

The summary of PhD thesis:

### **Parks as a part of the urban spatial structure of the cities within the Lodz Metropolitan Area**

The dissertation presents broad and multi-faceted research and analysis of parks as a part of the urban spatial structure. The spatial scope of thesis is Lodz Metropolitan Area (LMA), and the subject of research - 54 urban parks located in 12 cities LMA.

The aim of the dissertation is to examine the relationship between the location of the parks in the urban space of the Lodz Metropolitan Area and their origins, landscape development, functions as well as to provide an explanation and assessment of the gathered data. For the purpose of this dissertation, the following supportive objectives have been constructed:

- formulation of parks' typology within Lodz Metropolitan Area in terms of origin, land development and their functions
- examination and assessment of the location of the parks in the cities within the Lodz Metropolitan Area spatial structure
- assessment of the equipment of the cities within the Lodz Metropolitan Area in the park space and the formulation of proposals and recommendations for the purpose of shaping local policy within the scope of this field.

The first chapter, preceded by an introduction, is a theoretical background for the research issues discussed in the dissertation. The second chapter describes features of urban parks within the LMA. The following chapters characterize the typology based on their origins, development and their functions. The undertaken research make it possible to conclude that urban parks within the LMA are diverse on the account of origins, landscape development and function. The conclusion is drawn upon a great number of distinguished types based on the abovementioned features and the necessity for employing a multi-stage procedure for the sole purpose of making a selection. The green spaces of the functional area within the LMA are diversified because of the aforementioned features, similar to the green areas in Lodz. Urban parks of various types are mainly distributed unevenly within the Lodz Metropolitan Area.

The following chapters focus on the research and assessment of the situation of the parks against the nature system of the cities, public spaces, socio-demographic and functional and spatial structures with the particular emphasis on residential zones. What is more, the access to the said areas, by public transport amongst other, is also taken under examination and assessment.

Studies show that not all of the parks form a part of the continuous nature system of the city. Furthermore, the location of the said spaces do not refer to the distribution of people. Generally, the area surrounding parks are densely populated which makes them overloaded or close to this state or subjects to vandalism. The location of parks also do not refer to the distribution of residential zones in the cities. Only a minor part of the housing is situated within the reach of green areas. Lack of these places is much more prominent among multi-family dwellings than in single-family residence areas. Generally, the housing function dominates in the functional and spatial structure around parks. Usually, residential zones account for the greatest area surrounding the greenery. What is more, the type of the housing is related to the

standardization of the functional and spatial structure in the neighborhood of parks. More consistent structures (with a low functional diversity) are common for single-family residence area, and more diverse for multi-family residential dwellings and buildings other than dwellings. What is characteristic for the neighborhood of the green areas is the diverse functional and spatial structure.

Transport accessibility of the parks is one of the factors that have influence on the extend of the impact of the greenery and therefore on their role as general urban spaces. The worse transport accessibility, the more local character of the park. The transport accessibility to the discussed green areas is diversified. Most of them may be reached by the city's or the municipal public transportation without the necessity to change, within the optimal time of 15 minutes. Only to some of the parks access by the public transportation is not provided.

There are many other factors that influence the accessibility to the green areas, such as the number of entrances to the parks, the public car-parks, the number of parking spaces as well as the zebra crossings (including signalized crossings) in their immediate vicinity. In this regard, the majority of the parks possess those features, therefore may be easily reached. The high traffic intensity and high technical specification roads which are in the close proximity to parks offer good access by private means of transport, but on the other hand, they hinder access on foot. Such roads appear close to almost all of the mentioned greenery.

Because of the lack of delimitation of the public space systems in the cities it is impossible to assess the location of the urban parks within the cities. Considering that the direction of spatial development needs to be provided for those lands, the indication on them is usually limited in the studies.

Urban parks of the same or similar features which determine their location within other parts of spatial structure are mostly unevenly distributed within the Lodz Metropolitan Area.

In the last chapter, an attempt at synthesis of the location of the distinguished types of urban parks within the Lodz Metropolitan Area in the spatial structure of the particular cities was made. The connections between those concepts were analyzed, explained and evaluated.

The analysis showed the greatest correlation between the types of the parks identified in terms of origins, landscape development and/or their function and their location in the function and spatial structure of the city and a given technical specification roads which are in the close proximity to them. Furthermore, parks with the specific origins and landscape development show strong relationship with their location in the nature system. What is more, the parks which are characterized by certain features describing their location in the spatial structure (regardless of the combination of those features) always stay in a strong correlation with the types of park equipped with other landscape development. Parks with specific landscape development and functions are strongly connected with the pedestrian crossings equipped with traffic lights and located directly vicinity of green areas. However, the weakest correlation has been observed between the parks with a determined origins and landscape development and/or functions and the potential and the demographic structure of the people who live in the close neighborhood to the green areas in question.

The dissertation is concluded with conclusions and recommendations for local policy in terms of equipping cities within LMA in urban parks and shaping such green areas.