## Slawomir Palicki<sup>1</sup> EVALUATION OF URBAN SPATIAL PLANNING

The aim of the elaboration is to illustrate the need for proper and full perception of the value of urban public spaces. As the functioning of a city is a multifaceted issue, it is essential to recognise the role and the character of a given space. The predominant impact on social, market, cultural and communicative behaviour makes a well-designed and properly managed public spaces an axis of city development. It is a strong incentive to define proper directions in functioning for market-attractive and socially desired areas.

**Keywords:** public space, urban space, evaluation, urban planning.

## Славомір Паліцкі ОЦІНЮВАННЯ ПРОСТОРОВОГО ПЛАНУВАННЯ МІСТ

У статті продемонстровано необхідність правильного і повного уявлення про значення громадських територій в містах. Функціонування міста — складний процес, у якому важливу роль відіграє характер громадських територій та їх вплив на соціальну, ринкову, культурну та комунікативну поведінку. Тому продумане і правильне управління громадськими територіями — основа розвитку міста. Аргументовано необхідність визначення напрямів функціонування ринково привабливих і соціально значущих територій.

**Ключові слова:** громадські місця, території міста, оцінка, планування міст. Літ. 16.

## Славомир Палицки ОЦЕНКА ПРОСТРАНСТВЕННОГО ПЛАНИРОВАНИЯ ГОРОДОВ

В статье продемонстрирована необходимость правильного и полного представления о значении общественных территорий в городах. Функционирование города — сложный процесс, в котором важную роль играет характер общественных территорий и их воздействие на социальное, рыночное, культурное и коммуникативное поведение. Поэтому продуманное и правильное управление общественными территориями — основа развития города. Аргументирована необходимость определения направлений функционирования рыночно привлекательных и социально востребованных территорий. Ключевые слова: общественные места, территория города, оценка, городское планирование.

1. Introduction. The awareness of importance and attributing new meaning to public spaces, the input into increasing the standard of living, and shaping various aspects of life make the research into the public space a point of interest of numerous scientific disciplines and specialties including economy, sociology, psychology, ecology, architecture, culture science and city planning. Moreover, there are problems concerning the measurement of values related with public space, which might make it difficult for a comparison between varied manners of space utilisation. Such a situation may lead to the lack of awareness concerning the role a proper space utilisation,

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among both authorities and users of a given space, which leads to allotting them to perform different functions, limiting the amount and lowering the quality of public space in cities.

Within the scope of scientific foundations of the issues raised, the relation between civil engineering, local development, real estate market and matters concerning the social multicriteria decision making process must be pointed out. It is an interdisciplinary knowledge, however, it seems to show inclination towards economics. The root of the problem lies within economics: it is based on a correct interpretation, made by local authorities, concerning the way of valuating public space for its maintenance or modification - generally the optimisation of its usage. That is how scientific research moves towards the rule of optimal resource usage, based on the best possible allocation of goods, which, accompanied by a given economic potential, should maximise effect - in this particular case seen especially from the social and economic points of view.

The social and economic sphere of local development are both strongly affected by modern processes of city transformation. It derives from the nature of the aforementioned spaces, which are understood as a unique set of features, meanings, values and potentials. Urban development which is proper and targeted, together with socioeconomic development are determined by such processes as well. The fact that public space has recently been attributed, on the global scale - but also in Poland, role of a city development axis (How to turn..., 2000), and has been treated as a special, rare good of a strategic meaning, denotes the necessity of a thorough research into the matter.

2. Literature review. Particular kinds of public spaces are characterised by a different manner of influence on the reception, behaviour and utilisation by users (Akkar Ercan, 2007). The key issue is the conscious and appropriate management of given types of public space, and making use of the knowledge concerning its evaluation for the purposes of control, or conscious and targeted local development.

At this point, it might be essential to think about the meaning of the word "value" itself. In social sciences, including economics, values are seen to have a connection with assessment. Assessment establishes whether a given object, or its current state is valuable, or characterises it according to certain models. Assessments establish what is good, and what is bad, useful or useless, beautiful or ugly. Norms, however, state what the situation should look like, what the rules of behaviour or proceedings in a given environment are etc.

The understanding of value is differentiated as to (Chojnicki, 2008):

- objective intentional objects (good, evil);
- attributive judgements concerning actions, objects, events.

In the context of human activity the dichotomic classification of values into autotelic and instrumental has a crucial importance. Autotelic values are absolute and autonomic, as they are independent from their usefulness. Instrumental values, however, begin to play an important role only when they turn out to be useful for someone or something, when they become utilitatarian (in a given aspect, given conditions, for a given purpose).

