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ŻYCIE MIĘDZY BLOKAMI LIFE BETWEEN HOUSING ESTATES

pod redakcją Anny Janiszewskiej Ewy Klima Melindy Benkő



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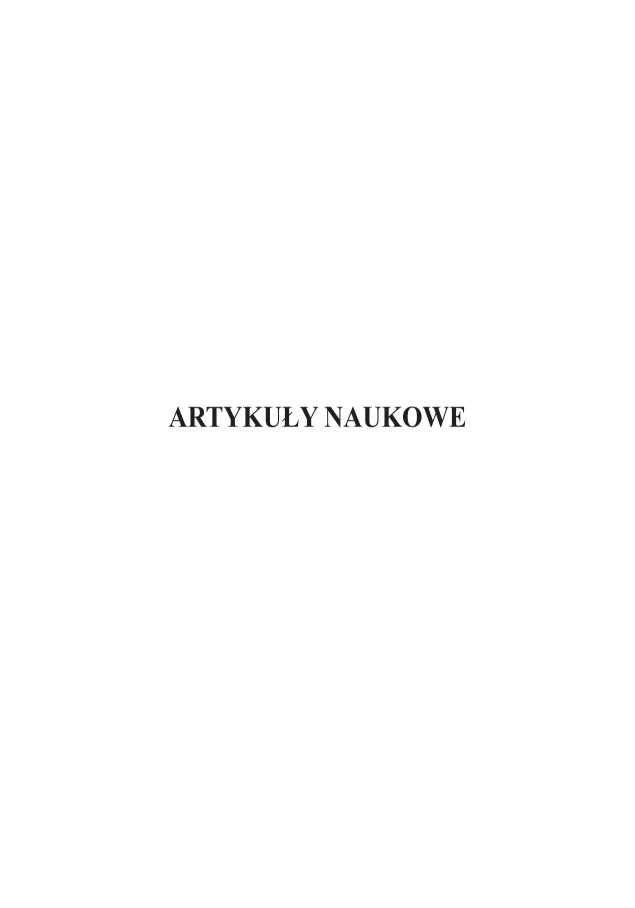
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### Ewa Szafrańska

# THE CHANGES IN SOCIAL AND DEMOGRAPHIC STRUCTURE OF LARGE HOUSING ESTATES IN POST-SOCIALIST POLAND AND THEIR MAIN DETERMINANTS

Abstract: Large pre-fabricated housing estates were erected all over Europe, however the political and ideological factors conspired to ensure that they developed on the largest scale in communist countries. Today, they continue to provide some 30–40% of the housing stock in this part of Europe. The present paper discusses the transformations of large housing estates in Poland 25 years after of the collapse of communism. The main purpose of the study was to identify the social and demographic changes in Polish large housing estates and to clarify the crucial factors underpinning them. The key questions were: (1) How the social and demographic structures of the large housing estates in Poland have changed since the collapse of communism? (2) What are the main determinants of these processes? (3) Whether the processes occurring in large housing estates reproduce the negative phenomena of social degradation observed in many Western European countries? The study is based on a review of the available literature concerning transformations of large housing estates in several of the large Polish cities and the results of the author's own investigations conducted within Łódź – one of the largest cities in the country.

**Keywords:** Large housing estates, post-socialist city, social and demographic changes, CEE countries, Poland.

### 1. Introduction

As Frank Wassenberg rightly pointed out in his book *Large Housing Estates: Ideas, Rise, Fall and Recovery* (2013) large housing estates for many people symbolise all that is wrong in urban planning. Large is wrong, because a lot of people prefer a living surrounding that reflects the human scale. Housing is wrong, because lively and vital urban areas should not be mono-functional but be a mix of functions that create activities, vital use and practical contacts between people. Estates are wrong, as people do not live within a particular area that is developed for them but without them (Wassenberg 2013). In conclusion, the author states that large housing estates, especially high rise blocks, are very symbolic outcomes of the way a city should not be planned.

However, it is not enough to state that large housing estates have been planned the wrong way. They are inhabited by millions of people all across Europe and because of their scale they constitute a real challenge for many European urban areas.

The idea according to which these estates were built, i.e., that of improving the living conditions of the working class through the construction of modern housing estates, emerged in the early 20<sup>th</sup> century. However, the principal period of construction of the large housing estates started after the Second World War. Then, a severe shortage of dwellings combined with the rapid post-War growth in population and the increasing pace of urbanisation made housing estates a viable and widespread solution that could offer homes to a very large of people in need, for a relatively cheap price (Dekker *et al.* 2005: 2).

Although large housing estates were erected all over Europe, it can not be forgotten that political and ideological factors conspired to ensure that they developed on the largest scale in state-socialist countries. Today, they continue to provide some 20–40% of the housing stock in this part of Europe, while in Western European countries, the percentage share of all housing resources accounted for by these estates is an estimated 3–7% (Kovács, Herfert 2012). In Poland they constituted about 35% of the whole residential housing stock (Rębowska 2000).

In Poland, as in other communist countries, the large housing estates were seen as instruments of social transformation and an improvement in living conditions, especially for the working class (Węcławowicz *et al.* 2005). Moreover, the idea of collective and uniform housing was perfectly fitted to state-socialist politics and made it possible to achieve the ideological goal which was a mix of different social groups, in accordance with the idea of egalitarianism (Sagan 2000; Kovács, Herfert 2012). It also fitted to another important goal of this policy that was to equalize the housing conditions within the urban space. Hence the era of the construction of large housing estates in CEE countries lasted until the end of the 80's, i.e., to the collapse of socialism, while in most Western European countries it ended almost two decades earlier.

During the state-socialist era, these residential complexes were built hastily and negligently in order to satisfy growing residential needs caused by accelerating urbanization. Their main drawbacks were: monotonous architecture, poor technical quality of large-panel buildings inflexible design systems, substandard floor plans (small rooms, kitchens without windows, or dysfunctional bathrooms) and small floor areas, as well as the insufficient social infrastructure and the shortage of basic services.

However, despite these characteristics, the large housing estates were seen as an attractive place of residence during the socialist period. This resulted from the fact that moving to a new block of flats in a new housing estate, was usually the only chance to improve one's living conditions socialist cities (Węcławowicz 2007). A structural deficit on the housing market, created a reality in which residing in a block of flats was a dream for the majority of socialist cities' inhabitants,

regardless of their social status (Lewicka 2004). This made the social structure of these estates heterogeneous and the prestige associated with living there was relatively high (Szelenyi 1996). Unlike in most Western European countries, they were home for not only lower social classes (Musterd, van Kempen 2005), but also for the *socialist middle class* and even for representatives of socialist elites (Éróss 2013).

The collapse of communism initiated intensive social and spatial changes of the large prefabricated housing estates and of other urban areas. Their appearance and social perception are also changing (Szafrańska 2014). The emergence of more attractive housing areas in the city (suburbs, gated communities, new apartment buildings) lowered the prestige of these estates (Kovács, Herfert 2012). In the 1990s some authors predicted that prefabricated socialist housing estates, by the same token as in West European countries, would soon become problem areas and turn into post-socialist slums (see Jałowiecki 1995; Szelényi 1996; Enyedi 1998; Czepczyński 1999; Rykiel 1999).

