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THE URBAN CONNECTION. PEOPLE AND STRUCTURES

MIEJSKIE POŁĄCZENIA. LUDZIE A STRUKTURA

Abstract

The concept of “urban connection” can be defined as the interaction of actors and elements of urban reality. This refers to all urban space stakeholders and their cooperation regarding urban projects, strategies and policies. The paper presents the broad issue of connections within contemporary cities networks in the process of shaping their development. The most important context of this process is the space development that corresponds to the achievement of social goals – the possibility of creating truth in the relationship of man with the urban structure. The article presents a review of Polish and foreign literature. The conclusions contribute to further analyses both in terms of research work and defining development directions of modern cities.

Keywords: city space, network, synergy, city, social value

Streszczenie

Pojęcie „połączenia miejskiego” można wprowadzić i zdefiniować jako interakcję aktorów i elementów miejskiej rzeczywistości. Dlatego odnosi się do wszystkich interesariuszy przestrzeni miejskiej i ich współpracy w zakresie projektów miejskich, strategii i polityk miejskich, elementów strukturalnych przestrzeni miejskiej. Celem artykułu jest zarysowanie rozległego zagadnienia, jakim jest sieciowość współczesnych miast w procesie kształtowania ich rozwoju w kontekście kształtowania przestrzeni odpowiadającej osiągnięciu celów społecznych – możliwości tworzenia prawdy w relacji człowieka ze strukturą miejską. W artykule dokonano przeglądu literatury polskiej i zagranicznej, na podstawie których sformułowano wnioski stanowiące przyczynek do dalszych analiz zarówno w zakresie prac badawczych, jak i definiowania kierunków rozwoju współczesnych miast.

Słowa kluczowe: przestrzeń miejska, sieć, synergia, system, miasto, wartość społeczna

(...) networks enabling city life have always existed, and since the emergence of the “modern city” in the end of the 19th century, they have been a rudimentary component of urban reality¹

1. INTRODUCTION

The relationship between relational and physical spaces representing socio-spatial interactions in cities has been an important issue in urban and regional research, planning and design for long time. The relationship between the city and the people is apparent. However,

¹ S. Gzell, *Miasto sieć i jego społeczność – ku konkretyzacji zapisów Nowej Karty Ateńskiej 2003* [in:] I. Jażdżewska (ed.), *Nowe przestrzenie w mieście. Ich organizacja i funkcje*, Wydawnictwo Uniwersytetu Łódzkiego, Łódź 2006, p. 72.

it should be noted that in this relationship, people can live without a city, while a city without people cannot. Creating links between people and the city is one of the goals of urban planning, and these connections take place in various relationships and the most important of which are: people and places as well as people and people. The quality and effectiveness of these connections affect the quality of city life and its functionality. The relationship between urban structure and people has changed with the evolution of cities various models of spatial systems. These models were generated depending on changing socio-economic conditions. The spatial order developed in this way became characteristic of his time, and his theoretical assumptions were often reflected in various manifestos, declarations or other similar documents. Development of construction technologies, among others in the area of technical infrastructure, growing social requirements concerning the quality of life as well as the political and economic situation, shaped the development of cities. His history shows different approaches to designing the city's spatial structure, ranging from compact to dispersed, and the promoted layout generated different spatial conditions for the lives of their users. One tendency remained unchanged – cities are becoming more and more complex structures for which more and more compiled management and design systems are needed. At the same time, there is a growing importance of social participation in making mutual decisions on the city form and function. The relationship between people creates a kind of “urban connection” that can be defined as the interaction of actors and elements of urban reality. Therefore, it refers to all urban space stakeholders and their cooperation regarding projects, strategies, spatial policies and structural elements of urban space. The urban structure identity is reflected both in the physical form resulting from its historical changes and in social phenomena. In addition to the aesthetic values of the urban form, the city also creates social values related to the local identity and social commitments of residents. This determines the authenticity of a modern city, whose truth can only be shaped by those who every day co-create its community, space and economy. The purpose of the article is to try to answer the question about the directions of urban development in the context of the social goals' achievement – the possibility of creating truth in human relations within the urban structure.

