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THE ENIGMA OF METROPOLIS: ITS SPATIAL DIVERSITY AND METHODS OF DIAGNOSIS

TAJEMNICA METROPOLII: JEJ PRZESTRZENNA RÓŻNORODNOŚĆ I METODY DIAGNOZOWANIA

A b s t r a c t

The type and scale of internal diversification are the main characteristics of metropolitan areas. There are some agglomerations where areas differ only slightly and some where territorial disparities are significant. The question is whether this internal diversification is a factor which stimulates spatial and economic development? In other words, which strategy should be chosen in terms of planning solutions: the egalitarian strategy targeted at equalisation or the one focused on using the competitive advantage of diversification? These questions are related to the problem of diagnosing the diversity of metropolitan areas.

Keywords: spatial diversity, diagnosis, metropolis

S t r e s z c z e n i e

Typ i skala wewnętrznej zróżnicowania to główne cechy charakterystyczne terenów metropolitalnych. Istnieją aglomeracje, których obszary różnią się tylko nieznacznie i takie, gdzie zachodzą znaczące dysproporcje terytorialne. Powstaje pytanie, czy wspomniane wewnętrzne zróżnicowanie jest czynnikiem stymulującym rozwój przestrzenny i gospodarczy? Innymi słowy, którą strategię należy dobrać w kategoriach rozwiązań planistycznych: ukierunkowaną na wyrównywanie strategię egalitarną, czy tę skoncentrowaną na wykorzystywaniu konkurencyjnej przewagi dywersyfikacji? Powyższe pytania są związane z problemem diagnozowania różnorodności obszarów metropolitalnych.

Słowa kluczowe: różnorodność przestrzenna, diagnostyka, metropolia

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1. Introduction

Urban area spatial diversification is the result of many historical, functional, economic and social factors. Local authority efforts, local developmental priorities, entrepreneur innovativeness, and efficiency of territorial marketing play an important role here. These elements are overlaid with accessibility, location in relation to the metropolitan centre, and existing infrastructure. We must also remember the variety of natural and landscape conditions. One of the reasons for territorial stratification is the migration of people, together with their mobility within the metropolitan area, which is significantly influenced by availability of building land designated for new housing developments.

The phenomenon of metropolitan area internal diversification has not been evaluated in the same way. Egalitarian views say that spatial planning and local policies should lead to the removal of differences between particular territories inside the metropolitan area. This is a result of priorities linked to a specific vision of development as well as the spontaneous, bottom-up tendency to become assimilated and copy fashionable models. The unification of spatial behaviours and visual standardisation of the surroundings are a visible effect of this phenomenon. This type of homogenisation is a feature of contemporary global mass culture.

On the other hand, some people think that diversification is an important factor in development. In this case, planning strategies are based upon a view that diversification is a factor which is a source of competitive advantage, providing an opportunity to reduce the costs of overcoming existing differences and concentrating on the creative use of local specificity.

However, we must remember that of importance here is which elements the diversification refers to. It is obvious that excessive income disparity among residents is a negative phenomenon. A high poverty level causes social tension and too much pressure on social funds. As a result, some areas are in stagnation, with the migration of young, ambitious and educated residents causing further worsening of social and spatial conflicts. This problem refers to city centres and is present in many European metropolitan areas.

2. Functional approach

The division of metropolitan areas between functional units is relatively best known, although there are some discrepancies in the way this concept is understood. From the geographical point of view, function is understood as type of human activity related to a particular territory. In this interpretation, function is a profile of the activity targeted outside the spatial unit and constitutes its developmental basis (city-formative role). Hence, it is about the external sources of income that the area specialises in and, therefore, functions in the settlement network. It might be trade that attract customers from the outside, certain manufacturing activity producing goods exported outside the unit, or culture targeted at people coming from outside the area boundaries.

In this meaning, the activity focused on use by internal residents (e.g. local groceries) is not classified as a function [3].

A different meaning of function is used in town planning. Function is understood here as the allocation of land for developments with various usage profiles. Here, it is about the differentiation of territories featuring distinct methods of development. Hence, we have housing functions, services, agricultural, manufacturing functions, leisure, transport, etc.

Both, methods of structural unit characterisation have their advantages and disadvantages, the main problem for the diagnosis, however, is the mixed functions and difficulties in the identification of major functions on territories compared in terms of their area and population.

From this point of view, spatial units in metropolitan areas are distinguished by their functional complexity – and this complexity is measured by the number of types of territory usage.

3. Economic approach

The economic approach emphasises the principle that a metropolitan area is not neutral in terms of economics. To put things simply, spatial diversification has been explained here as a natural result of economic inequalities. For example, as a result of income disparities, the groups with the highest income occupy the most attractive territories [11]. This is a part of a more global problem including the analysis of relations between spatial behaviour and economy [15]. Many models based on a systemic economic approach to spatial planning emerged in the first half of the 20th century. Dembowska [7] provides a detailed description of these models.

4. Landscape approach

It must be emphasised that the term "landscape" has several basic, quite different meanings [5]. Here, we can list:

- The geographical meaning was popularised in the 19th century and is currently commonly used in the geographical sciences. In general, the term "landscape" is used to describe features of the environment (inanimate nature, land form, vegetation, and water) as well as the broad impact of human activity on the environment.
- The ecological meaning dates back to the first half of the 20th century and is related to links and interrelations between the abiotic zone (elements of inanimate nature), the vital zone (organisms living in the ecosystem), and the cultural zone (broad social and cultural phenomena).

