## Foreword

The eighth volume of "Studien zum Burgwall von Mikulčice", as its subtitle – "Anthropological and epidemiological characterization of Great-Moravian population in connection with the social and economic structure" – suggests, is dedicated to the biological properties of the Great Moravian population in relation to the social structure of this society. Great Moravia represents the first state formation of the Slavs, whose centre in the 9<sup>th</sup> century AD occupied the region of Moravia (part of the Czech Republic), west Slovakia and nord part of Lower Austria.

The project whose results we present here was launched in 1999, when we could still refer to the Great Moravian population as people from the past millennium. It represents a continuation of several decades of anthropological research of the Great Moravian burial sites, especially those at Mikulčice. Research associated with the names of Milan Stloukal and his colleagues, Hana Hanáková and Luboš Vyhnánek. It is natural that some of the authors of this volume are members of the Anthropological Department of the National Museum, just like their predecessors. The biological study of the inhabitants of Great Moravia is a "tradition" and one of the key points of interest of this department. Cooperation with the Mikulčice base of The Institute of Archaeology of the Academy of Science in Brno dates to the department's foundation, i.e. the late 1960s or rather the late 1950s, as personified by Milan Stloukal.

Besides the two institutions mentioned above, the Department of Anthropology of the National Museum (Petr Velemínský, Miluše Dobisíková, Petra Havelková, Marek Jantač) and the Institute of Archaeology of the Czech Academy of Science in Brno (Lumír Poláček), another ten institutions collaborated on this volume. These institutions mainly included the Department of the Archaeology of Landscape and Archaeobiology, the Institute of Archaeology of the Academy of Science in Prague (Petra Stránská, Jakub Likovský, Markéta Urbanová, Martin Hájek, Viktor Černý), the Department of Anthropology of the Faculty of Science, Charles University Prague (Jana Velemínská, Martina Kujanová, Lucie Bigoni, Kristina Krchová), Laboratoire d'Anthropologie des Populations du Passé (LAPP), University of Bordeaux, France, the Department of Anthropology, Faculty of Humanities, University of West Bohemia, Plzeň (Jaroslav Brůžek), the Institute of Dental Research, General Teaching Hospital Prague (Pavel Trefný), the Institute of History of Medicine and Foreign Languages, Charles University Prague, the 1st Faculty of Medicine in Prague (Václav Smrčka), 3<sup>rd</sup> Department of Internal Medicine, 1st Faculty of Medicine, Charles University, Prague (Vít Zikán), the Czech Geological Survey, Prague (František Bůzek), the Institute of Geochemistry, Faculty of Science, Charles University, Prague (Martin Mihaljevič), the Institute of Applied Mathematics and Information Technologies, Faculty of Science, Charles University, Prague (Jarmila Zocová).

This volume contains sixteen papers that may be divided into several areas of interest. An introduction of the historical and archaeological issues of Great Moravia and a presentation of the power centre at Mikulčice is followed by the biological section itself. The first papers are devoted to

palaeodemographic issues and presents a proposal for secondary sexual diagnosis based on the skull dimensions of the Mikulčice population and the comparison of genetic and morphological sex determination of sub-adult individuals. This is followed by a study of the stature and the morphology/structure of the facial part of the skull, i.e. work devoted to the physical appearance of the inhabitants of Great Moravia. Most of the papers then represent studies and articles attesting to the health status of the Great Moravian population. A number of these deal with traits that may be interpreted as possible manifestations of nonspecific stress, of either physiological-metabolic or physical character. Two papers relate to dentition; apart from the evaluation of the state of dentition itself, they deal with the issue of hypoplastic enamel defects. Several studies focus on the structure and state of health of the locomotor apparatus. In the case of the long bones of the upper and lower extremities, the asymmetry of their structure, the incidence of Harris lines and the frequency of fractures were evaluated. In the case of the femur, the extent of osteoporotic changes was studied with the aid of Dual-Energy X-ray Absorptiometry. Other articles are linked by the theme of the quality of diet of the Great Moravian population. One evaluation used the isotopes of carbon and nitrogen, while another used selected trace elements. Finally, the last three papers deal with the application of non-metric morphological traits in the comparison of socially different population groups. The common denominator of all these papers is the population-based, not casuisticbased, evaluation of biological traits, always taking into consideration the socio-economic structure of the given society. More precisely, based on relevant biological indicators, three socio-economically different areas of the Mikulčice agglomeration or the corresponding population groups are compared: 1/ the inhabitants of the castle buried at the sites next to the II<sup>nd</sup> and III<sup>rd</sup> church; 2/ the people buried in the sub-castle (suburb), at Kostelisko and 3/ the population group living/buried in the hinterland of Mikulčice centre, at Josefov and at the Prušánky site.

The papers are conceived as autonomous, independent articles, which is why basic information relating to the burial sites is repeated at times.

The aforementioned studies represent the first compilation of the conclusions of research into the biological indicators of the inhabitants of Great Moravia, which to various degrees attest to their appearance and state of health, and indirectly to the quality of their living conditions. Among the traits that could not be included in this volume in view of this publication's extent but that were evaluated, we find e.g. the degenerative changes of articular junctures on the vertebral column and appendicular joints, the changes in the region of muscle/ligament attachments (enthesopathies), the lateral flattening of the bodies of long bones, the cribra orbitalia or hyperostosis porotica.

Apart from the authors, other collaborators and institutions participated on this publication. This book is published by the Institute of Archaeology of the Czech Academy of Science, Brno in cooperation with the National Museum in Prague. Publication of the book is financially supported by the Grant Agency of the Czech Republic (GA ČR 206/03/0725), the Czech Ministry of Culture (VZ PM MK00002327201) and the research plan of the Institute of Archaeology of the Czech Academy of Science, Brno, No. AV0Z80010507. We would also like to thank Mrs. Marie Cimflová for her editorial revisions and for technically preparing this volume for printing. We also thank Academic Painter Pavel Dvorský for the graphic design of the book cover. We thank Presto Prague for translation and revision of the English text. We thank the employees of the Department of Anthropology of the National Museum in Prague for the documentation and technical work (Táňa Dubová, Hana Horáková, Jitka Vítková, Alena Klímová) and the base of the Institute of Archaeology of the Czech Academy of Science at Mikulčice (Otto Marek, Rostislav Skopal). Of course, we thank to both reviewers, Milan Stloukal and Milan Thurzo, for valuable suggestions nad corrections.

## Lumír Poláček – Petr Velemínský