

## OPINION

by: **Prof. Dr. Dimitar Kadiysky, Phd, Doctor of Medical Sciences,**

Institute of Experimental Morphology, Pathology and Anthropology with Museum (IEMPAM) at BAS, Sofia

**Subject:** dissertation for the award of ONS "Doctor" in the field of higher education 4. "Natural Sciences, Mathematics and Informatics", Professional field 4.3 "Biological Sciences", doctoral program: "Anthropology"

**Author:** assistant Nadezhda Venetsieva Paraskova - Sofia University "St. Kliment Ohridski ", Faculty of Biology, Department of Human Anatomy and Anthropology

**Topic:** "DERMATOGLYPHICAL CHARACTERISTICS OF THE BULGARIAN POPULATION FROM CENTRAL WESTERN BULGARIA"

**Scientific consultants:** Assoc. Prof. Zorka Mitova, PhD (IEMPAM - BAS) and Kin Ivan Shirobokov, PhD (IEA RAS, Kunstkamera, St. Petersburg)

**Form** of doctoral studies: doctoral student of independent preparation

By order of the director of IEMPAM-BAS (RD-15-53 A dated 10.08.2021) I was appointed a member of the Scientific Jury for conducting a procedure for defense of the dissertation of assistant Nadezhda Venetsieva Paraskova. The set of materials presented to me on electronic media by assistant Nadezhda Venetsieva Paraskova is in accordance with the members of the Law for the development of the academic staff (LDAS) regarding the defense of the dissertation and the specific requirements of BAS and IEMPAM. The set includes: dissertation work, project for abstract and all documents required by the regulations for conducting the defense of a dissertation for obtaining the educational and scientific degree "Doctor".

From the scarce autobiographical data that the doctoral student Nadezhda Paraskova provided to the Scientific Jury in the electronic version, it is understood that she graduated from Sofia University "Kliment Ohridski" in 2000 with a master's degree in biology and a specialty "Vertebrate Zoology and Anthropology". Again, according to the same, reversed and extremely illegible autobiographical document, it is understood that the author of the dissertation is currently an assistant at Sofia University "St. Kliment Ohridski ", Department of Human Anatomy and Anthropology. With this and a few other not so important details from the career growth of the dissertation author , the data about her in the documentation are exhausted.

Unlike the extremely carelessly provided general administrative documentation on the defense, the results of Nadezhda Paraskova's research work are summarized in a concise dissertation, which builds on existing historical, archaeological and ethnographic facts and gives an additional anthropological view of the composition and genesis of the Bulgarian population. Central Western Bulgaria.

The work on the doctoral dissertation of the doctoral student was consulted by Assoc. Prof. Zorka Mitova, Doctor of Anthropology, from the Department of Anthropology and Anatomy at IEMPAM, which is almost the only continuation of the research of prominent our anthropologists and morphologists. Dr. Ivan Shirobokov, MAE RAS, Kunstkamera, St. Petersburg, is also a scientific consultant of the doctoral student.

The topic of the dissertation is important, given the importance of research not only from a biomedical point of view, but also for our historical heritage and national ethnogenesis. In this sense, the dermatoglyphic characteristics of the modern Bulgarian population of eight local populations in the region of Central Western Bulgaria: 1) Trudovets, 2) Slivnitsa, 3) Sapareva Banya, 4) Svoje / Iskrets, 5) Kyustendil, 6) Alino, 7) Batanovtsi, 8) Elin Pelin / Buhovo and some others, performed by the author of the dissertation, contributes to additional population screening of the demographic structure of the studied sites.

The good literary awareness and the theoretical preparation of the dissertation are obvious and are a prerequisite for a concrete formulation of the purpose of the dissertation and the approaches in conducting this interesting anthropological research. It includes a total of 1,600 individuals with processed 3,200 palm and 16,000 fingerprints. The dermatoglyphic study was conducted in the period 2001-2003 and although it reflects a period of 20 years ago, it is relevant with its conclusions, because during the past period there were no significant demographic shifts specifically in the studied areas. On the basis of the introduction and the literature review, the research tasks for the implementation of the territory of the region, characterized by the ethnographers rather as a "Shopska ethnographic area" ("Big Shopluk"), were formulated. The dissertation is written on 184 pages and contains 123 tables and 39 figures. The dissertation popularizes the results of the conducted anthropological research among the scientific community in 3 of its publications and 4 participations in scientific forums.

