

In the first half of the 2nd millennium BC, in east-central Europe, far away from the main course of events and central European communication routes, a new cultural group emerged designated as the Trzciniec Cultural Circle (TCC). Soon, it spread over vast and ecologically diverse expanses of land, forming parts of today's Poland, Belarus, Ukraine, Moldova, Romania, Lithuania and Russia. Archaeological data supported by radiocarbon dating show that the group took shape in the lowlands of Greater Poland, Cuiavia, Mazurian Lake District, Mazovia and Podlissia. Its earliest cultural traits are dated to the 19th century BC, but in the lifetime of four to five generations they appeared in the upland belt: from Lesser Poland to as far as Podolia and Volhynia. How did this happen? It is believed that the main cause was the migration of 'Trzciniec' populations from the north towards the lands occupied by the Mierzanowice culture. This belief is supported by many archaeological facts such as the different material (different vessel forms and their ornamentation), spiritual (traits of the funerary rite) and social (settlement forms and cemetery structure) culture of the two archaeological units. What remains a mystery is how this migration occurred and its precise nature. How did TCC communities contribute to bringing about a cultural change on the Uplands of east-central Europe and the decline of Early Bronze Age structures there? It is highly probable that the factor which integrated 'Trzciniec' social structures and made possible several-hundred-kilometre 'treks' proved to be kinship and blood ties. There are many reasons to believe that individuals buried in TCC collective graves were biologically related. For one thing, these burials were meant to present the dead as members of a specific kin group. Stress was laid on community ties: the value of the community which continued being held together by the tradition of common descent from a biological or (rather more often) mythical ancestor – the progenitor of a family or lineage. These convictions stand in sharp contrast to the funerary rites of Mierzanowice culture populations characterized by single graves in large cemeteries and the custom of clearly marking the sex of the buried dead by a different arrangement of male and female bodies, and offering them different grave goods.

The authors of this research project are convinced that it is possible to reconstruct the events and relations between people with respect to so distant a time by applying the methods of contemporary archaeology, biology (genetics), anthropology, isotopic geochemistry and other sciences. Results obtained in one field will be confronted with others achieved in the research domains of the other disciplines. Particular value will be attached to aDNA, and strontium and oxygen isotopic analyses. They will help determine the genetic diversity of 'Trzciniec' populations and trace the genetic relations with the Mierzanowice culture societies. These analyses will throw new light on the question of genetic, and consequently cultural, continuation/discontinuation on the Uplands in the first half of the 2nd millennium BC. On the 'micro' scale, the objective of aDNA analyses will be to determine the sex of and any consanguinity between individuals buried in some mass graves. The bone remains of about 150 individuals, representing the TCC and Mierzanowice culture (largely from the Lesser Poland and Lublin uplands) and contemporary animal shall be analysed. Some of these graves have already been radiocarbon dated, but 80 more determinations are planned, together with isotopic analyses aimed at diet. Anthropological examinations of buried individuals who have not been examined yet will be carried out also. Finally, the analysis of strontium and oxygen isotopes will be performed for the entire set of human individuals and baseline.

The archaeological part of the project will cover a comprehensive description and interpretation of the archaeological sources, which testify to the transmission of TCC patterns from the Lowlands to the Uplands of east-central Europe. The sources will include both diagnostic elements of material culture and ritual customs peculiar to the lowland part of Poland – the genetic centre of the TCC. The project will be crowned by a comprehensive interpretation model(s) of the changes of socio-cultural and population phenomena on the Uplands of east-central Europe in the first half of the 2nd millennium BC. This in consequence will bring together research results supplied by the humanities, as well as sciences.