

**SYMPOSIUM**

# Anthropological sketch of the prehistoric population of the Carpathian Basin

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**ABSTRACT** The present review is an attempt to sketch the anthropological characteristics of the populations that inhabited the smaller or larger geographical units of the whole Carpathian Basin during the several thousand years of prehistory in a grouping according to archaeological cultures defined up to now (which are constantly modified and precised) based on taxonomic data in the technical literature and the results of my Penrose-analyses that attest to the continuity of the autochthonous populations. **Acta Biol Szeged 44(1-4):75-79 (2000)**

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The growing pace of archaeological excavations resulted a growing number of anthropological material representing the Prehistoric populations of the Carpathian Basin. Following the continuous analyses of these materials, occasional summaries of the results are also necessary. Similar summaries have been restricted so far to smaller geographical units of the Carpathian Basin (usually according to the modern political borders) and to shorter periods of Prehistory. The present summary is relevant to the populations all over the Carpathian Basin and during each period of the Prehistory based on the taxonomic analyses published in the anthropological literature and on my own analyses using the methods of Penrose's distance analysis. In the course of the latter, the combined male and female series of more than 120 Central and Eastern European and Near Eastern Neolithic, Copper Age, Bronze Age and Iron Age populations were compared with a significance limit of 0.5%.

Similarly to any other review, this one could not be but defective in every respect and can be accepted as no more than an experiment, the results and the suppositions of which are basically subjected to frequent changes with the discovery of new finds. Although the populations of many significant archaeological cultures of the Carpathian Basin had to be omitted from the analyses for lack of a sufficient number of finds (custom of cremation etc.) (as e.g. Tiszapolgár, Incrusted Pottery, Nagyrév, Hatvan, Vátya, Füzesabony and Vatin cultures, the Illyrians etc.), the Penrose contacts of the existing series are enough to offer an idea about certain groups that may help to delineate the origin of some populations/population groups.

The following series could be included into the Penrose-analysis (traditional dating):

1. Neolithic (5000-2500 BC): Lepenski Vir, Körös + Cris and Starcevo cultures, Alföld Linear Pottery Culture and Central European Linear Pottery Culture (in the followings: LVL, K (S) C, ALP, CELP), series of the Lengyel culture, Tisza and Vinca cultures;
2. Copper Age (2500-1900 BC): Bodrogkeresztúr and Baden + Kostolac + Cotofeni cultures (in the followings BDG, BKC);
3. Bronze Age (1900-800 BC): Hurbanovo, Gáta-Wieselburg cultures, series of the Maros-Perjámos culture, and Tumulus Culture of the Hungarian Plain;
4. Iron Age (800-0 BC): Bosut and Mezőcsát cultures, Scythians, Celts in Slovakia and in Transdanubia.

**Results can be summed up as follows:**

The Lepenski Vir series has significant Penrose contacts only with the series of the Ukrainian Neolithic Dniepro-Doniets culture. Accordingly, the Protonordic-Cro-Magnoid type bearers of the culture must have been surviving post-Gravettian populational groups of eastern origin. The Penrose data do not indicate the local survival of the population in the later periods of the Neolithic.

The Penrose contacts of the mostly Gracile Mediterranean Körös + Cris population indicate eastern contacts, the Penrose identity of their series with the late groups of the ALP suggests either the local survival of some K (S) C populational groups or perhaps the common origin of a component of the K (S) C and the ALP populations. The K (S) C has no contact with any other series in the Carpathian Basin, while the Starcevo series cannot be linked with any

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of the cca 120 series included in the analysis, which may either be caused by the errors of the sample (uncertain dating, finds indicating strong brachycephalisation from the Vinca site), or points to a different origin of the Starcevo population (the anthropological composition of the Neolithic population within the Western and Central Balkan is absolutely unknown).

The contacts of the Protonordic-Cro-Magnoid, later gradually gracilised ALP populations point outside the eastern Carpathians, disregarding the above mentioned Penrose contacts to the K (S) C, referring to the direction of the place of the formation of the population. In agreement with the archaeological data, the ALP population displayed no Penrose contacts with Central European or Bohemian and German populational groups of the Linear Pottery Culture, so they must have had a different origin.

There is no significant Penrose result between the series of the so-called Central European Linear Pottery population and the Western Linear Pottery population (except for the Bruchstedt series which is totally different from the former), there seems to be an identity, however, with the contemporary Bohemian Linear Pottery series. The origin of these two Central European populations of the Linear Pottery entity must have been, the only possible interpretation deduced from the Penrose data, a local predecessor unknown to us, since this is the only way we can explain their detachment from the populations of both the Alföld and the Western Linear Pottery cultures.