The ecological approach to landscape research is focused on the relations between habitats and organisms living in the environment. In this meaning, landscape analyses refer to selected properties of ecosystems. Human ecology, which concentrates on the "artificial" ecosystems created by humans, is an important development in the classical ecological approach. From this point of view, landscape is often associated with the area, the form of which constitutes a synthesis of natural conditions, level of technology, and culture and social organisation.

- The architectural meaning, which in the 18th century referred to landscape gardening. Later on landscape gardening came to be associated with the preservation and landscaping of large natural areas (nature reserves and natural landscape parks).

Nowadays, landscape gardening focuses on the rational formation of the environment including human aesthetic, psychological, and cultural needs. In the centre of interest there

is the observation of changes in the landscape, preservation and maintenance of areas of outstanding beauty, and activity targeted at the revitalisation of devastated landscape.

Here, the emphasis is placed on such landscape features as degree of diversification, simplicity and complexity of landscape forms, rhythm, harmony, contrast, compositional axis and dominants, sequence of views. Also, it is worth pointing out the attempts to measure landscape quality based on comparison systems. An example of this is the remote sensing analysis of landscape forms [1]. Here, aerial and satellite photos are used to visually interpret the quality of photomorphic units. The images are analysed in terms of the shape, size, contrast, colour, and texture, and the relationships between these factors. This trend in landscape research has been developed in many ways based on an intuitive evaluation of landscape quality, which involves the identification of hierarchically connected qualitative attributes. Examples include the SBE method (*Scenic Beauty Estimation*) by Terry and Boster [16], which is used to assess natural landscapes.

The VAC (Visual Absorption Capacity) [17] and LPR (Landscape Pattern Recognition) [12] techniques are based on similar principles.

5. Sociological approach

This approach is particularly interesting as it takes into account the mutual relationships between urban environment, culture, the economy, and patterns of resident spatial behaviour. It makes it possible to distinguish certain characteristic types of space associated with various units of the metropolitan area.

Research focused on settlement sociology was originated in the early 20th century. Here, we must mention an article by Park [13], where the author treats the city not only as a spatial structure formed in a specific way but also as a unique social ecosystem. In the same year Galpin [8] published a study related to the social aspects of rural areas. Hawley [10] provides an overview of aspects related to social and spatial ecology. The division of metropolitan areas into specialised zones, suggested by Burgess, Park and McKenzy in 1925, triggered research into spatial diversification of resident activity in large American cities. The idea of spontaneous formation of zones with a variety of characters in the urban area proved to be, in retrospect, the most lasting achievement of the Chicago School. Burgess' model involved the division of a city into a number of concentric zones [13]. The zones were distinguished by the following elements: social status and ethnicity, employment in industrial or retail sectors, and the value of land.

These models were used for many years to explain the social and spatial structure of several American and European cities, e.g. Paris, Rome, and Florence, as shown by Castells [6].

6. Psychological approach

Spatial psychology links the spatial structure of a city with human perceptive capability [2]. In the foreground, there is the issue of distance and territory management. In the microscale, this problem was the subject of interest of proximics and architectural psychology. In the urban scale, it is important to understand the territory as an area which we know and are able to control (i.e. notice changes in the area and respond to them). Territory related to the

place of residence, the area which we think of as "our" street, square, or backyard. Therefore, these are the spaces we use every day, not necessarily within our immediate sight (as in landscape research). These are the places where neighbourhood bonds are built, where we recognise the people we meet on a daily basis.

The visual features of a space can indicate the level of social integration, the care of the common good, the cultural level of residents, their sensitivity, and their ability to cooperate in order to solve local problems. Lack of care about the way the immediate surroundings look is often linked with social pathologies.

A fondness towards certain places within the metropolitan area is a good measure showing the strength of emotional attachments to the space.

This research trend resulted in attempts to locate various feelings connected with the perception of the urban tissue. Here, we can mention research carried out by Gould and White [16] who were one of the first to create cartograms showing the locations of places that people like, which give them security and a feeling of identification with certain areas of a city. Preparing images of behaviours related to the perception of space is the subject of intensive interdisciplinary research.

The aforementioned method of describing the internal structure of metropolitan area complements other, more formal diagnostic methods. It gives the benefit of lowest level analysis – the level of feelings, assessments and opinions of the individual resident.

7. Summary

The above synthetic description of research trends which study the spatial diversification of the urban area includes a number of bibliographic references which include basic sources with the chronology of the appearance of new approaches to diagnostics.

The oldest trends still developed nowadays are related to economic aspects of the diversification of settlement networks and date back to the 19th-century ideas brought forward by von Thünen [18].

Then, there is the ecological trend originating in the first decades of 20th century in works by Park, Galpin and the achievements of Chicago school.

The urban and landscape trend with direct references to contemporary Polish urban practice is derived from the Kraków school of landscape architecture by Bogdanowski [4].

A relatively recent approach includes psychological aspects of the urban space with Bańka [2] as a forerunner of such studies in Poland.

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