

CRANIOLOGICAL DIFFERENTIATION OF MODERN MANKIND

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To assess the patterns of human cranial differentiation we used characteristics other than those traditionally employed in racial studies. Based on the size and shape of the skull three modern craniotypes were established – Tropids, Holarctids, and Pacifids. Differences between them concern three major dimensions of the braincase (Martin 1, 8, and 17) and their ratios, as proposed by V.V. Bunak (1922). In addition to standard ratios (8:1, 17:1, 17:8) the following generalized parameters were used: ORV (total growth dimension) = $(12+82+172)/2$ and indexes of form: dolichoid = $(1/8 \cdot 1/17)^{1/2} \cdot 100$; brahioid = $(8/1 \cdot 8/17)^{1/2} \cdot 100$; hipsioid = $(17/1 \cdot 17/8)^{1/2} \cdot 100$. The Tropids originated in the tropical zone of the Old World. They have the smallest crania with ORV=262.6, with the largest longitudinal diameter and the smallest transverse diameter. Holarctids, who originated in northern Eurasia, are characterized by the largest crania ORV=266.7, the largest transverse development, and the smallest cranial height. The Pacifids originated in East Asia and spread on both sides of the Pacific (in Asia and America). They are characterized by large crania (ORV=265.7), which are high and broad but short. Apart from these groups, there are also local ones such as Capoids (Bushmen and Hottentots) and Tropical Pacifids (Andamanese and Aeta). This classification is based on general cranial shape, not on “racial” traits. Therefore certain disagreement between geographic races and craniotypes is predictable (Pestryakov, 1995; Pestryakov, Grigorieva, 2004).

Key words: *craniometry, cranial differentiation, cranial types*

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FROM BIOLOGICAL HISTORY AND DEMOGRAPHY TO LINGUISTICS AND DNA ANALYSIS: A HOLISTIC APPROACH TO POPULATION STRUCTURE STUDIES IN THE ADRIATIC AREA

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Anthropological research of modern European populations indicates pronounced diversity between and among various groups, confirming the complexity of interactions of the components of the “eternal triangle” (heredity, environment and culture). Such studies require an interdisciplinary approach and a large scale of diverse data: sociocultural, linguistic, archeological, anthropo-genetic, biological, and biomedical. For several decades, holistic anthropological research, based on the belief that human evolution and variability can be understood only by the simultaneous study of biological and socio-cultural phenomena, has been conducted in the Eastern Adriatic and in the Balkan region as well. Detailed characterization of historical events, population movements and migrations, demographic peculiarities, family structure, linguistic peculiarities, and various biological and genetic traits were investigated, revealing possible routes of peopling of this geographic area. Within the context of this research, this paper will address various scenarios of microevolution, including factors such as population exchange, demic diffusion, short-term and long-term migration movements and population mobility, possible founder effects, the form of selection of reproductive partners, the effect of possible settling and population reflux and the dependence of demographic characteristics of various historical groups. Current findings concerning mitochondrial DNA and Y-chromosome lineages of the population of Eastern Adriatic will be analyzed and interpreted with an emphasis on the fact that historical processes are the laboratory in which modern human populations were created.

Key words: *anthropology, population structure, bio-cultural evolution, migrations, history*

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