Recently the discussion of social and physical decay and the outflow of better-off inhabitants has slowed down (Wiest 2011; Gorczyca 2016; Szafrańska 2016) however, the future development of large housing estates still remains a great challenge in many former socialist countries, primarily due to the fact that they constitute the dominant form of urban residential environment.

### 2. Objectives and research materials

The main purpose of this study was to present the social and demographic changes in large housing estates in post-socialist Poland and to clarify the crucial factors underpinning them. The key questions were: (1) how the social and demographic structures of the large housing estates in Poland have changed since the collapse of communism? (2) what are the main determinants of these processes? (3) whether the processes occurring in large housing estates in post-socialist Poland reproduce the negative phenomena of social and physical degradation, in the literature referred as the "large housing estate syndrome" (Rembarz 2010) or "spiral of decline" (Prak, Priemus 1986)?

The "large housing estate syndrome" was a phenomenon recognized in Western Europe in the 1980s and defined as a complex of spatial-social conditions, producing a negative image of an estate and accelerating the downward spiral and the replacement of the culturally stronger inhabitants by weaker ones. It leads to an increase in the number of vacant flats and structural social problems, intensifying the spatial degradation. This in turn causes the economic potential of the estate (such as the purchasing power or the market value of the housing resources) to disappear (Rembarz 2010). The "spiral of decline" may be increased because more stable and affluent households move away or because there are no opportunities for deprived households to move away (Prak, Premius 1986).

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The study was based on a review of the available literature concerning large housing estates in post-socialist Polish cities and the results of the author's own investigations conducted in the second large Polish city (Łódź), published in 2014 and 2016.

### 3. The development of LHE in state-socialist Poland

Similarly to other CEE countries, the era of building large housing estates began in Poland in the late 1950s, and lasted until the early 1990s. That period, which lasted almost 40 years, can be divided into several stages as regards the development of this form of building (see Kiciński 2004; Tokajuk 2007; Wojtkun 2008): 1956–1964, 1965–1970, 1971–1980 and 1980–1989. Despite the differences between the housing estates built during individual stages, the standards imposed by central authorities (building and urban planning standards) made them similar in many respects. Due to the political system factors, the estates were built exclusively by the public sector. Starting from 1956, there were three main investors in Poland: the state, state enterprises and the reactivated housing cooperatives. However, the reactivation of the housing cooperatives, whose traditions went back to the pre-war times in Poland, was only illusory, because they were actually "para-state" bodies, dependent on the centrally controlled housing policy (Basista 2001). From the beginning of the 1970s, the housing cooperatives dominated the construction of large housing estates in Poland.

The housing estates built during the first period (1956–1964) were relatively small. Their design drew from the conceptions of a C.A Perry's *neighborhood unit* and E. Howard's vision of *garden-city*, as well as the architectonic and urban planning solutions adopted at this time in Sweden and Great Britain (Kiciński 2004). Until the early 1960s, buildings in housing estates had been erected using mixed technology, i.e. traditional materials (brick) combined, in a small part, with prefabricated elements. The estates were often located within a close distance from the compact urban fabric of the city centre. Due to their relatively well developed system of basic services and green areas, they provided their inhabitants with fairly good living standard. Unfortunately, from the beginning of the 1960s, as a result of implementing the austerity policy, the living conditions in the newly built housing estates started to deteriorate. In 1961, the standard living area was limited to 5–7 m² per person¹ (which was clearly regressive compared to the earlier years), constructing lower than 5-storey buildings was forbidden and the scope of the service facilities program was reduced (Basista 2001; Wojtkun 2008).

<sup>&</sup>lt;sup>1</sup> This limitation resulted from the housing norm regulating the allocation of flats, and was regarded as a temporary solution, but practically it was in effect until 1971. The regulations allowed putting three people in an M-2 category flat, four or even five in an M-3 flat, and even six in an M-4 flat, which seriously exceeded the formally established housing standards (Tokajuk 2007).

In the mid-1960s, housing estates built as part of the austerity policy started to be put into service (Basista 2001), which resulted in a lower standard of the flats. The number of high-rise buildings increased considerably (they were usually 11-storey structures) and, in order to reduce the construction costs, so called "corridor" buildings were introduced, with flats overlooking one side only, which substantially worsened their usability. Concrete started to be used on a mass scale, which resulted in the worsening of the thermal and acoustic insulation of flats (Tokajuk 2007). More and more often, the idea of building balconies and loggias was abandoned, the rules of proper flat layout design was ignored for the benefit of enfilade solutions, and appropriate proportions in flats were not kept.

The principle of austerity led to building flats with kitchens without windows, devoid of day light. This idea, however, was abandoned after a few years due to strong social protests. Buildings started to be constructed almost solely from concrete prefabricated elements, which caused unification and lack of individuality of buildings in individual housing estates, as well as of whole estates. New regulations prohibited implementing individual designs and erecting lower than 5-storey (low-rise) or 11-storey (high-rise) buildings, as those heights were regarded as the most economical (Basista 2001). The most important thing was to build flats fast, which involved limitations and delays in the construction of service, recreation, sports facilities and parking lots. The housing estates designed between 1965–1970 were built further and further from density urban fabric and from city centres and covered increasingly large areas (Tokajuk 2007).

The next stage in the development of housing estates in Poland began in 1971 and lasted until 1980. The regulations concerning housing construction (which were formally changed only in 1974), had undergone certain changes already in the early 1970s (Tokajuk 2007). According to the new housing standards, the average size of flats increased considerably, their functional structure improved (e.g. the bathroom was separated from the toilet, the flats had to have balconies or loggias), and the flat layout was modified (a separate door lead to each room). The changes introduced in 1974 also raised the standards of the housing estate infrastructure. They included increasing the minimal greenery and recreational area per one inhabitant (to 8 m<sup>2</sup> and 5.5 m<sup>2</sup>, respectively), increasing the number of parking places and plans to increase the service area by 50%. The solar insolation of flats increased and it became allowed to erect buildings of varying height (2–16 storeys), though in practice, 5- and 11-storey buildings were still predominant (Basista 2001). A characteristic feature of this period was the predominance of concrete panel construction, which became an increasingly popular form of housing resources (at the end of the 1960s – it made up around 16%, while in 1980 – almost 85% of the living area in multi-family housing in cities). The concrete panel construction was characterized by even stronger unification and standardization (both, of flats and whole buildings). It was impossible to change the flat layout or adjust the flats to the inhabitants' individual needs. The buildings

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also had many faults coming out at the production stage (in house factories), during transport to the building site and at the assembly stage, which significantly lowered the quality of the finished flats (Rębowska *et al.* 2006). The 1970s were characterized by the most dynamic increase in the number of flats in large housing estates after World War II. It was when the largest Polish estates were built, accommodating several dozen, or even over 100,000 inhabitants (e.g. Ursynów in Warsaw). They were erected far from the compact buildings in the city centre and became huge, mono-functional "mega dormitories" of socialist cities.

From the beginning of the 1980s, as a result of the economic crisis, the scale of housing investments started to decrease. The number of new flats per 1000 people, in 1986–1990 was nearly two times lower than at the peak of the 1976–1980 phase (Jarosz 2010).

