

1. Aim of the research proposed

The aim of the project is to investigate the oldest traces of adaptation of Transcarpathian Copper Age cultural patterns in the so-called younger Danubian cultures on the Małopolska Upland in about 4300 – 3600 BC. The starting point for such an analysis will be unique archaeological-anthropological-environmental data from the cemetery of the Lublin-Volhynian culture at site 2 in Książnice, which is a key site for investigating such questions. In addition to the materials from the cemetery in Książnice, several other carefully selected assemblages of artefacts from some, important for this kind of research, sites from the Małopolska Upland (such as Kraków Nowa Huta-Wyciąże 5, Złota Grodzisko I i II, Miechów 3) will be studied. The results of these analyses will be compiled against the existing information, both factographic and interpretative, which can be found in the relevant literature.

Research hypothesis:

The western branch of the Lublin-Volhynian culture, which is exemplified by site 2 in Książnice, must be considered as an archaeological reflection of human groups who – as the first ones in south-east Poland developed a fully Eneolithic socio-economic model. The high status of some of their representatives, which is manifested by numerous prestigious copper artefacts found in graves, was possible as a result of their control of trade routes between the territory of Małopolska and the Carpathian Basin, at the turn of the 5th and 4th millennium BC.

2. Fundamental studies within the project

The main part of the work will be conducted in accordance with the descriptive, typological and comparative method, which is characteristic of classical archaeology. There will also be conducted specialist studies, including the use of some methods which will be innovative for this period of time in Lesser Poland Upland (among others, physicochemical methods) in order to investigate copper, ceramic and flint artefacts in a multifaceted way. Moreover, the biological material (human bones, animal bones, paleobotanical samples) will be subjected to modern biochemical analysis, which have rarely been performed at Eneolithic sites until now. Also, a series of radiocarbon dates will be obtained, including those on animal bones, which, according to the most recent research standards, are considered more reliable than those performed on human bones.

In order to represent the multifaceted situation at site 2 in Książnice, and to reconstruct the settlement network of the Lublin-Volhynian culture and of the Wyciąż- Złota group on the Małopolska Upland, the Geographic Information Systems (GIS) will be used.

3. Justification for addressing the particular research topic

The beginnings of the Eneolithic period in Lesser Poland, associated with a development of the Younger Danubian communities, including the Lublin-Volhynian culture, is a relatively poorly recognised issue in Polish prehistory. At the same time, this issue is extremely important due to changes within the belief system and the social structure that took place in that period. These changes were manifested, among others, by a new "sepulchral" ideology, derivative from the Carpathian Basin, with strongly distinguished *sacrum* and *profanum* in spatial sense, as well as an elitism of burials and a sexual dimorphism strongly stressed in burial rites.

Engaging an innovative set of instruments in analysing techniques for particular categories of artifacts will allow to obtain unique, in terms of regional scale, data referring to e.g. characteristics of copper objects imported to Little Poland at the beginning of the 4th millennium BC.

Moreover, employing modern and innovative, biological and physico-chemical technologies for examining biological relics, together with analyses of fossil DNA sampled from the remains of individuals buried in Książnice (executed on the outside of this project) will enable a possibly complete assessment of a biological condition of the population under scrutiny and, in wider perspective, will contribute to better recognition of the Younger Danubian communities that had lived northward to the Carpathians.

Summarising, the project will have a significant impact on the advancement of archaeology in Poland and Central Europe.