Description for the General Public

In the Late Middle Ages, European towns were experiencing an economic boom directly related to flourishing long-distance trade, in which barrels played a significant role. They served as containers for storing and transporting diverse goods, such as beer, wine, grain, herrings, salt, nails, tar, broadcloth, etc. Moreover, they were also used as units of volume in both local and international trade. The immense demand for barrels is attested, for instance, by written sources which report a distinct increase in the number of master coopers in many major urban centres in the 13th through 15th century. The same is suggested by emergence of associated crafts, such as barrel repairers who were easy to find in urban ports and transhipment sites.

Over the last several years, the number of archaeological finds of fragments of barrels grew significantly thus providing a base for multifaceted studies on the role of these items in late medieval economy and trade. However, no detailed study related to this question has been published so far. Therefore, this project is going to include interdisciplinary research on surviving medieval barrels from the area belonging to the state of the Teutonic Order between the 13th to the turn of the 15th and 16th century. The research will encompass archaeological finds from major urban centres, such as Elbląg, Gdańsk, and Toruń, as well as smaller towns, such as Chojnice, Golub, Grudziądz, Kwidzyń, Lębork, Puck, and Tuchola. It will allow for presenting a relatively full picture of cooperage within the investigated area, and tracing differences between particular towns in a broader comparative perspective including published analogous finds from outside the researched region.

In order to ensure as an in-depth analysis of barrels as possible, three main research tasks have been planned. The first is to examine, compile, and catalogue staves and bottoms of barrels found in Chojnice, Elbląg, Gdańsk, Golub, Grudziądz, Kwidzyń, Lębork, Puck, Tuchola and Toruń. Next, specialist dendrological and dendrochronological analyses will follow to determine types and provenance of the wood used for the investigated barrels. After that, post-production trace evidence analysis will be performed to reconstruct the manufacturing techniques and tools used in coopers' workshops. Moreover, meticulous macrophotographic documentation of marks on barrel bottoms will be prepared, which will then be used to create digital 3D models – a convenient tool for interdisciplinary studies.

The final outcome of the present project will be a comprehensive study on the question of production, provenance, and exploitation of barrels in the Late Middle Ages based on archaeological finds from the State of the Teutonic Order. The use of dendrological and dendrochronological examinations for precise determination of species and provenance of wood will be an innovative research procedure. The data obtained this way will allow for tracing common features in manufacturing practices between the investigated towns, as well as assessing proliferation of this type of products, which could travel long distances due to their practical function. Investigating this problem requires an insightful study of marks placed on barrel bottoms, so their precise documentation and introduction into the scholarly circulation will contribute to expanding the related comparative base and foster a scholarly discourse regarding their significance.