Until the mid-1980s, the attempts to make savings resulted in a worsening condition of the housing estate infrastructure, including service facilities and green areas, as well as in a lower standard of new flats. In the second half of the 1980s, towards the end of the socialist era, the situation slightly improved. The new estates started to include modest architectonic details in the form of more decorative entrance doors to the buildings, balconies, small, steep roofing elements *etc*. The buildings were also more varied as regarded their height, and the designers took the need of creating public spaces in housing estates into account (Nowakowski 2013). The average size of the flats put into use increased, and after the future inhabitants' needs had been taken into more serious consideration, the housing estates from that period became most attractive in Polish cities (Kiciński 2004).

In 1989, at the beginning of the political and economic system transformation, the state withdrew from housing construction administration, which put an end to the building of large housing estates. The last of them were being slowly finished still in the early 1990s<sup>2</sup>. The total number of flats put into use between the end of World War II and the mid-1990s in Polish cities was 5.7 million, over 3.5 million of which were flats built using prefabricated technology, typical of huge housing estates (Rębowska *et al.* 2006) – Table 1.

In result of their massive development, the large housing estates constituted a significant part of the housing market in former socialist countries. In post-socialist Poland, in the mid of the 1990s, various estimates state that more than 8 million people were residing in large housing estates (Węcławowicz 2007), with these, thereby, accounting for over 50% of the urban population (Rębowska 2000), and about 56% of urban households (Rembarz 2010). In Warsaw, it was

<sup>&</sup>lt;sup>2</sup> In order to complete housing investments, co-operatives, which were unable to obtain bank credits, required the future tenants to participate in the cost of building the flats, which in many cases was impossible.

600,000 of 1,671,700 inhabitants, and in Kraków 150,000 of 758,500 inhabitants (Węcławowicz *et al.* 2003). In the third largest Polish city – Łódź (City of Lodz) – the estimated number of inhabitants in these housing areas was over 300,000 of 798,000 in the first decade of 21st c. (Szafrańska 2014).

**Table 1.** Number of housing units in Polish cities built from 1945 to 1995

	Total	In individual periods			
	10141	1945–1970	1971–1978	1979–1988	1989–1995
Number of housing units (in thousands)	5718,1	2012,4	1566,7	1585,5	553,5
<ul><li>in that built with prefabricated technology</li></ul>	3573,1	461,1	1262,8	1445,4	403,8
Usable floor area (in mln of m²)	334,9	102,8	85,6	104,1	42,4
in that built with     prefabricated technology	218,2	23,6	69,0	94,9	30,8

Source: own elaboration on estimations made by A. Rębowska et al. (2006)

### 4. Large housing estates in Poland within the European context

Unlike in certain European countries, there is no single definition of large housing estates in Poland<sup>3</sup>, hence numerous authors (e.g. Węcławowicz *et al.* 2005; Górczyńska 2008; Gorczyca 2009) use the definition formulated for the purposes of the RESTATE<sup>4</sup> project. According to this definition, large housing estates constitute spatially isolated groups of buildings, comprising over 2000 flats, built in the second half of the 20<sup>th</sup> century, planned and fully or partly financed by the state<sup>5</sup>.

<sup>&</sup>lt;sup>3</sup> In several European countries, the definition of a large housing estate is a specific legal category introduced in order to facilitate the pursuit of a spatial policy oriented towards transforming these areas and preventing the large housing estate "syndrome". In Germany, the legal category of *Groβsiedlung* takes in estates with at least 2500 flats (Wassenberg *et al.* 2004), while in France, *Grand Ensemble* status is assigned to housing areas with over 2000 flats within Greater Paris, or else over 1000 flats where the outskirts of are concerned (Coudroy de Lille 2000; Rembarz 2010).

<sup>&</sup>lt;sup>4</sup> RESTATE – the acronym of the international research project "Restructuring Large-scale Housing Estates in European Cities: Good Practices and New Visions for Sustainable Neighbourhoods and Cities", 2005.

<sup>&</sup>lt;sup>5</sup> According to other European authors, large housing estates are defined as residential complexes constructed using prefabricated technology with over 2500 housing units (Knorr-Siedow 1996) or over 6000 (Wiest 2011; Kovács, Herfert 2012).

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Despite their similar physiognomy, the large housing estates built in Poland (likewise in other CEE countries) were different from those found in Western Europe. They differed primarily in terms of the urban planning scale and the role played on the local housing market, the time of construction, the dominant form of ownership, and the socioeconomic status of inhabitants – and consequently their residential prestige and position in the ecological structure of the city in which they were located (Coudroy de Lille 2000; Musterd, van Kempen 2005; Wecławowicz 2007; Sýkora 2009; Kovács, Herfert 2012; Szafrańska 2014, 2015).

The first and most fundamental difference concerns the "weight" of large housing estates on the domestic housing market. In Poland, as of the 1990s, the different estimates have it that more than 8 million people were resident in large housing estates (Węcławowicz 2007), with these thereby accounting for over 50% of the urban population (Rębowska *et al.* 2006), and about 56% of urban households (Rembarz 2010). In Warsaw it was 600,000 of 1,671,700 inhabitants, and in Kraków 150,000 of 758,500 inhabitants (Węcławowicz *et al.* 2003). In third largest Polish city – Łódź the estimated number of inhabitants of this housing areas was over 300,000 of 798,000 (Szafrańska 2013).

Putting together the number of flats in large housing estates and the number of all flats built from 1960 to 1990 in Poland, as well as the overall number of flats, their shares are respectively 61% and 35%. Thus, they are one of the highest in Europe, only lower than in the former Czechoslovakia (66% and 36% respectively – Knorr-Siedow 1996).

Differences between countries on the both side of Iron Curtain also affected the construction periods where the large housing estates are concerned. Thus, the peak of the development of this particular urban form in Poland (similarly to the majority of state-socialist countries) was recorded in the 1970s (only in Hungary and Slovenia in the 1980s), and lasted until the early 1990. In the Western Europe countries, in contrast, the idea of building large estates was abandoned in the 1970s<sup>6</sup>, following the recognition of these estates as problem areas (Wassenberg *et al.* 2004).

The next difference between Western and East-Central part of Europe, and also within the bloc of state-socialist countries, was the forms of ownership of flats in large housing estates. In Poland the most of them (on average almost 80%) were owned by housing cooperatives. Creating cooperatives was an idea born in Poland before the Second World War. The communists suspended this idea in 1948 and came back to large housing estates in 1956. The cooperatives were supposed to build the dwellings for their members. Since 1972 some of the

<sup>&</sup>lt;sup>6</sup> The symbolic date of the fall of the modernist philosophy behind the idea of block estates is 1972, when the Pruitt-Igoe Estate in the USA, consisting of a complex of 14-storey buildings, was demolished, after it had turned into a crime nest thanks to a lack of people willing to settle there (Jencks 1987).

members of the cooperatives were able to buy out their flats (Węcławowicz *et al.* 2003). However, these flats were a particular, imperfect type of ownership with a limited right on property (the owner of the building is still the cooperative, which has a right to the land on which the building stands). The percentage shares of the sold flats (with the limited right to property) ranged from 10% to 40% in individual estates. Besides the cooperatives, the flats in large housing estates were owned by state-enterprises and the state treasure (at the disposal of the city authorities). In early 1990, their average shares did not exceed respectively 10% and 15%.

