## Summary

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## Boatbuilding relics from archaeological excavations in Gdansk, conducted from 1988-2015

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Gdansk owed its development to trade based on sea and river navigation. Since the Middle Ages, this city has been one of the most important port centers in the Baltic Sea basin. Despite conducting numerous studies on the issue of shipping, shipbuilding, the functioning of the port of Gdansk, there are still many research areas that require further cognitive work. One of these issues are boatbuilding relics discovered during archaeological research. Since 1988, numerous and large-scale archaeological works have been carried out in the area of Gdansk, which contributed to the discovery of many remains of boats and ships. The main contractor of these works was the Archaeological Museum in Gdansk, which carried out the last major research in 2015. For this reason, the time frame from 1988 to 2015 was adopted in this paper. Boatbuilding relics acquired during this period have not been comprehensively developed taking into account not only identification, typological and chronological analysis, but also consideration of the functioning of these monuments in the context of social, economic and natural conditions of the city on the Motlawa River.

The aim of the study is to analyze archaeological sources - boatbuilding artifacts - and their broad interpretation taking into account the cultural, social and economic context. As part of the work performed, a comprehensive elaboration of one category of archaeological monuments was achieved, which are wooden remains of boatbuilding elements. Some of these relics have already been the subject of scientific studies, but information about most of them does not function in scientific circulation. The need to collect and develop all the artifacts of this group for scientific needs and the awareness of the high demand of both academic and museum circles for monographic elaboration guided the idea of undertaking the effort of this task.

As the main research problem, the question was adopted: are wooden boatbuilding elements discovered during archaeological research an important source for studying the functioning of Gdansk as a port center in the period from the Middle Ages to the modern era?

The subject of archaeological boatbuilding relics, so far untouched in the scientific literature, is related to the issue of dismantling vessels as an element of the port city's life in order to obtain raw material for the economic needs of the city. This issue is one of the research problems addressed in this work.

During archaeological works completed in the area of Gdansk, it was found that many of the discovered boatbuilding elements were subjected to the process of secondary use, often as a building material in various constructions. An additional research question posed as part of this work is: was the secondary development of boatbuilding wood an important element of Gdansk's economic activity in the period from the Middle Ages to the modern era?

The work was written on the basis of a collection of 131 boatbuilding parts. The most important group is one of the seven wrecks discovered at the following sites: Zielona Brama, Chmielna, Ołowianka (two wrecks), Brabank and Podwale Staromiejskie (two wrecks). The analysis covered elements of longitudinal and transverse bonds: 6 keels (preserved in 10 fragments), 8 bottoms and 2 frames. A collection of fragments of hull plating was also developed, consisting of staves connected, i.e. at least two staves connected to each other longitudinally or transversely – 18 examples and individual fragments of staves – 89 pieces. Zembrant was also included in the ship's fabric category. In addition, the work also includes finds of a semi-finished boatbuilding elements and an alleged boatbuilding part.

The work also uses numerous scientific material, mainly including archaeological, historical and ethnographic sources.

The collection of boatbuilding relics from Gdansk is very diverse typologically and chronologically. It is a unique collection compared to materials obtained in other port centers in the area of Poland, for instance from Szczecin and Wolin, and stands out against the background of finds from archaeological research of port centers in the Baltic Sea basin.

The collection of boatbuilding elements acquired during archaeological research carried out in Gdansk in the years 1988-2015 significantly expands knowledge about the functioning of the city as a port center, especially since the fourteenth century. The presented archaeological sources brought a lot of new information to further studies on issues related to sea and river navigation in the port of Gdansk and the functioning of boatbuilding and shipbuilding sites.

On the basis of the review of boatbuilding materials from Gdansk, it can be concluded that along with economic changes (mainly with the development of trade) and social (new residents of the city) there were changes in local boatbuilding techniques, and thus changes in the construction of ships. These were not revolutionary changes, but rather evolutionary, consisting in the gradual adaptation of new solutions. It has been shown that boatbuilding relics, which are treated as destructed parts, are a valuable source of knowledge about the rich past of Gdansk. For this reason, the attitude to this category of sources of archaeologists conducting research should change. Monuments of this type should enrich the collections of Gdansk museums and should be exhibited as an important cultural heritage testifying to the history of Gdansk, which owed a lot in its development to shipping.

In the study of boatbuilding elements, their "second life" should be taken into account as objects reused in various economic activities. The presented examples of the use of boatbuilding elements show the multitude of applications of this raw material and they are a good example of skillful recycling and upcycling wooden units, which should now be used in accordance with the requirements of pro-ecological activities.