2. DIMENSIONS OF URBAN CONNECTIONS

A modern city is a complex system of related elements. On the other hand, this system consists of a network of various dependencies, among others, social natural, cultural, spatial, functional, transport, infrastructure, whose mutual and effective relations are one of the most critical challenges of the city of the future. The concept of the network appears in many fields of science and has a comprehensive research perspective.² The conceptual basis is most often the existence of the idea of networkability of given elements considered in the configurations in which they coexist and operate. The genesis of research in the field of network and network shows their ability to interdisciplinary and multi-level analyses of social, economic or spatial phenomena. In the context of urban issues, Sławomir Gzell points out that the term “city network” is an

² Cf. P. Healey, *Urban complexity and spatial strategies. Towards a relational planning for our times*, Routledge, New York 2007, and A.J. Filip, *Miasto jako struktura sieci współzależnych*, Studia Ekonomiczne, 2015, no. 217.

attempt to translate the name “connected city” into Polish, which appeared in the New Athens Charter 2003.³ He believes that he describes well “the essence of the new city, a name emphasizing its physical and immaterial network, considered today its primary attribute.”⁴

On the other hand, Zbigniew Zuziak distinguishes the urban skeleton as one of the three basic systems of the living space and defines it as the material that binds tissues and cells of urban matter. He further defines it as “(...) a network of streets, green corridors, functional connections and public spaces, naturally valuable non-public open spaces, as well as directions most characteristic of the spatial composition of the entire city.”⁵ In turn, Christopher Alexander points out that the city cannot be treated as a hierarchical tree-like structure: “whenever we have a tree structure, it means that within this structure no piece of any unit is ever connected to other unit, except through the medium of that unit as a whole.”⁶ In his opinion, cities are a much more complex system that needs cross-connections and dependencies at all levels of functioning. A natural city is an open structure based on interdependent, interrelated elements. “The city is not, cannot and must not be a tree. The city is a receptacle for life. A living city is and needs to be a semi-lattice.”⁷ In these words, Alexander claims that the city structure is more like a network model that he calls a semi-lattice, which in contrast to the simple hierarchical and rigid form of the tree, can show all the socio-spatial subtleties of cities. On the other hand, Nikos A. Salingaros uses the fractal city idea, indicating that the existence of a related structure at all scales and the hierarchy, from very large to very small is its basis. Salingaros notes that, “the different types of cities’ connective geometry contain entirely different degrees of urban life. The life of a city is directly dependent upon its matrix of connections and substructure, because the geometry either encourages or discourages people’s movements and interactions.”⁸ Batty and Longley also use fractal geometry to understand and plan the physical form of cities to illustrate the underlying order that reveals their complexity and diversity. Nevertheless, they also use it to provide new insight into the complexity of social systems.⁹ In that context, Manuel Castells’ theory of network society shows the interpretation of modern society transformation as a reflection of the transition from industrial to information mode of development. He emphasizes that the essential aspect of social life are activities within networks¹⁰ in which both people and information and communication move within nodes that form decentralized systems because the network by definition has no centre. “I shall first define the concept of the

³ The document prepared in November 2003 in Lisbon by the European Council of Town Planners (ECTP), cf. T. Majda, I. Mironowicz (eds.), *Manifesty urbanistyczne w poszukiwaniu współczesnego modelu miasta*, Towarzystwo Urbanistów Polskich, Warszawa 2017.

⁴ S. Gzell adds that the literal translation of a connected city was not unambiguous because it gave rise to a question connected with what? the second version of this term, in turn, sounds like a slogan from the era of connecting proletarians of all countries, cf. S. Gzell, *op. cit.*, p. 64.

⁵ Z.K. Zuziak, *O tożsamości urbanistyki*, Wyd. Politechniki Krakowskiej, Kraków 2008, p. 56.

⁶ C. Alexander, *The city is not a tree*, Design, 1966, no. 206, p. 10.

⁷ *Ibidem*, p. 22.