Last essential difference reflects social composition of inhabitants. In CEE countries, the flats in large housing estates were meant for an anonymous group of people, representing medium-level needs (mainly families with children), but they were not the social housing type addressed to the low-income groups. In Poland, similarly to the other state-socialist countries (see Kabisch, Grossmann 2013), they were built for a large segment of the population belonging to a variety of social strata and used as political signs of progress in society, in line with the socialist vision of a homogeneous housing condition. Therefore, the socialist large-block estates were inhabited, not only by blue-collar workers, but also by middle-class families, or even representatives of the socialist elite (Węcławowicz *et al.* 2003; Zborowski 2005). The social structure of certain of the estates (eg. Ursynów North<sup>7</sup> in Warsaw, Prądnik Czerwony in Kraków, Radogoszcz-East in Łódź) has been characterized by a relatively high percentage of population with a higher education and representing high-skills professions (Węcławowicz *et al.* 2003; Zborowski 2005; Szafrańska 2016).

This resulted in the specific ecological position of the large housing estates within the socio-spatial structure of cities in state-socialist countries (Szelényi 1983), which also applies to Polish cities. Unlike in Western European cities, the social status first dropped sharply in certain parts of the densely built-up inner-cities, and then increased again in the zone of housing estates, due to the larger shares of younger and better-educated people (Kovács, Herfert 2012).

Summarizing, most of the large housing estates originating in Poland in the state-socialist period (especially those built in the 1970s, i.e., during the era of their fullest development), were characterised by:

<sup>&</sup>lt;sup>7</sup> According to Węcławowicz and colleagues (2003: 14–15) on the Ursynów North estate (built between 1975 and 1999) "in the 1980s, most of the housing association members were white-collar workers. A big part of the dwellings were (informally) put at the disposal of the city and communist party rulers; plenty of new dwellings were occupied by officials from various ministers. However, it does not mean that the social structure in Ursynów was completely homogeneous. In many blocks of flats the social structure was mixed: for example in one unit a taxi driver lives next to a university professor, or a film director maybe a neighbour of a shop assistant".

- a large urban-planning and demographic scale, frequently exceeding the threshold of 2000 dwellings acknowledged in the literature as the defining criterion;
- construction in the industrial prefabricated (large-panel) technology;
- monotonous architecture and a uniform appearance of buildings;
- a peripheral location in urban space;
- an illegible spatial configuration and spatial anonymity;
- an absence of functional diversification the housing function was prevalent, while other urban functions were underdeveloped, especially the service function and social infrastructure;
- low workmanship standards and progressing physical (technical) degradation;
- small sizes of dwellings;
- a heterogeneous, mixed community, with a predominance of families with children.

Nevertheless, as has been stated already, the estates were seen as an attractive place to live in socialist cities nonetheless.

### 5. The changes in social and demographic structure of large housing estates in post-socialist Poland

As pointed as numerous authors (Wecławowicz et al. 2003; Zborowski 2005; Gorczyca 2016; Szafrańska 2014, 2016) the most essential processes of social transformations of large housing estates in post-socialist Poland is the ageing of their inhabitants. Characteristically, this processes, observed in all housing estates built in state-socialist period, are synchronised with the time when they were built. This results from the fact that these estates were specifically occupied by a population that was homogeneous in terms of family status (mainly families with children) and age (most frequently, the generation of 30-year-olds at the time). The factors that have enhanced this process over the last 27 years have been, first, the marked residential stability of the original occupants, and, second, a gradual outflow of young inhabitants, as many households enter the stage of the family life cycle called the "empty nest" phase, which starts when adult children leave home (Zborowski 2005). A closer analysis of selected large estates in three Polish cities (Warsaw, Kraków and Łódź) demonstrates that their ageing process, although it progressed rapidly in the 1990s and the early 21st century, began to slow down with the onset of the 2010s (Wecławowicz et al. 2003; Zborowski 2005; Szafrańska 2014). This ensued from an inflow of people in younger age categories (in their 20s and 30s) into the estates. This is first the outcome of the inheritance of dwellings, which are now occupied by the generation of grandchildren of the original occupants and, second, a reflection of the relatively high rate of sales of these flats on the secondary property market. The research

in question demonstrates that the occupation of a flat in a prefabricated housing estate represents a frequent first stage in the housing biography of young people only just entering the labour market. This is particularly true of cities in a better economic condition; in other words, large cities and capitals, first and foremost (Węcławowicz *et al.* 2003).

The slowdown in the rapid pace at which housing estate populations are ageing also reflects an inflow of students, who, for the duration of their studies, rent and sometimes even buy such flats. This process, referred to as "studentification" (Smith 2002), primarily spreads through academic cities, and within them, the housing estates with favourable locations in relation to the given university. For Polish cities, the phenomenon has so far been observed in Kraków (Zborowski 2005), Warsaw (Węcławowicz *et al.* 2003), Lublin (Rodzoś, Flaga 2010), Poznań (Kotus 2007; Ciesiółka 2010) and Łódź (Jakóbczyk-Gryszkiewicz 2013). Although this process does not have a permanent impact on population structure, because it involves temporary occupancy that is, not infrequently, unregistered ("unregistered tenancy"), it does produce tangible changes in the social landscape of housing estates<sup>8</sup>.

The empirical studies of the large housing estates in selected Polish cities, like Warsaw (Wecławowicz et al. 2003), Lublin (Rodzoś, Flaga 2010), Poznań (Ciesiółka 2010), Łódź (Marcińczak 2009) and Kraków (Zborowski 2005; Jerschina et al. 2012), show that, despite certain symptoms of housing filtration and outflow of the most affluent people with the most far-reaching housing aspirations, housing estates in these cities have not degraded socially. On the contrary, in many of the cities, large housing estates are still occupied by the middle class, thus rating highly within the socio-spatial structure of cities. Some housing estates, in particular those purported to be prevalently occupied by the intelligentsia under the previous political system (e.g., Pradnik Czerwony in Kraków, or Warsaw's Ursynów), boast a good position within the urban residential structure. This favourable social structure of Polish housing estates is also confirmed by measures describing population social structure other than educational background, such as the rate of unemployment or share of residents who are social aid beneficiaries – a proportion that relevant studies have found to be much lower in housing estates than in other urban areas defined as problem areas, and even lower than the average in those cities (e.g., the studies in Łódź – Szafrańska 2014, Lublin – Rodzoś, Flaga 2010, and Poznań – Ciesiółka 2010).

<sup>&</sup>lt;sup>8</sup> The foregoing processes, triggered by the sale, inheritance, or private rental of flats within large housing estates, and leading to an inflow of younger groups of residents, are observed not only in Poland but also in the other post-socialist countries that have largely privatised such housing units, i.e., Hungary, the Czech Republic, Slovakia, and Bulgaria (see Stanilov 2007; Temelova *et al.* 2011; Kovács, Herfert 2012).

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The studies conducted in Kraków and Łódź demonstrate that the social status of large housing estates is frequently related to the time at which they were built. As a rule, where a population's social status is concerned, the newer housing estates compare favourably with the older ones<sup>9</sup>. What is more, this has been found not to derive exclusively from the age structure of housing-estate populations, but rather from the state-socialist era rules governing housing allocation, which, in certain decades, gave preference to certain social categories<sup>10</sup>.