The subject division of values points out to the existence of 2 kinds of them - individual and public. Both individual and public values pertain to the life situation

of people. Some of them show some signs of being autotelic; such values are themselves appreciated by people, i.e. justice. Others have an instrumental character, concerning the aims of a person or needs to fulfilled. Biological and psychological values shall also be treated as individual values. Public values, however, are usually related to the socioeconomic sphere, to be more precise - pertain to fulfilling the needs and expectations of different social groups.

As an entity, pertaining to various fields of human activity, values can be divided into economic, social, political, cultural and ecological (Hillier, 1999).

When it comes to economic values, the division into the use value and the exchange value, coined by A. Smith, plays a crucial role. As it was pointed out by Dyke (1981), the term "use value" pertains only to the items which are produced, lent or sold to users. We usually do not try to obtain something, which will prove to be useless for us. The exchange value refers to a different aspect, when we ask about a value of something, we want to know how much it costs. The fact that exchange values are seen in both financial and quantitative terms, makes it the basic context of understanding the financial value. The functional value may be dominated by economic aspect - as it informs, regulates and measures the market (economic) usefulness, but at the same time it pertains, in a wide perspective, to other aspects such as aesthetics or culture.

Social values refer to the existence and the quality of functioning of communities, and these current and future qualities of life, which fulfil their collective needs (e.g., welfare, safety, comfort of life, favourable environment) (Czarnecki and Sieminski, 2004).

Social values may be interpreted as being equal to, or overriding economy, but are always next to it (or "out of economy") (Chojnicki, 2008). Well-being is an example of a value which is above economy itself, because it also includes the process of fulfilling social needs. Social values seen as complementary or competitive to economic values (e.g., the standard of living) may either displace, or complement them (e.g., income per capita).

Political, cultural and ecological values are characterised by a strong connection with both economic and social values. Political values pertain mainly to the position, role and character of a country and authorities. The most important issues are the relations between countries on the global scale, and within international unions, and the values which determine the structure of a country - political freedom, pluralism, democracy, participation.

Cultural values pertain to education and people's invention, and to fulfilling the needs within the area - they apply to people's behaviour (learning), the use of symbols (scientific knowledge), and tangible objects (works of art). The effects of learning, accessibility of education and the evolution of scientific thought are the examples of such values.

A state of nature which is already shaped or is currently undergoing changes, and the interaction between the society and nature lie within the scope of ecological values. Such values may also concern the issue of "socialising" nature, creating an environment for people, therefore nature is increasingly being seen as an important element of socioeconomic development. Among fundamental ecological values there are the ecological balance, ecological order, the cleanliness of ecosystem, environmental protection.

The awareness of the complexity of interpreting values, especially within the scope of public spaces, helps to understand the range of complexity of the discussed issue. A well-designed public space generates numerous important effects - it builds up the economic value of a space, creates the image of a city, increases the standard of living, catalyses the growth of a creative society (Matusiak et al., 2010). The demand to keep a high quality of space, which is a crucial element when it comes to the comprehensive development of a city, is often stated in the literature on the subject (Thompson, 1998; Gies, 2006; Harnik and Welle, 2009; Palicki, 2009; Trojanek, 2012). The process of creating public spaces has not been left unnoticed when it comes to subjects investing in real estates - reading the functions of a space provides arguments for an optimised usage of such real estates.

4 different types of non-measurable features (meta-criteria of valuation) of a public space were listed within the "Project for Public Spaces" research: utilisation and actions, comfort and image, accessibility and community, strengthening social relations. In order to find optimal features of a public space, when it comes to the utilisation and actions criterion, traits such as amusing, active, lively, special, real, useful, rooted, balanced were attributed. Measuring features which would quantify the aforementioned features, constitute the value of an estate, the level of rents, and the volume of retail sales. Within the remaining measuring features there are construction conditions, environmental data, traffic data, public transport usage, pedestrian usage, crime level, night life (Matusiak, 2010).

It suggests a clear inclination of public space management processes towards enhancing economic and social phenomena. Both operational and aesthetic qualities of a space influence the perceived attractiveness of estates located directly in a city or in its surroundings (The Value..., 2004). A high quality of public space is decisive when it comes to both pedestrian and motor traffic in the area of influence. A deep analysis of public usage profile of a given space, may become a source of interesting observations when it comes to methods, or even the optimal direction of management, also concerning the profit in financial terms. The success and popularity of a given public space is usually caused by either spontaneous, or planned household expenses in the retail trade sector, e.g., main streets of big cities, gastronomical services or entertainment. Such determinants may cause commercial rents increase, and, as a consequence, the appreciation of houses in the surroundings (Palicki, 2012). It must be underlined that there is an interaction, a positive feedback, between public spaces and their users (Bell, 2007). A further increase of quality may occur, as a secondary effect of the popularity of a given fragment of space.