⁸ N.A. Salingaros, Keynote speech, 5th Biennial of towns and town planners in Europe (Barcelona, April 2003), <http://www.planum.net/connecting-the-fractal-city> (access: 1.06.2020).

⁹ M. Batty, P. Longley, *Fractal Cities: A Geometry of Form and Function*. Academic Press, London 1994.

¹⁰ Cf. N.A. Christakis, J.H. Fowler, *W sieci. Jak sieci społeczne kształtują nasze życie*, Smak Słowa, Soopot 2011, T. Tiwari, *Connecting Places, Connecting People: A Paradigm for Urban Living in the 21st Century*, Routledge, London 2017, L. Boelens, *The Urban Connection. An actor-relational approach to urban planning*, 010 Publishers, Rotterdam 2009.

network since it plays such a central role in my characterization of society in the information age. A network is a set of interconnected nodes. A node is a point at which a curve intersects itself. What a node is, concretely speaking, depends on the kind of concrete networks of which we speak.”¹¹ Despite the many aspects that make up the complex network of urban connections, one of the most important is linking the city’s physical structure with people – its stakeholders. Therefore, the city space should be analysed not only in its material but also social and cultural dimension. Paul Vidal de la Blache noticed that space is not only of social origin, but also expresses what is social.

On the one hand, it is a way of thinking about the world, a category of knowledge, and at the same time, an emanation of social life. It changes with the society of which it is a product.¹² Aleksander Wallis,¹³ on the other hand, notes that the social space of a given community is the area he uses and shapes, with which he links the system of knowledge, ideas, values and rules of behaviour, thanks to which he identifies most fully with this particular area.

3. EXISTENTIAL SPACE

In the context of the people and space connection, the most important seems to be the existential space, which as a kind of physical space is defined as the fact of actual people’s existence.¹⁴ It is a human space – created and shaped as a result of their activity.¹⁵ Norberg-Schulz defines existential space as “a relatively stable system of perceptive patterns or “image” of the environment.”¹⁶ It contrasts with abstract space, which refers to the geometric treatment of spatial patterns without specifying its character, reducing the role of human activity from it, which leads to the creation of utopian models. He also recalls the opinion of Merleau-Ponty: “(...) we said that space is existential. We might as well say that being is spatial.”¹⁷ Norberg-Schulz also draws attention to the need to include the existential dimension as a relationship between man and his surroundings in the study of architectural space. That aspect gives the authentic picture of the city functioning because space should be understood both as a dimension of human being and the thought or perception. That concept of architectural space as the concretization of existential space, created by man on the canvas of living space, makes it a living space for people who use it. “Man creates patterns by interacting with existing architectural spaces, and when these cease to satisfy him (...) he must change the architectural space. Thus, architectural space can be called the concretization of human existential space.”¹⁸ The concept of existential space has many interpretations. Still, in the context of shaping the relationship between space and people,

¹¹ M. Castells, *The Information Age. Economy, Society and Culture*, Vol. I. *The Rise of the Network Society*, Blackwell, Oxford 1996, p. 470.

¹² K. Rembowska, *Zapomniany wymiar czasoprzestrzeni*, Space – Society – Economy, 2005, no. 7, p. 2.

¹³ A. Wallis, *Socjologia przestrzeni*, Niezależna Oficyna Wydawnicza, Warszawa 1990, p. 26.

¹⁴ In contrast to the abstract space, which is understood as a space of logical relations and refers to geometric space (cf. C. Norberg-Schulz, *Bycie, przestrzeń i architektura*, Wydawnictwo Murator, Warszawa 2000, p. 10).

¹⁵ Cf. M.M. Nowak, *Humanistyczne wartości miejsca*, Zeszyty Naukowe. Architektura, 1996, no. 33, p. 41, and J.L. Łapiński, *Przestrzeń egzystencjalna człowieka technicznego*, Chemik, 2014, 68(3), p. 167.

¹⁶ C. Norberg-Schulz, *op. cit.*, p. 17.

¹⁷ *Ibidem*, p. 16.

