

The aim of the project is to generate a study concerning cultural and social changes in the Carpathian zone in the Final Neolithic (3000-2000 BC) based on archaeological sources and specialistic analyses, including isotope and genetic investigations. The study will be conducted in the upper Tisza river basin in Slovakia and Ukraine. In the prehistoric times this area was one of zones with presence of steppe elements in Central Europe having a significant impact on the cultural situation in Poland. These influences consisted of the migration of human groups and the diffusion of socioeconomic patterns from areas located to south of the Carpathian arch in the Upper Tisza basin. The turn of the 4th and 3rd thousand BC is a period of major population changes in Central and Eastern Europe identified with the intense migration of steppe populations (Preyamnaya and Yamnaya culture) and highly probable shifts of the population living in the Upper Tisza river basin to the north (Baden culture). The earliest stage of this migration is readable to the north of the Black Sea and from there along the Danube Road this current goes to the Great Hungarian Plain. In archaeological materials, eastern elements are manifested in the funeral rite in the form of sepulchral constructions and in grave goods as specific tool sets and ceramic forms, as well as other objects from natural materials, there are also artefacts made of copper and gold.

The difficulty in precise recording the infiltration of steppe elements is due to the lack of remains of permanent settlement forms associated with final Neolithic communities. Almost the only source of information are funeral sites that is visible in the cultural landscape by the presence of separate mounds or their entire clusters. These markers, however, are not always a sign of those times. The erection of mounds by communities that are not in genetic relation is often noted in prehistoric and historic times. So far, more than 100 burial mounds are known from the Carpathian zone that is planned to be investigated. They are associated with the decline of the Corded Ware culture. Barrows in Slovakia in the Ondawska and Laborecka Uplands have been studied since the 1940s and about 40 mounds were excavated. In Ukraine, according to the current state of research with III millennium BC can linked 3 mounds excavated in the 70s of the twentieth century. The burial mounds located in the southern part of the Ondawska Upland display an association with the Yamnaya culture milieu in features of the funeral rite.

The small amount of data encourages to undertake new excavations and to modern elaboration of archival materials. The intended excavations of six burial mounds - 4 in Slovakia and 2 in Ukraine - will be concentrated in the southern part of the Ondawska Upland and the Eastern Slovak and Transcarpathian Lowlands. Specialistic analyses will concern both new excavated materials and previously acquired archival collections that in this way will be part of scientific circulation. In the classic archaeological studies, a detailed analysis of the distribution of raw materials and artefacts made of stone will be carried out. This will allow for reconstruction of the connections between human groups living in different areas. As part of specialist interdisciplinary analyses, genetic investigations will be carried out that will enable for comparison of the acquired data with the increasingly numerous results of archeogenetic studies of Neolithic populations. The reconstructed genetic structure of the studied series will allow to determine the share of steppe population which will also deliver data of the strength of migration movements occurring in this period. The results of migration processes will be supplemented by strontium isotope analyses and pioneer neodymium isotope analyses that will allow for the reconstruction of mobility patterns in the Final Neolithic communities. Stable carbon and nitrogen isotopes analyses will also be carried out, which will allow for the diet determination indicating at the same time how the natural environment was exploited. A detailed chronometry of cultural phenomena in this area in a wider Central European context will also be established. Samples for interdisciplinary analyses will be selected from archival collections and materials acquired during planned excavations. Anthropological, archeozoological and archeobotanical analyses are also intended. In this way, the project includes a number of specialist analyses that will be carried out by researches of various scientific disciplines. Interdisciplinary, innovative analyses are based on the latest scientific achievements and are simultaneously conducted in leading centres in the world.

The Upper Tisza river basin is an important reference point for the south-eastern territory of Poland due to the possible contacts between these regions and the same cultural processes that occurred in the Final Neolithic and the Early Bronze Age. A comprehensive interdisciplinary study will allow for tracing transmission of steppe elements later transferred to Polish territories. The elaboration of this process based on new data is of fundamental significance for research of the Final Neolithic in Central Europe.

Archival queries, excavations and interdisciplinary analyses will be carried out in the years 2021-2024. Results will be presented at international conferences and in series of articles with interdisciplinary analyses.