**3. Key issues.** The already existing concepts concerning benefits and values generated by public spaces do analyse the issue from different points of view; symbolism of a place, market attractiveness, social potential, spatial and ecological order, city planning and architecture. However, all of them analyse the issue from the viewpoint of quality. What is more, there are suggestions on the lack of possibility to measure them in terms of quantity generates a certain fortuity when making investment decisions.

The fundamental problem which was taken up within the research done by Polish scholars (Matusiak et al., 2010), was to size the value of public spaces in a formula, with a wide usage of the quantitative approach. However, it is not an attempt at

pointing out a synthetic parameter or index, which would present the general attractiveness of space, but rather an aspiration to create a relational model of valuating alternatives for urban public spaces' management. The wide term of public space values, in cities, including the current state of knowledge, at the present level of social and economic development are quantified.

Economic and social aspects constitute the main axis of the research concept. The emphasis is put on the multidimensionality of the issue, in the context of typology of public spaces themselves, but also their users (or in a wider perspective - stakeholders, beneficiaries), and the criteria of affecting them. The collected data were organised in the order allowing for the multicriteria analysis.

The effect of the research will be the method of valuating public spaces in the form of a general model and partial models. A database of benefits and values created by different kinds of public spaces (recreational, cultural, meeting places etc.) will be formed, accompanied by quantitative and qualitative indicators, which would allow their measurement and relative evaluation. Further on, the direction and the force in which public space influences particular developmental factors of a city will be researched into and related with the results of the qualitative analyses.

It is essential for the project to take into consideration the measures taken in public spaces which are desired from the economic and social points of view. It is a specific analysis of preferences of inhabitants, entrepreneurs and temporary users, which, when diagnosed on a proper level of insight, may support decisions concerning the dynamics of public space management. Defining the desired qualities of a good public space helps to achieve success in both social and economic categories. Places where people want to spend time have positive effects on local businesses, attract tourists and draw potential real estate investors. It is important then to establish a desired set of key features for a given space, from different users' points of view, and to recognise which types are especially well seen in particular parts of a city, considering the collective valuation of a situation by various stakeholders.

The model would make it possible to compare particular kinds of public space in given Polish cities, considering the central, inner-city and housing estate space. In the longer term, it is possible to imagine a recommendation concerning management or optimisation of public place management in cities, through a conscious influence on the changes of values which are assigned to particular kinds of public space (e.g., revitalization formula), and generating a desired model of human behaviour (e.g., increasing the frequency and diversification of directions concerning the usage of a space).

The primary objective of the paper is to create a scientific tool, which would support the processes of interactive and discursive adapting the structure or kind of a public space, depending on the adopted, two-way level of priorities: the optimisation of public spaces' effect on the development of a city and the minimization of social conflicts.

**4. Materials, methods and first results.** It must be noted that the research grant is still in progress. Hence, some parts of the discussed elements are only at the planning stage, and the accessibility of results shall be treated postulatory, due to the fact that working out the initial data is time consuming.

The result of the research will provide a wider knowledge concerning the meaning, power, direction and the impact of public space on the development of cities,

especially on its economic, social, ecological and cultural factors. In order to present a comprehensive image of the situation, it is necessary to hierarchise the benefits and values generated by public space from the point of view of every important socioeconomic group. Then, the aforementioned benefits and values were grouped according to the subject criterion, and complemented by further analysis of the statistical data. Mutual relations between various kinds of benefits and values, concerning public space, will be analysed as well. Particular types of benefits underwent an initial sociographic analysis in order to estimate the emotional and cultural values seen by various collective benefiters.

The guiding axis of the analysis will be 2 sources: individual indepth interview with the representatives of local communities, and the observation of public space in its practical functioning. Both sources of data will help to outline the image of a public space (park, square etc.), in the users' consciousness, from the point of view of its features (e.g., quality assessment, spatial availability, openness, security), and the narrative elements concerning changes in a space over time (based on the knowledge of subjects). Additionally, the socioeconomic dynamics of public spaces will be established, which may be read on the basis of frequency and character of social interactions induced by it, their durability and recurrence ("the rhythm of city").

The research was carried out in 2012 by the team in the public spaces of 3 big Polish cities (Poznan, Gdansk, Wroclaw). Proper study visits were carried out, using the groups of pollsters, who were observers of the space users' behaviour as well. 3 general types of public space were chosen - central square, inner-city market and the recreational public space located within the premises of a housing estate. Almost 100 hours of observations and 800 survey interviews were conducted. Additionally, the results of almost 200 indepth interviews with pedestrians were obtained (with the text transcripts), and almost 130 business entities were researched into - using a separate concept of survey. Due to limited financial capabilities, it was established that in order to outline the sociographic analysis, it will be sufficient to use the quota sampling methodology (random walk research). It is a consensus between scientific desires and financial reality.

