## Summary of PhD thesis Spatial behavior of urban squares users in Poznań Adam Wronkowski

Urban squares are often referred to as the key elements of the city that crystallize its plan, constituting nodal points where various events intertwine and diverse activities are carried out (Whyte 1980; Wejchert 1984; Carr et al. 1992; Carmona et al. 2008; Gehl 2007, 2009; Chmielewski 2010; Jałowiecki 2011). These types of spaces are used by countless people who carry out many different spatial behaviors. It is a phenomenon that is based on intentional actions relating to human activity closely related to the possibilities offered by his own and the surrounding conditions aimed at satisfying the needs. The relationship between man and the surrounding environment results in his spatial behavior, e.g. in urban squares (Barthel et al. 2015; Downs, Stea 2017). This relationship is based on a system of feedback between the two above-mentioned subsystems, which are closely related to each other, but remain autonomous (Wallis 1990; Jurković 2014). Therefore, it becomes important to explore this relationship, which consists in the constant confrontation of man with urban space.

The main purpose of the work was to describe and explain the way of shaping the spatial behavior of the users of urban squares. It was achieved through the implementation of five detailed goals: (1) defining the role of urban squares for their users, (2) identifying the needs satisfied by the users of urban squares, (3) identifying factors influencing the spatial behavior of users of urban squares, and (4) defining behavior tactics spatial users of city squares. work. Three research methods were used to achieve the assumed goals of the work and to answer the questions posed. Observational studies allowed for the study of human spatial behavior as it occurs in a natural context (Frankfort-Nachmias, Nachmias 2001; Creswell 2013). The users of Plac Wolności in Poznań were observed, as well as the type and variety of activities performed by them, as well as their duration and place of their occurrence. There were also 17 individual in-depth interviews (10 structured interviews conducted with the MS Teams tool and 7 free interviews conducted at Plac Wolności in Poznań). The indepth interview scenario included open-ended questions divided into five basic groups concerning: the role of urban squares in everyday activities, the motives for using urban squares and the factors determining their choice as a place of activity, the needs satisfied in urban squares, factors influencing spatial behavior and limitations of spatial behavior. During individual, in-depth interviews, the focus was on getting to know the motives for using Plac Wolności and the specific places within this space. A questionnaire survey using the CAWI technique was also conducted. It mainly concerned the assessment of the frequency of meeting the identified needs satisfied in urban squares and the degree of influence of factors on human spatial behavior. In total, 384 respondents who were residents of Poznań participated in the study. The sample of respondents was selected according to the structure of selected population characteristics, such as sex, age, education and place of residence.

The doctoral dissertation consists of two main parts: theoretical and empirical. The first one presents the concepts and concepts present in the literature on the subject, which are of key importance for the implementation of the topic under consideration. There was a literature discussion about urban squares as open public spaces (chapter 2), man as a user of such areas in the city (chapter 3), his spatial behavior (chapter 4) and the affordance theory (chapter 5). The second part of the work contains the results of the research carried out along with their description, analysis and conclusions drawn.

Chapter 6 presents the results of the questionnaire survey and individual, structured indepth interviews. The results of the conducted research indicate that over 80% of the survey participants declared that they use urban squares in Poznań. The most frequently used spaces of this type are: the Old Market Square and Wolności Square. Urban squares are important areas in the city for most of their users. In the course of the research, 11 functions of the squares were distinguished. They are treated as spaces for meetings, culture, recreation, demonstration, gastronomic, market, tourist, artistic, social, communication and science. The phrase "urban square" is most often equated by its users with terms such as: rest, meetings, recreation, events, culture, festival, gastronomy, enclave, tourists, people, memories and free time. Interestingly, city squares are noticed not only in spaces that have an administrative name that includes the phrase "square". The participants of individual in-depth interviews also indicated a number of other areas in the city that function as squares in their minds. These are, for example: areas along the Warta River, Święty Marcin Street, free spaces in front of shopping malls or clearings in parks (e.g. on the Citadel and on Malta). What makes it possible to distinguish a square from the city's spatial structure are: the physical properties of a given area, activities that can be undertaken and its location in the city structure. Despite the high percentage of survey participants using urban squares and assigning great importance to these spaces, the indications of the youngest respondents aged 18-29 who most often declared that the use of these spaces is irrelevant or indifferent to them are worrying. In terms of the location of squares in Poznań, their density in the city center should be noted - the closer to the city center, the more of them there are. They are also more popular with survey participants.