However, the foregoing, favourable examples by no means attest to a more general rule that there are no downturns whatsoever in any of the post-socialist housing estates. Nevertheless, those analysing the issue of the potential social degradation of housing estates conclude that, with a few exceptions, this only looms over small fragments, or enclaves, of housing estates. This is because in the state-socialist era, the poorer classes within the socialist society were concentrated in single buildings or in small ensembles that tended to form *quasi-slums*, even in the communist era. Today, in the wake of the systemic transformation, certain housing estates with a relatively good and diversified social structure have begun to experience this problem, with enclaves of poverty and exclusion facilitated in this way. In Poland, this phenomenon is present, e.g., in Szczecin (Wojtkun 2004) and in Warsaw (Węcławowicz *et al.* 2003). These examples demonstrate that deep social segregation in the large housing estates in post-socialist Poland is only present on a microscale, and within small, specific estate areas.

The transformations of the social structure of the post-socialist housing estates are also informed by process of intensification of housing development. This process change the morphological structure of these residential areas and involves two types of development. The first one leads to an increase in the density of existing original housing resources built before 1990, through the development of greenfield sites. Most of these sites were designed originally to accommodate social and commercial infrastructure that was never built, due to the lack of sufficient financial resources and the rapid pace at which housing estates were built. The second type involves the building-up of areas on the outskirts of existing developments, which causes housing estates to spread. Both developments are stimulated by the opportunity to utilise existing utilities and infrastructure, which markedly reduces the costs of investment projects and makes these areas more attractive to developers.

New housing developments in Poland are typically single, multi-family buildings, rather than whole ensembles. They are characterised by a higher

<sup>&</sup>lt;sup>9</sup> This situation is a result of a period of construction and the gradual improvement of standards imposed by central authorities (building and urban planning standards) during the four subsequent decades of state socialism.

<sup>&</sup>lt;sup>10</sup> The results found by authors from other CEE countries confirmed these findings (see Kovács, Douglas 2004; Temelova *et al.* 2011).

building standard and a different physiognomy that makes them stand out from the surrounding buildings (architectural details, richer colours, and diversified masses of buildings). New buildings frequently boast underground car parks, whilst their ground floors are occupied by shops and commercial services (Węcławowicz *et al.* 2003). Since the way in which new developments are located within the space of housing estates depends on the available free land, their sites are quite often random. However, in exceptional cases, they do help to create attractive new public spaces, e.g., by utilising peripheral development, unseen in those housing estates, to date, and creating multifunctional shopping (commercial) communications passageways. This solution has been applied successfully in, for example, Warsaw's Ursynów housing estate (Kozłowski 2010).

One social impact of the new developments appearing within existing housing estates is an inflow of people whose socio-economic status is higher than that of existing residents, hence the emergence, within such estates, of developments that represent enclaves of higher social status and greater housing prestige (Węcławowicz 2007; Szafrańska 2014). It follows that the high prices of flats in new buildings located within housing estates can constitute a barrier to their purchase. The price of 1 m² of a new flat built within a large housing estate exceeds the average monthly wage in Polish cities<sup>11</sup>.

Some of the new residential buildings are built as gated communities within existing housing estates. Although not all new buildings are enclosed, the process of separation, i.e., surrounding such buildings with fences to separate them from the other local residents, is not infrequent in housing estates located in formerly socialist countries, though its scale is often varied (Matlovič et al. 2001). In Poland, the overall number of gated communities, including those within existing housing estates, is the highest in Warsaw. Interestingly, their locations within housing estates are not greatly affected by the current reputation of these housing estates. Research conducted in Warsaw demonstrates that life in a gated enclave is equally attractive in reputable Ursynów as in the less reputable, working-class housing estate of Wrzeciono (Węcławowicz et al. 2003). Thus, the paradox of gated communities being built within existing housing estates in post-socialist cities lies in the fact that such housing estates are generally safe, meaning that there is no good reason for their residents to separate themselves from the surroundings. The negative consequences of the construction of enclosed housing enclaves within housing estates include the appropriation of public spaces and disruption of their continuity, in both the physical dimension (the erection of barriers that prevent free movement) and the cultural (symbolic) dimension. This entails the processes of social segregation and separation within housing estates. Nevertheless, it is

<sup>&</sup>lt;sup>11</sup> At the end of 2016 the average monthly salary was in Łódź PLN 4,200 gross, while the price of one square meter of a new apartment exceeded PLN 4,500.

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doubtless that the new housing – whether fenced or open – built within housing estates brings about an inflow of a younger, better-educated population of higher economic status and, consequently, helps to improve the social structure.

### 6. Conclusions

The presented research has shown that the main social and demographic transformation that have been taking place within Polish large housing estates since 1990, as discussed in this study, include the following phenomena:

- population decline ad residents' ageing, which depended on the period of their construction;
- the increasing number of one-person households, the decrease in the percentage of working people and the increase in level of education;
- maintaining a relatively high social status of the inhabitants, that contradicts the social degradation of these estates predicted in the 1990s;
- "studentification", which leads to rejuvenation of the demographic structure, but also to the high rotation of residents;
- an increase in the socio-spatial diversification of large housing estates that resulted from intensification of housing development, and the inflow of new better-off residents.

The identified phenomena occur in the majority of the large housing estates in Poland, but their frequency and extent differ between cities and individual estates. The investigation of literature and own previous author's research showed that these processes were determined by a number of mutually dependent factors, both endogenous, depending on the particular character of individual estates and their communities, and exogenous, external to these estates (operating both at the local and national level).

The socio-demographic processes listed above resulted from natural movement and migrations. However, some of them are not specific for large housing estates, because they occur in other urban areas in post-socialist cities and are associated with wider demographic trends and socio-cultural changes (i.e. changes in family life patterns and lifestyle changes). The other processes which were accompanied to examined changes e.g. the appearance of new housing buildings and turnover of flats on the secondary market were determined by political changes and market processes (especially the privatization and return of the housing market) which took place after the collapse of state socialism.

Summing up, despite the fact that over twenty five years have passed since the fall of the socialist system, the large housing estates in Poland are not problem areas and are not treated as such by the inhabitants, the city authorities, or the central authorities. The relatively good social status of the inhabitants is not decreasing, despite the outflow of the more affluent residents who have higher

aspirations as regards the housing conditions. Living in large housing estates is still common in Polish cities and, consequently, is not seen as socially degrading.

As can be expected, the fact that large housing estates in post-socialist Polish cities do not degrade as much as their counterparts in Western Europe and still are attractive as a place of residence for people who belong to *post-socialist middle class* results above all from (Szafrańska 2016):

- enormous scale of those housing estates and their share in the housing resources of post-socialist cities reaching 30–40%, which makes them common and considered as the "typical housing standard";
- housing deficiency carried over from the times of the former political system and preserved after 1990, though today its nature is not structural (as was under the previous regime) but economic;
- far-reaching privatisation of housing resources within housing estates, in some countries in excess of 90% of housing units, which factor reduces migration mobility and increases attachment to both the flat and the housing estate, and consequently improves public perception of them and enhances residential stability;
- structure of the incomes of post-socialist cities' residents and unfavourable ratio of the prices of new flats to the average income, which still prevents most average-income households from fulfilling their housing aspirations, in as much as it increases their residential stability;
- still relatively good living conditions offered by this residential form, especially
  in comparison with the old, low standard housing substance found in many
  cities (mainly as a result of underinvestment and lack of renovation works in
  the central areas of cities during the socialist period);
- relatively good and continuously improving furnishing of estates with shopping, service and social infrastructure; a large amount of greenery, especially as regards the densely built-up areas, often devoid of greenery, as well as good transport accessibility of many estates;
- relatively weak spatial mobility, established in the previous political system; considerable lack of migration and a sense of belonging; in effect – considerable residential stabilization;
- strongly limited during the socialist period and still modest aspirations of post-socialist cities' residents as regards their place of living in comparison with the inhabitants of other countries, as well as international standards;
- a sense of the lack of choice, caused by the socio-economic situation of the
  post-socialist cities inhabitants and the situation on the real estate market and
  the unfavorable relation between salaries and the prices of flats, which create
  a financial barrier, making it impossible for many households to satisfy their
  housing needs.