The obtained data is now being thoroughly analysed. However, it has already been possible to identify meta-criteria of attractiveness evaluation concerning particular types of public space.

Among the basic, universal criteria of evaluating all the kinds of public spaces there are:

- a) social indicators:
- the intensity of usage;
- the universality of usage;
- social interactivity;
- habits;
- relax/spare time;
- anonymity of a space;
- b) economic indicators:
- pace of growth or market value of an estate;
- space as a workplace;
- causing a economic-functional habit (so called "forced" interactivity);

- uniqueness or the offer of a place.

Other meta-criteria evaluate urban and cultural qualities and values. Values specific for given types of public space were also analysed. However, it was not possible to perform a direct comparison research, as such values are characterised by a wide variety in particular spaces.

The next stage was an indepth analysis of the collected data, and their groups (meta-criteria) on the basis of multi-criteria analysis (PROMETHEE, AHP, conjunction rule, lexicography rule) and statistical tools, especially the correlation analysis and exploratory factor analysis, which will make it possible to detect meaning and relations between particular groups of benefits, and will allow for the number of factors to be reduced to a few, which are crucial for each analysed public space. Typical effects, which belong to a given will be separated in such a way.

Only the separation of key subject groups, evaluating particular alternative kinds of public spaces will make it possible to outline partial models of valuating them. Among all the respondents, it was possible to establish 4 groups which were numerous enough and guaranteed an internal cohesion of socioeconomic attitudes:

- high-level management, intelligentsia, owners of companies;
- middle and lower levels at the job market;
- students;
- pensioners.

The evaluation of each social group, in its relation to every space, consists of the analysis of the survey answers, correlation analysis which is based on the survey as well, exploratory factor analysis, together with the quality analysis of users' behaviour, strengthened by indepth interviews. The image is completed in the partial model by statistical indicators, which are characteristic for a given space (data from the Central Statistical Office in Poland, the city cadastre - several hundred transactions on the real estate market of the researched cities between 2008-2012, in relation to social, demographic and economic phenomena). When in comes to partial models, the main thought is to follow the explorative quality valuation ("what does the valuation of public spaces look like?"), and it is a relative evaluation, which is defined separately for each of the groups taking part in the research.

The general model is characterised by a explanatory character of the deliberation ("Why does the valuation of public spaces look like this?" and "Why and by whom are some of the spaces evaluated higher, and others lower?"). It assumes the depressurising of partial models, through combined reading of human preferences, without the division into social groups, and looking for relations and comparative valuation between various kinds of analyses spaces.

The research is aimed at constructing a certain model for general evaluation of public space, which would encompass a broad spectrum of their valuation criteria (social, economic, market value, dynamics of changes, active usage of space etc.), of both quantitative and qualitative character. It was assumed that the results which would be obtained after applying the model, will not be a valuation in its literal sense (points, money, a value on a scale), but would rather be more of a relational valuation.

It will be possible to implement the general model, together with the partial ones due to the application of the multicriteria decision-maker (user) profiling formula, so establishing various preferences of different social groups which were found in the research. In such a way, the answer which social group prefers a given type of a public space, and which factor made them choose so, will be obtained, which may be treated as the final formula of valuating different kinds of public space.

- **5. Conclusions and perspectives.** The concept of research and some of the already obtained, preliminary results expose both methodological and applicational aspects of the work. The current state of advancement does not, unfortunately, allow us draw any binding conclusions. However, the perspectives for further research look promising. There are still several crucial tasks which need to be completed before the research process is over. The further, deeper analysis stage contains (Matusiak et al., 2010):
- Identifying which type of public space is the most common cause of a given kind of socioeconomic effect.
- Identifying postulates as to the final effects, which are caused by a given public space.
- Adapting kinds of public spaces in particular parts of cities to the assumed effects.
- Recognising preferences and the level of acceptance declared by particular social groups concerning different public spaces on a given area.
- Recognising the level of similarity or difference in preferences and acceptance diagnosed on a given area in social groups.
- Building the final image of a public space (establishing the elements, mixtures and kinds of public spaces), what is more, preferences, the level of acceptance for particular components, and the agreement-conflict level for a given situation must be taken into consideration.
- Interactive and discursive adjustment of structures/kinds of public spaces, depending on the levels of priority: the optimisation of public spaces' effect on the development of a city and the minimisation of social conflict.

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Стаття надійшла до редакції 16.05.2013.