The methodology and approaches used include fieldwork, dermatoglyphic fingerprinting using the methodology of Cummins, Midlo (1961), processing and description of dermatoglyphic fingerprints, characterization of the identified features, descriptive and taxonomic analysis of the results by region and complete biostatistical analysis. It should be noted that the author of the dissertation for the first time in our country presents an integration IPCA (PC analysis) of the key for ethnic anthropology dermatoglyphic and odontological features in the population of Central Western Bulgaria.

The subsequent interpretation of the results and the comparative analysis with data from modern physical anthropology, as well as with those of previous historical, archaeological and ethnographic research, become the basis of the discussion in the dissertation. The established local dermatoglyphic characteristics are presented convincingly and indirectly give data not only on the ethnographic composition and movement of the population in Central Western Bulgaria, but also on its correlation on dermatoglyphic features with Bulgarians from other regions of the country and abroad (Moldova and Ukraine).

The nine scientific contributions formulated by the dissertation student are a summary of the conclusions in the dissertation, derive completely from the conducted anthropological research and reflect almost all the results obtained and published by the author. The well-formulated conclusion, representing the essence of the study, shows that the dermatoglyphic picture of the studied population from Central Western Bulgaria is mosaic depending on the levels of differentiation, specific features and the ratio between the individual components by local groups. At the territorial level, both northern European and southern European and eastern (Mongoloid) characteristics are registered, which correspond to the literature data from previous studies for the presence of various anthropological types among the population of the Shopska ethnographic area. An important conclusion from the dissertation is that the main factor for the formation of the anthropological composition of the studied contemporary Bulgarian groups from Central Western Bulgaria is the interaction between the northern and southern variants of the Western Eurasian population.

The author sees a perspective for continuing the completed research in a future study of the somatological features of the population in this region of the country and the inclusion of data in the integration analysis (together with dermatoglyphic and odontological), which will contribute to more precise ethnogenesis of the Shopska ethnographic group. in Bulgaria.

The dissertation of Nadezhda Paraskova was discussed in detail at an extended meeting of the Section of Anthropology and Anatomy (July 22, 2021) at IEMPAM-BAS. The assessment of the qualities of work in this discussion, incl. the publication activity related to it is generally positive and the procedure has been launched. I am convinced that the personal contribution of Nadezhda Paraskova in carrying out the research work in the field, in summarizing the data, as well as in shaping the dissertation is not in doubt.

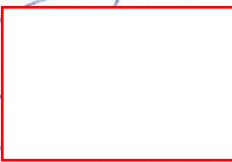
With a mandatory minimum of 80 points for fulfilling the minimum requirements for obtaining the educational and scientific degree of doctor at the institute, Nadezhda Paraskova collects 180 points, and the total number of credits of the dissertation is 480 points, which almost doubles the requirements of the BAS Training Center.

#### CONCLUSION

The material presented to me for opinion contains fundamental scientific and scientific-practical results, which represent a real contribution to modern anthropology. To some extent, these results are indirectly applicable in other sciences such as history, archeology and ethnography. The structure of the work is consistent with the classic type of dissertation for obtaining an educational and scientific degree "Doctor", and its volume, incl. the illustrative material meets the standard requirements. The dissertation submitted for review meets all the requirements of the Law for the Development of the Academic Staff in the Republic of Bulgaria, including its new amendments from 2018, the Regulations for its implementation and the updated requirements for obtaining the educational and scientific degree "Doctor". in IEMPAM.

In connection with the above, I confidently give my positive assessment of the research, the dissertation presented and the abstract. Based on the original character and the richness of factual material from the anthropological research, on the basis of which the dissertation was compiled, I propose to the esteemed scientific jury to award the educational and scientific degree "Doctor" to Nadezhda Venecieva Paraskova, assistant at Sofia University "St. Kliment Ohridski ", PhD student of independent training at the Department of Anthropology and Anatomy of IEMPAM-BAS.

09/27/2021 . Prepared the opinion:

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Prof. Dr. Dimitar Kadiysky, MD, DSci: