

The period from 110 to 40 kyr BP is identified with archaic humans inhabiting Europe for hundreds of thousands of years. In the first part of this period (110-50 kyr), humans representing the Neanderthal population had uniform coping strategies in the conditions of the last glacial, inhabiting different places, obtaining various resources and, above all else, producing similar stone tools. This period is referred to as the late Middle Palaeolithic. From approximately 48 until 40 kyr BP and, in some places, until 35 kyr BP, the appearance of tools changed. Some scholars claim that this resulted from the contact between the native Neanderthal population and the newcomers from the South, i.e. modern humans. Due to the same reason, this period is referred to as the Middle-Upper Palaeolithic transition.

In our opinion, this scenario is contrary to the current data and therefore we put forward this project. We believe that the boundary of 50-48 thousand years is illusory for some regions, including the Oder river valley. In our opinion, the development process of the Middle Palaeolithic within the Oder river valley might have lasted much longer, and the first phase of the transitional period was a consequence of the evolution of indigenous cultures. The first signs of indirect or direct contact with the allochthonic culture of modern humans could have occurred in the area of the Oder river valley after the 45th millennium or even later.

In order to prove the hypothesis presented, a large body of the data obtained from the best preserved archaeological sites must be analysed. Our studies will be based on a group of sites situated in the southern and central parts of the Oder river basin. In these areas there is no terrain where caves or rock shelters could have formed. Thus, our studies will be based on the so-called open-air sites. Obviously, the choice of the Oder river basin is not accidental. The biggest number of open-air sites from this period in Poland has been found there. A large portion of remains from this period is linked to the function of a transit route the Oder river valley served from the beginning of the Central European colonisation.

The studies to be carried out as part of this project will cover the following areas: 1. the production and use of lithic tools; 2. the ways of food provisioning – wild game; 3. the establishment of where and what was produced on the sites of long-term or short-term stay; 4. the evaluation of the chronological and palaeo-environmental background of settlement episodes. The studies of lithic artefacts will be aimed at e.g. the reconstruction of the methods of manufacture and use thereof on the basis of refitting supported by a 3D model analysis and a microscopic analysis. The methods of food provisioning will be established on the basis of the studies of faunal remains, which will be carried out in two ways. Firstly, an analysis of the remains will be conducted, showing the share of the different species, the number of individuals and the age at specific sites. Secondly, analyses will be conducted to establish which remains were an effect of human activity. This will allow us to learn about the hunting strategy.

The size and structure of the sites constituting the remnants of camps or just workshops will be studied based on an analysis of the data on the spatial location of the stone finds and faunal remains in combination with the information on the geological structure of the sites. The studies will be carried out through the Geographic Information System (GIS).

The reconstruction of the natural background and the evaluation of the age of settlement episodes will require field works and laboratory analyses. Sediment samples will be analysed for the purpose of determination of the origin and the dynamics of sediment formation. The age will be assessed on the basis of dating of mineral sediment samples with the optically stimulated luminescence method (OSL) and of organic matter samples through the means of radiocarbon dating (accelerator mass spectrometry).

We believe that the completion of this project will enable us to prove that archaic humans inhabited the Oder river valley area, as well as other regions situated north of the Alps, at least until the 45th millennium BP. In the final period they were able to make certain changes to the material and symbolic culture independently of modern humans who, as evidenced by the current data, brought about a complete disappearance of traces dating back to the Middle Palaeolithic.