Referencing the findings of the present study to the concepts of housing environment transformations described in world literature and used to investigate the transformations of large housing estates in West European cities, it can be stated that in the case of housing estates in post-socialist cities no, or very few, observations (in very few housing estates or their fragments) have been made of the phenomenon referred to as "spiral of decline" or "large housing estate syndrome" typical for this urban form in Western Europe.

Also, compared with many West European cities, the scale of filtration processes resulting from the outflow of high-status residents is much smaller. Actually, migrations out of housing estates are informed not so much by degradation of large housing estates, as by the arrival of new and more attractive residential areas that were not present in socialist cities, as well as the opportunity to satisfy individual housing needs outside the housing construction system subsidised by the state, as mortgage credits only became available after the system transformation. Hence, an important role in this process was played by the rather obvious, given the situation, growth of housing aspirations, strongly suppressed under the previous regime, and the natural technical and moral wear and tear of housing estate housing facilities resulting from their life cycle. Therefore, filtration processes within large housing estates are evolutionary in nature and fully governed by the natural process of certain housing resources becoming worn-out and obsolete, not by mass exodus of residents, as was predicted.

It appears, therefore, that the conditions prevailing under the previous political and economic system (which shaped a totally different social composition of housing estate residents within the same urban form) have combined with the transformation process itself (of fast pace and overlapping with global processes) to represent a unique legacy that determines the transformations taking place on the large housing estates of cities in formerly-communist countries, and thus distinguishes these from the processes that have been ongoing in Western European cities.

### **Bibliography**

Basista A., 2001, Betonowe dziedzictwo, Wydawnictwo Naukowe PWN, Warszawa.

Ciesiółka P., 2010, Rehabilitacja zabudowy blokowej na przykładzie osiedla Jana III Sobieskiego w Poznaniu, [in:] Jażdżewska I. (ed.), Osiedla blokowe w strukturze przestrzennej miast, XXIII Konwersatorium Wiedzy o Mieście, Wydawnictwo Uniwersytetu Łódzkiego, Łódź: 89–100.

Coudroy de Lille L., 2000, Jak dalece można porównywać miasta europejskie? Refleksje nad procesami i pojęciami na przykładzie osiedli mieszkaniowych we Francji i w Polsce, [in:] Jażdżewska I. (ed.), Miasto postsocjalistyczne – organizacja przestrzeni miejskiej i jej przemiany, XIII Konwersatorium Wiedzy o Mieście, Wydawnictwo Uniwersytetu Łódzkiego, Łódź: 99–112.

- Czepczyński M., 1999, Rozwój i upadek koncepcji osiedli blokowych, "Biuletyn KPZK PAN", 190: 49–67.
- Dekker K., Halls S., van Kempen R., Tosics I., 2005, *Restructuring large housing estates in European cities: an introduction*, [in:] van Kempen R., Dekker K., Hall S., Tosics I. (eds.), *Restructuring large housing estates in Europe*, Policy Press, Bristol, UK: 1–17.
- Enyedi G., 1998, Transformation in Central European postsocialist cities, [in:] Enyedi G. (ed.), Social change and urban restructuring in Central Europe, Akademiai Kiadó, Budapest: 9–34.
- Éróss A., 2013, Past and Present of Large Housing Estates in Visegrad Countries and Armenia, "Hungarian Geographical Bulletin", 62(1), Hungarian Academy of Science: 77–82.
- Gorczyca K., 2009, Wielkie osiedla mieszkaniowe diagnoza stanu obecnego. Podejmowane działania rewitalizacyjne, [in:] Jarczewski W. (ed.), Przestrzenne aspekty rewitalizacji, Instytut Rozwoju Miast, Kraków: 89–123.
- Gorczyca K., 2016, The social transformation of large housing estates in Poland at the turn of the 21<sup>st</sup> century, "Sociologicky časopis/Czech Sociological Review", 52 (6): 861–892.
- Górczyńska M., 2008, Percepcja i waloryzacja osiedla mieszkaniowego (na podstawie badań prowadzonych w Warszawie w ramach projektu RESTATE), "Przegląd Geograficzny", 2, IGIPZ PAN: 267–286.
- Jakóbczyk-Gryszkiewicz J., 2013, *Procesy studentyfikacji w Łodzi*, [in:] Jakóbczyk-Gryszkiewicz J. (ed.), *Procesy gentryfikacji, cz. II*, XXVI Konwersatorium Wiedzy o Mieście, Uniwersytet Łódzki, Łódź: 95–107.
- Jałowiecki B., 1995, *Miasto polskie między utopią a rzeczywistością*, [in:] Starosta P. (ed.), *Zbiorowości terytorialne i więzi społeczne*, Wydawnictwo Uniwersytetu Łódzkiego, Łódź: 36–43.
- Jarosz D., 2010, Mieszkanie się należy... Studium z peerelowskich praktyk społecznych, Oficyna Wydawnicza Aspra JR, Warszawa.
- Jencks Ch., 1987, *Ruch nowoczesny w architekturze*, Wydawnictwa Artystyczne i Filmowe, Warszawa.
- Jerschina J., Lesińska E., Pytliński Ł., Siwek H., 2012, *Badania poczucia bezpieczeństwa mieszkańców Prądnika Czerwonego w Krakowie*, [in:] Czapska J. (ed.), *Zapobieganie przestępczości przez kształtowanie przestrzeni*, Wydawnictwo Uniwersytetu Jagiellońskiego, Kraków: 201–247.
- Kabisch S., Grossmann K., 2013, *Challenges for large housing estates in light of population decline and ageing. Results of a long-term survey in East Germany*, "Habitat International", 39: 232–239.
- Kiciński A., 2004, *Poland. A future for the 'blokowisko'*?, [in:] Turkington R., van Kempen R., Wassenberg F. (eds.), *High-rise housing in Europe. Current trends and future prospects*, Delft University Press, Delft: 187–202.
- Knorr-Siedow T., 1996, *Present and future outlook for large housing estates*, http://www.eaue.de/Housing/housfut/htm (accessed on: 20.02.2014).
- Kotus J., 2007, *Natura wielkomiejskich sąsiedztw*, Wydawnictwo Uniwersytetu Adama Mickiewicza, Poznań.

