## The Spatial Layout of Bydgoszcz from its Foundation to the Partition (1346-1772). Fundamental Transformations Based on Historical, Cartographic, and Archaeological Sources

The city of Bydgoszcz was founded in 1346 by King Casimir the Great during the period of medieval urban colonization in Europe, which was associated with the implementation of a standardized model in spatial design and land use. The aim was for chartered cities to have a planned spatial layout with recurring elements – a market square, street network, building blocks with burgher plots; public utility buildings such as a town hall, church, municipal cemetery, and bathhouse – all enclosed and protected by a defensive fortification system. The process of urban foundation could take several decades, with the city gradually expanding as more areas were adapted to serve roles within the urban structure. The development of a city territory with clearly defined boundaries and an appropriately organized urban tissue was linked to topographical reorganization that happened during the founding process. The physiography of the terrain played a key role in the establishment of a new city. The way the land had been previously used was also an important factor. Over the following centuries, the designated spatial layout underwent both spontaneous changes and planned transformations.

The subject of the study is the spatial layout of Bydgoszcz and its transformations from the time the city was granted the town rights till the end of the Old Polish period. The chronological framework for that time is nominally marked by the period during which Magdeburg Law was in force in the city – from 1346 to 1772. The availability of archival materials is also significant, though these remain heavily fragmented and are nearly non-existent for the early phases of urban development. A broad range of sources was used and it was divided into four categories: historical (archival) sources, iconographic, cartographic, and archaeological sources – all of which were subjected to detailed analysis. The scientific value of these sources is presented in the first part of the study, which constitutes the foundation for further exploration. The analysis begins with an examination of the impact of natural spatial determinants on the urban development of mediaeval Bydgoszcz. The starting point involves reconstructing the topography and hydrographic network at the time of the city's foundation, as these were key conditions determining the possibility of settlement. This is followed by an assessment of the scope and nature of transformations made to the natural environment by anthropogenic activity.

The issue of the city's foundation was considered from both - legal perspective, based on territorial provisions of the foundation charter, as well as from the practical implementation of the task, which involved planning, measuring, and building a new city. Bydgoszcz's spatial layout resulted from the functional plan envisioned for European medieval towns. The main elements of the urban structure were: the market square and the town plots forming city blocks arranged along the street network. Each urban space had designated functions: residential, commercial, industrial, administrative, defensive, religious, and other roles within the urban social structure.

The spatial scope of the study includes the actual city - within the city walls - presented against the background of its immediate surroundings. By the end of the mediaeval period, Bydgoszcz had developed a complete system of fortifications and the city functioned within a small, clearly demarcated area, where internal architectural transformations occurred.

The spatial layout defining the arrangement of buildings and infrastructure forming the city, evolved over time as the city developed, however in its essential framework, it retained the form it had reached from the late 14th till the end of the 16th century. The aim of the study was to trace the changes in the spatial layout of Bydgoszcz between the granting of municipal rights and the Prussian annexation, as well as to identify turning points that marked stages of transformation within the city. The issue was approached by tracing changes in the spatial layout and analyzing urban structures from an urban planning perspective. The study focused on the functional arrangement of the city and

the plots within it, which constituted the basic autonomous units of land division. Tracking changes in parcelling provides insight into transformations in the spatial layout. An attempt was made to determine key parameters: the size of the market square, the dimensions of a residential plot, and specifying the methods of organizing urban spaces for different uses.

The spatial layout of each city is its unique feature, differentiating it from other urban centers and it plays a crucial role in shaping sense of individuality and local identity. The development of a city with medieval origins, such as Bydgoszcz, has taken place over the course of centuries and continues to undergo transformation to this day.