

The aim of the project is to characterise textile manufacture of agricultural communities inhabiting the lowlands between the Oder and Vistula rivers in the period from the mid-6th to the mid-3rd millennium BC. The study will allow for finding the the answer to the questions of how to identify tools related to weaving activity, how to distinguish impressions of woven textiles on pottery from the impressions of plaited works, how the manufacturing technology developed in individual communities and periods, what kind of influence it had on other areas of the economy, and whether there were textile manufacture centres and peripheries in the territory under study?

The evidence analysed within the frameworks of the project includes features related to textile manufacture, tools used for spinning and weaving or their impressions on vessel pottery, and specialist samples, which allow for the accurate identification of the raw material used. The investigations are based on the results of library and museum research, archaeological description of sources (typology, metric measurements, drawing and photographic documentation), and a series of experiments with replicas of the finds: spindles with spindle whorls in four most common types, loom weights, bone awls and needles. The experiments will be carried out under my supervision by the group of collective performers (5 persons). The manufactured textiles will be used for experiments aimed to examine textile impressions on pottery. Another part of the project consists in specialist analyses: archaeobotanical, archaeozoological, microscopic (digital microscope Keyence VHX - 6000), and physicochemical (the analysis of tar substances and lipids). The research methodology is based on my own methods of division and description of finds, on the concept of experimental study of non-vessel pottery, bone objects, and textile impressions on vessels, and on the analyses of the residues of wood tar and lipids.

In the studies on the Neolithic period carried out so far, archaeologists have focused mostly on the most Common finds: pottery, stone and flint tools, ornaments and so-called cult objects. They allow for the determination of chronology, cultural attribution, and manual relations between different human groups. At the same time, many other finds have been omitted from investigations, including spindle whorls, loom weights, spools, and bone awls and needles, which testify to the daily activity of prehistoric communities. In contrast to previous studies, this project, based on the analyses of different kinds of finds, is aimed to link the places of textile manufacture with tools and finished textile products, and it allows for the recognition of the role of spinning and weaving in various areas of the prehistoric economy.

In contrast to the previous studies, this project is based on the analyses of different kinds of finds is aimed to link the places of textile manufacture with tools and finished textile products, and it allows for the recognition of the role of spinning and weaving in various areas of the prehistoric economy. This project will enable to point whether Neolithic communities had the ability to produce textiles from the sheep wool and began to breed sheep not only as a meat source but also to provide them fleece. Another predicted effects of this study is to test to what extent can experimental, microscopic and physicochemical analysis allow to check yet unknown aspects connected to spinning on spindles, weaving on vertical looms, sewing and ornamenting pottery with textiles or textile stamps. This will be the first research of that kind in Poland and will help to elaborate the innovative of recognition on past human activities through their tools and work places. It will become the basis in the research in other Central Europe regions, also for other periods.