- Kovács Z., Douglas M., 2004, *Hungary. From socialist ideology to market reality*, [in:] Turkington R., van Kempen R., Wassenberg F. (eds.), *High-rise housing in Europe. Current trends and future prospects*, Delft University Press, Delft: 231–248.
- Kovács Z., Herfert G., 2012, Development pathways of large housing estates in post-socialist cities: an international comparison, "Housing Studies", 27(3): 324–342.
- Kozłowski S., 2010, *Przeszkody i bariery na drodze humanizacji osiedli*, [in:] Jażdżewska I. (ed.), *Osiedla blokowe w strukturze przestrzennej miast*, XXIII Konwersatorium Wiedzy o Mieście, Wydawnictwo Uniwersytetu Łódzkiego, Łódź: 73–87.
- Large housing estates in Poland. Territorial enclosure, privatisation of the public space, RESATE, Conference for researchers and policymakers, 19–21.05.2005, Ljubljana, Slovenia, http://restate.geo.uu.nl/conference/posterexhibition/Poland1.pdf (accessed on: 18.08.2013).
- Lewicka M., 2004, *Identyfikacja z miejscem zamieszkania mieszkańców Warszawy: determinanty i konsekwencje*, [in:] Grzelak J., Zarycki T. (eds.), *Społeczna mapa Warszawy*, Wydawnictwo Scholar, Warszawa: 273–315.
- Marcińczak S., 2009, *Przemiany struktury społeczno-przestrzennej Łodzi w latach 1988–2005*, Wydawnictwo Uniwersytetu Łódzkiego, Łódź.
- Matlovič R., Ira V., Sýkora L., Szczyrba Z., 2001, Procesy transformacyjne struktury przestrzennej miast postkomunistycznych na przykładzie Pragi, Bratysławy, Ołomuńca oraz Preszowa, [in:] Jażdżewska I. (ed.), Miasto postsocjalistyczne organizacja przestrzeni miejskiej i jej przemiany, XIV Konwersatorium Wiedzy o Mieście, Wydawnictwo Uniwersytetu Łódzkiego, Łódź: 243–252.
- Musterd S., van Kempen R., 2005, Large-scale housing estates in European cities: opinions of residents on recent developments. RESTATE, Utrecht University, Utrecht.
- Nowakowski M., 2013, Sto lat planowania przestrzeni polskich miast (1910–2010), Oficyna Naukowa, Warszawa.
- Prak N.L., Premius H., 1986, *A model for the analysis of the decline of postwar housing*, "The International Journal of Urban and Regional Research", 10: 1–7.
- Rembarz G., 2010, Rola przestrzeni publicznej w odnowie i kształtowaniu miejskiego środowiska mieszkaniowego, [in:] Lorens P., Martyniuk-Pęczek J. (eds.), Zarządzanie rozwojem przestrzennym miast, Urbanista, Gdańsk: 138–156.
- Rębowska A., 2000, *Rehabilitacja blokowisk*, [in:] Ziobrowski Z., Ptaszycka-Jackowska D., Rębowska A., Geissler A. (eds.), *Odnowa miast. Rewitalizacja, rehabilitacja, restrukturyzacja*, Instytut Gospodarki Przestrzennej i Komunalnej, Kraków: 85–105.
- Rębowska A., Jeżak J., Rydzik W., Węgłowski M., 2006, *Strategie rehabilitacji "blokowisk"*, Instytut Rozwoju Miast, Kraków.
- Rodzoś J., Flaga M., 2010, *Nowa sytuacja społeczna starych osiedli mieszkaniowych na przykładzie osiedla im A. Mickiewicza w Lublinie*, [in:] Jażdżewska I. (ed.), *Osiedla blokowe w strukturze przestrzennej miast*, XXIII Konwersatorium Wiedzy o Mieście, Wydawnictwo Uniwersytetu Łódzkiego, Łódź: 101–118.
- Rykiel Z., 1999, *Przemiany struktury społeczno-przestrzennej miasta polskiego a świado-mość terytorialna jego mieszkańców*, "Prace Geograficzne", 170, IGiPZ PAN.
- Sagan I., 2000, *Miasto. Scena konfliktów i współpracy*, Wydawnictwo Uniwersytetu Gdańskiego, Gdańsk.

- Smith D.P., 2002, *Patterns and processes of studentification in Leeds*, "Regional Review", 12(1): 14–16.
- Stanilov K., 2007, Housing trends in Central and Eastern European cities during and after the period of transition, [in:] Stanilov K. (ed.), The post-socialist city. Urban form and space transformations in Central and Eastern Europe after socialism, Series: "Geo Journal Library", 92, Springer, Dorgdrecht: 173–190.
- Sýkora L., 2009, *Post-socialist cities*, [w:] Kitchin R., Thrift N. (eds.), *International Encyclopedia of Human Geography*, 8, Elsevier, Oxford: 387–395.
- Szafrańska E., 2013, *Large housing estates in post-socialist Poland as a housing policy challenge*, "European Spatial Research and Policy", 20(1): 119–129.
- Szafrańska E., 2014, *Transformations of large housing estates in post-socialist cities: The case of Łódź, Poland*, "Geographia Polonica", 87(1): 77–94.
- Szafrańska E., 2015, Transformations of large housing estates in Central and Eastern Europe after the collapse of Communism, "Geographia Polonica", 88(4): 621–648.
- Szafrańska E., 2016, Wielkie osiedla mieszkaniowe w mieście postsocjalistycznym. Geneza rozwój, przemiany, percepcja, Wydawnictwo Uniwersytetu Łódzkiego, Łódź.
- Szelényi I., 1996, *Cities under socialism and after*, [in:] Andrusz G., Harloe M., Szelényi I. (eds.), *Cities after socialism. Urban and regional change and conflict in post-socialist societies*, Blackwell Publishers, Oxford: 286–317.
- Temelová J., Novák J., Ouředniček M., Puldová P., 2011, Housing estates in the Czech Republic after socialism: Various trajectories and inner differentiation, "Urban Studies", 48(9): 1811–1834.
- Tokajuk A., 2007, *Zespoły mieszkaniowe z lat 1945–1970*, Wydawnictwo Politechniki Białostockiej, Białystok.
- Wassenberg F., Turkington R., van Kempen R., 2004, *Prospects for high-rise housing estates*, [in:] Turkington R., van Kempen R., Wassenberg F. (eds.), *High-rise housing in Europe: current trends and future prospects*, Delft University Press, Delft: 265–280.
- Wassenberg F., 2013, *Large housing estates: Ideas, rise, fall and recovery*, "The Bijlmermeer and Beyond", Serie: "Sustainable Urban Areas", 48, Delft University Press, Delft.
- Węcławowicz G., 2007, Geografia społeczna miast, Wydawnictwo Naukowe PWN, Warszawa.
- Węcławowicz G., Kozłowski S., Bajek R., 2003, Large housing estates in Poland: overview of developments and problems in Warsaw. RESTATE, Utrecht University, Utrecht.
- Węcławowicz G., Guszcza A., Kozłowski S., Bielawska A., Adamiak A., Krasowska M., Fader A., Bierzyński A., 2005, *Large housing estates in Poland: opinions of residents on recent developments. RESTATE*, Utrecht University, Utrecht.
- Wiest K., 2011, Large-scale housing estates in Central and East European cities: between residential preferences and local housing market differences, "Housing: Theory and Society", 28 (4): 410–431.
- Wojtkun G., 2004, *Osiedle mieszkaniowe w strukturze miasta XX wieku*, Wydawnictwo Politechniki Szczecińskiej, Szczecin.
- Wojtkun G., 2008, Wielorodzinne budownictwo mieszkaniowe w Polsce. W cieniu wielkiej płyty, "Przestrzeń i Forma", 10: 175–194.