¹⁸ *Ibidem*, p. 12.

it is essential in the process of defining it to build it by the rhythm of life activity, creation and experience of space by man.¹⁹

4. URBAN SYNERGY

Synergy is defined as the result of active cooperation – the interaction of people, phenomena or methods that can bring more significant effects than the operation of these elements separately.²⁰ In the context of the city, the concept of “urban synergy” could be introduced and defined as the interactions between entities and aspects of urban reality. According to the idea of synergy, the total effect is greater than the sum of the interactions of individual aspects of the entire system. So, in this definition, the emphasis is on the synergistic impact of changes in spatial development consistent with projects, strategies and urban policies, but taking into account the needs, expectations and aspirations of users of a given space. However, even though creating synergies in cooperation seems to be a natural consequence of urbanity, it is the determination of these needs, expectations or aspirations of individual stakeholders that may turn out to be a challenging task. According to Piotr Kamiński, the main problem lies in the residual communication between the upper city and the lower city. The determining factors of the first, i.e. investors, developers, decision-makers, urban planners, which have a real impact on this development of the city. While the lower city is the material, i.e. about 99% of the population using the city and working on its resources, “this evident dualism breeds dissonance caused by the lack of effective communication in the age of network society.”²¹ This, in Kamiński opinion, leads to an artificial creation of needs, speculation and wrong decisions and blocks potential symbiosis. However, the potential lies in the very form of the network society, which in its model form creates a definite, compact self-stabilizing structure, resistant to permanent pressure. In such an arrangement, the interdependence of its nodes is most important. Kamiński claims that an effective method for building cooperation between nodes, which in the case of the city are the equivalent of the needs of its stakeholders, is communication between them, including based on mutual knowledge and understanding.²² This is to lead to the elimination of communication breaches based on a misunderstanding of joint needs and the creation of community society. Kamiński indicates that “a modern city needs its idea for a post-modern network society”. He proposes striving to create a flexible development model that will generate a network of bridges between the city of residents (lower city) and the city of creators (upper city).²³

5. CITY NODES

The response to problems related to shaping cooperation and creating urban synergy can be urban nodes. The common places will connect local communities as their co-creators jointly responsible for the local unity. These locations will merge to become one of the elements of

¹⁹ Cf. M.M Nowak, *op. cit.*, p. 41; J.M. Chmielewski, *Teoria urbanistyki w projektowaniu i planowaniu miast*, Oficyna Wydawnicza PW, Warszawa 2010, pp. 51–54; Z.K. Zuziak, *op. cit.*, pp. 54–91.

²⁰ This topic is present in many research works. These include A. Bohm, K. Lenartowicz, Z.K. Zuziak, J. Wrana, M. Stangel, S. Salat, J. Minner and others.

²¹ P. Kamiński, *Model przeplotu: Strategia dla miast w epoce sieci*, Fundacja im. S. Kuryłowicza, Warszawa 2015, p. 24

²² *Ibidem*, pp. 20–61.

²³ *Ibidem*, p. 18.

the urban network. In the context of generating social bonds and promoting integration and activity, a properly outlined urban form is also essential. K. Wejchert and K. Lynch pointed to the importance of the role of elements of physical space in the context of building a human emotional relationship with space, sense of security, identification and identity. C. Norberg-Schulz claims that "In terms of spontaneous perception, the personal area is subjectively centralized. The development of schemes means not only that the concept of the centre has been established as a way of general organization, but also that some centres are externalized (externalized) as reference points for the environment. This need is so strong that from time immemorial, the man thought of the whole world as having possession."²⁴ These words indicate that users of space compose it according to individual and social functions, creating their place identified not only with the home but also with the area constituting the centre of their living space. Local centres play an essential role here, which is both the spatial and social context, create places of concentration of essential services, meetings of the local community and crystallize the spatial distribution of their everyday spaces, strengthening their sense of identity. The development of a balanced and polycentric settlement system is one of the main goals of spatial policy. Z.K. Zuziak defines polycentrism as a property of spatial structure (on a regional or local scale), which consists in the fact that its development leads to the creation of various concentrations of activity centres fulfilling the functions of the multifunctional city/regional centres.²⁵ Their distribution shows some regularity depending on the attractiveness of these centres. This potential is expressed in the strength of impact and depends on the size, diversity, rank of the service program and the quality of devices concentrated in a given centre. The size of this potential determines the place of a given centre in the hierarchy of centres. That is why polycentric structures analysed at various scales of urban development planning, in this article is mentioned in the aspects of shaping urban activity nodes, which are an essential link in building their functionality. Within the current structures of the city, one should strive to create local clusters that will bring together people from a given area, creating their centres. Therefore, one of the crucial elements forming this urban structure of the city are nodes – here called urban nodes – and connections between them. The notion: "urban nodes" can be defined as places which, due to their accessibility, spatial development values and other valuable values are of crucial importance for contemporary forms of urban life.²⁶ However, due to the types of their structure, nodes may have different ways. Most often, it is determined by the parameters related to the communication accessibility of a given place, high building intensity, high concentration of public, cultural and economic functions. When determining the operational parameters of nodes, its three impact scales should also be taken into account: local, national and metropolitan.²⁷