Chapter 7 also discusses the results of the survey and individual, structured in-depth interviews. On their basis, it should be concluded that human spatial behavior begins in the human mind along with the identification of his needs. In the course of the research procedure, 17 main needs were identified, which are met in the space of urban squares. They can be divided into 2 main categories: obligatory and optional, and 4 subcategories: basic, recreational, social and developmental. Most frequently met in urban squares in Poznań are the needs of: rest, mobility, visual / aesthetic, communing with nature, communicating with other people and communing with culture. In turn, the needs of creating, manifesting one's personality and expressing emotions, cooperation with others and belonging to a group are realized the least frequently. After identifying his needs, a person starts looking for a space where he can satisfy them. When choosing, he pays particular attention to the prevailing weather conditions, aesthetics, a sense of security, the possibility of comfortable use and good transport connections. Generally speaking, the factors of choosing an urban square as a space for human activity can be divided into 3 categories: environmental, spatial and psychological. The influence of the so-called a sentiment filter that relates to memories, experiences and values associated with a given space. It makes it possible for a person to choose a space that is less obvious from among two spaces that can satisfy their needs - due to memories, experiences and values. When reaching a previously selected space, a person's spatial behavior begins to be influenced by various factors that can be classified according to 3 orders. The first relates to their genesis. In this context, there are environmental, spatial, cultural, social, physical and psychological factors. The second concerns the degree of their influence on human spatial behavior. There are high, moderate and low-impact factors. The last division concerns the stimulating and limiting properties of the identified factors.

Chapter 8 presents the results of individual in-depth interviews conducted at Wolności Square in Poznań. In the course of the research procedure, three basic tactics of human spatial behavior focused on space, people and needs, respectively, were distinguished. The implementation of each of the above tactics translates into a different use of space - both in terms of the course of spatial behavior, their intensity, and the place of their overlap. These tactics are the way in which a person strives to fulfill his needs. They determine the course of spatial behavior, and also determine the places of their occurrence, duration and intensity. The tactics of spatial behavior make a person pay attention to a characteristic set of factors during his activity and look for specific affordances in order to meet his needs, often ignoring other factors. As emphasized by M. Madurowicz (2019, after de Certeau 1990), in opposition to the often inconvenient, but necessary and permanent strategic arrangements, there are tactical

solutions of a convenient and at the same time temporary nature. Thus, tactics of human spatial behavior can be treated as flexible activities, selected under the influence of various factors that are to serve the most effective implementation of human needs. The tactics of human spatial behavior determine the direction in which human activities are mainly directed - space, other people or needs. Man uses all three tactics simultaneously. One of them, however, plays a dominant role over the others, therefore it particularly strongly determines the course of spatial behavior. The remaining tactics are complementary - they are present, but they do not have that much influence on the decisions made by a person. The proportions between tactics are determined each time by a human and may change. The dominant tactic may also change depending on the needs. A person can change the space of activity while maintaining the same tactic, or change tactics without changing the space. Importantly, the choice of tactics for human spatial behavior can be made at any time. Chapter 8 describes in detail each of the 3 identified tactics, incl. in relation to the needs and factors influencing human spatial behavior, as well as affordances playing a key role. The conducted research procedure allowed for the implementation of the assumed goals. Chapter 9 is devoted to answers to the research questions posed.