

Funerary rites of the Late Bronze Age and Early Iron Age population have been already subjected to research many times. It can be presumed that cultural or climatic changes could impact on adaptive strategies of the population, and thereby also indirectly affect ritual transformations. Attempts on reconstruction of these communities were based mainly on analyses of different elements of material culture (e.g. earthenware or metal items). However, burial rites, with a basic role of social, spiritual, symbolic or ideological factors, were much more sophisticated. Their more comprehensive description and interpretation should accommodate to the current theoretical reflection on the problem and to the body of data still enlarging as the array of methods widens and new discoveries appear. During all the years of archaeological excavations tens of thousands (!!!) graves of the Urnfield culture has been explored, yet many questions concerning performance of funerary rites remain unanswered. This seems to point to the approach and not the quantity of data as crucial in this regard.

It is assumed that in the period under consideration stable subsistence economy based on agriculture and husbandry fostered improvement of biological condition as well as growth of the population. In a longer perspective though, such demographic consequences, as possibly facilitating appearance of zoonoses and spread of all diseases, may have undermined its development. Weakening of climatic conditions noticed for the time by many scholars must have caused substantial changes in vegetation and by that probably also negatively affected wellness of the population.

The demographic growth might have stimulated increase of mobility and migrations to new territories. On the one hand, existence of big cemeteries lasting for hundreds of years, as estimated on the basis of conventional chronology, points to their continuity and stability of settlement networks. This seems to be additionally confirmed by omnipresence of big permanent settlements. On the other hand, there is growing evidence of mobility (e.g. cases of the girl from Egtved or participants of the slaughter by the Tollense river in nowadays Germany). Due to common cremation of bodies, all organic matter (along with DNA) has been completely burnt, what precludes palaeogenetic analyses. Therefore there are no data directly confirming continuity of populations. Still, the material preserved enables analyses of strontium isotopes accumulating in bones, on the basis of which migrations of individuals or groups can be inferred.

The project aims at verification of hypothesis on effects that changes adaptive strategies had on transformations in funerary rituals. Its agenda will encompass autochthonous or allochthonous character as well as their biological condition of individuals, groups and populations.

The investigation will be conducted in three steps: (1) non-invasive diagnostics, (2) exploration, and (3) post-excavation analyses with interpretation. Firstly, still infilled pottery from cremation graves (urns and assisting pots) will be scanned with computed tomography. Then, the images of such encapsulated environments are to be subdued to pre-excavation analysis, results of which will allow to undertake systematic exploration and sampling for further research. Bioarchaeological agenda will include the following analyses of organic matter: anthropological, archaeozoological, and archaeobotanical ones, as well as measurements of strontium isotopes ($^{87}\text{Sr}/^{86}\text{Sr}$) levels to decide whether individuals were of local/nonlocal origin. Assess of possible effects of peri- and post-cremation taphonomic factors had on bone structures (SEM analyses), aimed mainly at excluding possible pseudopathological changes, will be an integral part of the undertaking. Micromorphological analyses of sediments filling pots will be also completed. Observations towards presence of textile pseudomorphs possibly preserved as encrustations and specialized analyses of the textile remains will be performed as well. The investigation will be complemented with radiocarbon dating (AMS ^{14}C) to anchor the grave finds on a timescale.

The agenda of the radiologic, bioarchaeological and other analyses will be applied mainly to cremated osteological materials from the Late Bronze Age and Early Iron Age cemeteries discovered in the vicinity of Wrocław and Ostrów Wielkopolski.