6. CONCLUSIONS

Considering the issue of lies and truth in urban planning, one can refer to several aspects of this problem. One of them is implemented directions and goals of urban development formulated in strategic documents. Visions of urban development aim to outline the optimal trends for the

²⁴ C. Norberg-Schulz, *op. cit.*, p. 18.

²⁵ Z.K. Zuziak, *op. cit.*, p. 115.

²⁶ Cf. *ibidem*, p. 56.

²⁷ Cf. D. Jopek, *System lokalnych węzłów aktywności a funkcjonalność miasta Krakow* [in:] T. Kudłacz, M. Musiał-Malago (ed.), *Funkcjonalne miasto w teorii i praktyce na przykładzie Krakowa i Krakowskiego Obszaru Metropolitalnego*, Wydawnictwo Uniwersytetu Ekonomicznego, Kraków 2018, pp. 97–105.

transformation of cities in all aspects of its functioning, i.e. political, economic, social, spatial, environmental. However, one of the main pillars on which large cities base their development strategies is to improve the quality of life of residents. In the spatial context, it most often concerns the shaping of high-quality public spaces, including green and recreational areas, to which access should be provided in all areas of the city. The strategy is a document developed by local government authorities with the participation of experts, groups of urban activists and residents. It is easy to notice that, depending on the level of activity of the inhabitants, the quality of the documents developed depends, above all, on their adaptation to real needs and aspirations. What should the city of the future be like in which people will want to live? This is a question that would probably have many different answers. The experience of recent years shows that cities are implementing a participatory management model, supporting the social activity of their inhabitants, build social capital, which becomes the basis for their development. The value of great social resources has been confirmed by the crisis of recent months associated with the pandemic. Supporting local communities, creating the mutual trust of all city stakeholders can help to overcome the nuisance of an unexpected threat. However, K. Nawratek draws attention to the importance of manipulation on the part of political ideology in the field of city space organization, through which it strengthens or weakens the existence of specific social groups and structures in space. In his opinion, the most objective method of studying the degree of democratization of the city landscape seems to consider its audience. The type of users, their diversity and the way they use the explored space allows to identify hidden motives, the intentions of its authors/owners and to examine the real effect of their activities.²⁸ It seems that since writing these words, many countries have managed to work out ways to create a democratic space of inclusive cities, making them one of the priorities in the process of shaping their development. However, many have this path ahead of them.

What is the truth of urban planning? And if it is so difficult to define, is it even possible to achieve? Leaving this rhetorical question, one can cite the thesis of F. Daszkiewicz: “the concepts of truth and falsehood are objective in the case of the implementation of primary functions narrowed to ergonomics, and relativized in the case of primary and secondary services to changing rhetorical and ideological codes and the implied application of social relations.”²⁹

One should always bear in mind that understanding and interpreting these codes also depends on the context and that they may be true, but they are certainly not always the only truth.

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²⁸ K. Nawratek, *Ideologie w przestrzeni. Próby demistyfikacji*, Universitas, Kraków 2005.

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