Popular scientific summary

The main objective of the project is to show the role of the macro-lithic artefacts for the Neolithic societies. The word "macro-lithic" refers both to the object dimensions and to the raw material used in its production. The objects made from rocks are one of the category of the archaeological records that survived thousands of years, the category including wide range of types, such as ground stones, handstones, grinding slabs, chisels, hoes, axes, adzes, coulters and others, defined by their shape and similarity to the tools used during the historical periods.

Although present in the literature, the discussion mainly refers to the typology and raw material, while function of macro-lithic artefacts seemed to be too obvious for debate. However, the interpretation of tool function cannot be based on its shape. Moreover, in case of objects manufactured by the prehistoric societies, the function and the use of tools go beyond an ordinary, everyday activity. Usewear studies/traceology is the method used for the identification of the real function of tools, basing on traces produced by particular activity. Although this method is present in the lithic studies from almost one hundred years, microwear studies of macro-lithic objects made from non-flint rocks are scarce in Europe, and come from the last decade.

This project is focused on functional identification of macro-lithic objects from the archaeological sites in SW Poland, particularly in the region limited by three rivers: Nysa Kłodzka, Kaczawa and Widawa. This region is characterised by high density of the Neolithic settlements and cemeteries from 6^{th}-3^{rd} millennia BC. Fertile soils, rivers and streams, well accessible raw materials necessary for tools manufacture and building houses, as well as sunny hillsides attracted groups of people, whose life, food manufacture and subsistence strategies were based on farming and husbandry.

The publications report about 800 macro-lithic tools from this area, made from various types of igneous, sedimentary and metamorphic rocks. The following analytical methods necessary to "read" the biography of the objects (from the idea and need of manufacture of the object, its production, through its use, modifications and repairs, changes of function, to the deposition) will be employed in this study: usewear analysis combined with experimental studies, petrographic analysis, starch grains and phytolith analysis, mineral residue analysis, analysis of resinous adhesives, 3D analysis of selected and spatial analysis for examining distribution of objects in the archaeological contexts. From these analysis we will collect the data on types of activities performed with the use of macro-lithics, duration of use, methods of tools manufacture, kinds of organic and mineral materials processes with the tools, curation methods and deposition practices. The results of the analysis will generate the discussion on the economic role of macro-lithic tools in everyday life, as well as the significant character of the objects as social and symbolic communicators.