Each of the populational groups of the later Neolithic cultures included in the analysis can be related to these two Central European Linear Pottery populational groups. All the three series representing the Southern Transdanubian lengyel population (Aszód, Mórág-B.1 and the combined south Transdanubian series, while the Lower Austrian Lengyel series demonstrating south-eastern contacts stands apart from this block), the Tisza culture in the Hungarian Plain and the Sirmium populational group of the Vinca culture are connected with significant Penrose values and form, accordingly, an isolated, closed up block in the Carpathian Basin within the Neolithic of Central and Eastern Europe, the population of which did not mix with the neighbouring populational groups, at least it cannot be proved with Penrose values, but lived undisturbed in one place, seemingly without any significant outer influence, probably from before the Neolithic until the end of the Neolithic. Within the populational groups belonging to this autochthonous block, the robust and the gracile leptodolichomorphous varieties dominate, while the proportion of the Cro-Magnoid component is low.

There are no Penrose data to prove the survival of the autochthonous population in the Early Copper Age for lack of series with sufficient item numbers. In the Tiszapolgár population, which is considered to be the direct follower of the Neolithic Tisza culture according to archaeological finds,

a taxonomically demonstrable change occurred. The increase of the proportion of the Cro-Magnoid type suggests an outer influence. Although according to archaeological data the invasion of the Pit Grave people of robust Cro-Magnoid type in the Carpathian Basin happened somewhat later, the anthropological data certainly indicate an earlier infiltration during the Early Copper Age. The mixture of the Pit Grave and the local populations is proved again by taxonomic analyses, in contradiction to archaeological suppositions (the occurrence of gracile Mediterranean type in Pit Grave burials).

In the following period, the high proportion of the Cro-Magnoid type cannot be demonstrated any more in the population of the Middle Copper Age Bodrogkeresztúr culture. The alien component, accordingly, had partly assimilated or disappeared from the region. The Penrose contacts of the series representing the Bodrogkeresztúr populational group also indicate that at least a part of the original autochthonous population survived in the region and took part in the formation of the Middle Copper Age culture in the Hungarian Plain.

According to the Penrose analysis, a new, alien population arrived in the Carpathian Basin after the Middle Copper Age, which is in harmony with the archaeological data. The Late Copper Age population, the so-called Baden population (its related cultures were the Kostolac in the South and the Cotofeni in Transylvania) had strong southern/south-eastern components according to the Penrose contacts, which is again in harmony with archaeological theories. The animal breeding populational groups flooded the whole of the Carpathian Basin, while the cultivating (archaeologically latent?) autochthonous populations seem to have survived the invasion. Namely, the series from the cemeteries of the Maros-Perjámos population that developed in the early Bronze Age and flourished during the Middle Bronze Age in the southern part of the Hungarian Plain testify with their Penrose data that, beside certain southern/south-eastern components, both the Middle Copper Age Bodrogkeresztúr population marking the continuity of the autochthonous population and the Baden population immigrating during the Late Copper Age took part in the formation of the new Bronze Age culture. In a biological sense, accordingly, the survival of the autochthonous population of the Carpathian Basin probably going back to Mesolithic roots can be demonstrated even in the Middle Bronze Age.

Contrary to the continuity of autochthonous populations in the southern part of the Hungarian Plain, new, alien populational groups appeared in the central and western parts of the Carpathian Basin. The people of the so-called Bell-beaker culture occupied a large part of Europe, while in the Carpathian Basin they lived within a limited territory for a short time and did not mix with the local population, according to archaeology. Although there are very few evaluable anthropo-

logical finds from the biritual cemeteries of the Bell-beakers in the Carpathian Basin, the appearance of the characteristic planoccipital Taurid type, unknown until then from the Carpathian Basin, in the populations of some later cultures (e.g. Kisapostag and Gáta-Wieselburg cultures) suggests a mixture with the local population against the archaeological theories. According to archaeology, the populational groups of the Bell-beakers also took part in the formation of the Gáta-Wieselburg culture on the western fringes of the Carpathian Basin, which is also attested to by the Penrose identities between the Gáta-Wieselburg and the Bell-beaker series in Moravia and Germany.

Another bronze Age series involved in the Penrose analysis from the western part of the Carpathian Basin represents the population of the Hurbanovo culture. According to the results, the population of this culture cannot be related to the autochthonous block living on the territory of the Basin, since the Penrose values link it to the lengyel population group in Lower Austria bearing southern/south-eastern traits and to the Złota-Tripolje-Hamangia entity outside the Carpathian Basin. As the low item numbers of the series of the Chlopice-Veselé and the Nitra cultures, which are the territorial predecessors of the culture, have not allowed so far a Penrose-analysis, the Penrose results concerning the Hurbanovo populational groups need further precision.

The survival of the autochthonous elements in Transdanubia cannot be followed in the Middle and the Late Bronze Age either by taxonomy or by Penrose analysis due to the custom of cremational burial at the newly developed archaeological cultures (Incrusted Pottery, Tumulus culture, Urnfield culture). The few male skeletons in a sacrificial pit unearthed in a settlement of the Urnfield culture is an exception at the time of cremational burials. According to the taxonomic analyses the finds represent a robust Cro-Magnoid type, which was characteristic in the Carpathian Basin of the Pit Grave population during the Middle Copper Age, and which could not be observed since then in the region. The appearance in Western Transdanubia of a type characteristic of Eastern Europe in the case of men thrown into a sacrificial pit, who certainly suffered a violent death, means that the Urnfield populational group must have "buried" the slain members of some outer enemy, who, as suggested by historical and archaeological data, could have been members of the Cimmerian people who had invaded the Carpathian Basin from the east.

The populational groups of the Tumulus culture, mentioned earlier with regard to Transdanubia, diffused towards east and occupied the territories of the Hungarian Plain and north of it where, as demonstrated by archaeological research, they mixed with the local population and soon created local archaeological groups. The custom of cremational burial of the populations in the northern regions hinders an anthropological analysis, while the large item numbers in the

inhumation cemeteries in the southern part of the Hungarian Plain allow even a Penrose analysis. The results of this analysis correspond to those of archaeology. The significant Penrose identities between the Tumulus people in the southern part of the Hungarian Plain and the Maros-Perjámos populational group, their territorial predecessors, connect the Urnfield people using these cemeteries to the surviving block of the autochthonous elements. A further evidence of this survival is, to some degree, the Penrose contact of the series representing the Early Iron Age Bosut culture in Sirmium (among other contacts) to the Maros populational group. The local predecessors of this southern population are anthropologically unknown due to the custom of cremational burial at the Vatin, the Dubovac-Zutobrd and the Belegis cultures.

There are no sufficient series from the Early Iron Age of the western part of the Carpathian Basin for a Penrose analysis, so the observation of the autochthonous elements in this region was inevitably broken. In the eastern part of the Carpathian Basin, the bearers of the new so-called Mezőcsát culture at the beginning of the Early Iron Age were composed, according to archaeological data, of a population arriving from the east, which might be identified with the Sigynnas known from written records. The Penrose contacts of their anthropological series demonstrate a double feature: significant identities could be found with the western European Hallstatt on the one hand, and with the Greek Iron Age populational groups through the Bessarabian Scythians on the other hand. This latter may indicate the origin of the dominantly Mediterranean type Mezőcsát population. The links of the Scythians following them in the Carpathian Basin are exclusively eastern or south-eastern ones. An identity can be found again with the Greek Iron Age populational groups, although the Penrose contacts to the Scythian period populational groups in the Black Sea region attest to an origin of the population in the Carpathian Basin different from the earlier Bessarabian one. The Scythian find material in our region is taxonomically heterogeneous, still the gracile Mediterranean type can be said to be dominant. The Mezőcsát and Scythian populations immigrating from the east did not really mix with the local autochthonous population according to the analysis.

In the closing phase of Prehistory, during the Late Iron Age, a new population arrived in the region. The anthropological material of the Celts, who occupied a large part of Europe, is known from the Carpathian Basin only from the present Slovakia and Transdanubia, the few finds from the Hungarian Plain and the southern territories could not be included in the Penrose analysis. There is no Penrose identity between the Celtic series in Slovakia and in Transdanubia, and there are differences between their links as well, namely southern, south-eastern contacts can also be detected in the case of the Transdanubian material. It seems, however, much more important, that a Penrose identity appeared at both

series with the Bronze Age Maros-Perjámos populational groups in the Carpathian Basin, which, in turn are related to the local Copper Age people and through them to the local Neolithic autochthonous population. It can be supposed, accordingly, that the Celts significantly mixed with the local populational groups (the Nordic, Mediterranean and Cro-Magnoid types must have characterised the autochthonous populations, the Alpine and the Taurid were the features of the Celts), and passing over their culture, they themselves became gradually assimilated. In consequence it can also be supposed, that the population that, following the Celtic period, saw the Sarmatians in the eastern part of the Carpathian Basin and the Roman occupation in the western part was composed of an autochthonous population that went back to the Neolithic (or the Mesolithic) in the western part of the Carpathian Basin. Reviewing the above analytical results it seems that the closed geographical unit of the Carpathian Basin was suitable for the survival of the autochthonous population from the Neolithic or even an earlier period against the repeated ethnic infiltrations or immigrations from the different cardinal directions (according to the anthropological data they can be attached to the Körös-Starcevo-Cris in the Neolithic, the Pit Grave and the Baden peoples in the Copper Age, the Bell-beakers and the Urnfield populational groups in the Bronze Age and finally the eastern Mezőcsát and Scythian populations, and also the western Celts in the Iron Age). Finally, at the end of Prehistory, this population, the bearers of the Celtic period culture at the beginning of the Roman occupation constituted the majority of the Panonian autochthonous population after a long biological continuity.

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