Zborowski A., 2005, Przemiany struktury społeczno-przestrzennej regionu miejskiego w okresie realnego socjalizmu i transformacji ustrojowej (na przykładzie Krakowa), Instytut Geografii i Gospodarki Przestrzennej Uniwersytetu Jagiellońskiego, Kraków.

### ZMIANY W STRUKTURZE SPOŁECZNEJ I DEMOGRAFICZNEJ WIELKICH OSIEDLI MIESZKANIOWYCH W POSTSOCJALISTYCZNEJ POLSCE I ICH GŁÓWNE DETERMINANTY

Zarys treści: Wielkie prefabrykowane osiedla mieszkaniowe powstawały w całej Europie, jednakże czynniki polityczne i ideologiczne przyczyniły się do tego, że na największą skalę rozwinęły się w krajach realnego socjalizmu. Obecnie nadal stanowią one około 30–40% zasobów mieszkaniowych w tej części Europy. W artykule omówiono przemiany wielkich osiedli mieszkaniowych, jakie zaszły w Polsce w ciągu 25 lat po upadku komunizmu. Głównym celem badań była odpowiedź na następujące pytania: (1) Jak zmieniły się struktury społeczne i demograficzne dużych osiedli mieszkaniowych w Polsce od czasu upadku socjalizmu? (2) Jakie są główne determinanty tych procesów? (3) Czy procesy zachodzące w tych osiedlach odzwierciedlają negatywne zjawiska degradacji społecznej obserwowane w wielu krajach Europy Zachodniej? Podstawą opracowania był przegląd dostępnej literatury dotyczącej przekształceń wielkich osiedli mieszkaniowych w kilku dużych miastach Polski oraz wyniki badań własnych przeprowadzonych w jednym z największych miast w kraju, jakim jest Łódź.

**Słowa kluczowe:** Wielkie osiedla mieszkaniowe, miasto postsocjalistyczne, zmiany społeczne i demograficzne, kraje CEE, Polska.

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### A C T A U N I V E R S I T A T I S L O D Z I E N S I S FOLIA GEOGRAPHICA SOCIO-OECONOMICA 30, 2017: 27–37

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### Natalia Otrishchenko

### (RE)DEFINING PLACES FOR COMMUNITY IN SYKHIV HOUSING ESTATE

**Abstract:** Lviv (Ukraine) is an Eastern European city with a history dating back to the 13<sup>th</sup> century. It could be imagined as a palimpsest-like place of different architectural, social, and cultural heritages. However, the majority of current Lviv's population lives within an urban environment designed and constructed during the second half of 20<sup>th</sup> century. Based on sociological data (in-depth semi-structured interviews, survey, and unobtrusive observation) article reviews the specifics of places for community in the largest mass housing estate – Sykhiv. Author shows what areas are perceived by inhabitants as the locations for social life and what types of social cohesion could contribute to the urban transformations.

**Keywords:** Community, social bonds, (post)socialist city, mass housing estate, spatial transformations, Sykhiv, Lviv.

### 1. Introduction

According to Ivan Szelenyi, "socialist city," compared to "capitalist" one, has less diversity, less marginality, and is less space saving (Szelenyi 1996: 300). Therefore, it is often characterized with recurring, predictable, standardized environments and huge open areas. After 1989/1991, urban spaces of former "socialist cities" are constantly redefined. Areas for common usage, with no specific content, started to be filled with various functional elements and symbolic meanings. This process became extremely vibrant within centrally designed environment of modernist housing estates. During the period of 1990s, with tough economic conditions and establishment of a new system of power relations, there were hardly any resources to take care of common areas. These spaces were either perceived as owned by nobody, and consequently privatized, or were generally abandoned. Some of the former open spaces started to be used as religious sites or big shopping malls. As

<sup>&</sup>lt;sup>1</sup> T. Darieva, W. Kaschuba, M. Krebs (eds.) (2011); A. Kleims, M. Dmitrieva (eds.), (2010).

a result, social life of modernist housing estates was arranged mainly between consumption, entertainment, religion, and transition from home to work and back.

Within the frame of the project "Planned Urbanity in Socialism and Beyond" conducted at the Center for Urban History of East Central Europe I would like to discuss the process of (re)defining of the places for community in modernist environment based on experience of local inhabitants. As a primarily case for this study I would use Sykhiv, the biggest (located on the territory of 390 hectares) housing estate in Lviv, western Ukraine. As for 2001, 146847 residents lived there (Cherkes 2013: 68). This area was centrally designed under the concept of micro-district and was constructed mainly during 1980s. The residential 9-storey and 15-storey buildings were made of prefabricated panel blocks and became the accommodation for workers of the south-eastern industrial hub of the city. Since construction open spaces of Sykhiv as well as areas for common usage were constantly reshaped and reappropriated by various actors. With this research I intended to see the role of local community in this process.

### 2. Community in mass housing: places to be

Annemarie Sammartino pointed out that one of the differences between late modernism and modernism of the first two post-war decades was the target: the first one aimed to develop a new kind of community with the help of urban planning and architectural means (Sammartino 2016: 497). The city under socialism, as Astrid Ihle puts it, was conceived as a public space designed to support the process of social integration and the formation of a new socialist citizen" (Ihle 2002: 90). Thus, it had to facilitate a certain type of social bonds among people: new ways of spatial organization and material environments had to produce new social relations, personal identities, and systems of values. The influence of physical space on social structure and individual behavior was implicitly assumed as linear. According to David Crowley and Susan Reid, "the architectural form of the city and planning of urban space were vested with a social-transformative role in the lives of its residents" (Crowley, Reid 2002: 11). However, the relationship between space, materiality, social structures, and human agency is rather mutual and might be visualized as a network with various types of connections that influence each other in different ways.

Kenny Cupers reviews the interrelations between sociological theorizing of community and urban planning in Western Europe in 1940s and 1950s. He stated that the dominance of the ecological concept of habitat led to "the assumption that spatial proximity equaled social bonding" (Cupers 2016: 1012). Strongly influential during the 20<sup>th</sup> century, this determinist approach was gradually replaced by the "reciprocity of interaction" (Cupers 2016: 1023) as a key precondition for the existence of community. According to this shift, the links and social cohesion

between different actors become crucial for the development of community. They might be established within the space, which could be defined with four qualities: 1) accessibility, 2) possibility to be engaged in activities around, 3) comfort as well as a good public image, and 4) sociability, therefore the ability of people to meet each other and interact there<sup>2</sup>. Basically these are the qualities of places of encounters, informational and emotional interactions, to which I would refer as "places for community". With this name, instead of "public space," I am emphasizing both social (in terms of links) and local (in terms of specific space) aspects of such areas.

The recurring type of Soviet city landscape during the period of 1950s–1990s has transformed, according to Philipp Meuser, from "the neoclassical superblock to the socialist micro-district" (Meuser 2015: 145). One of the key ideas behind the latter was the System of Stepped Services (Zadorin 2009: 26). It meant spatial proximity of services based on the frequency of their usage. Sykhiv area was divided into thirteen micro-districts (M11-M23) with planned community centers in each. According to Bohdan Cherkes, such centers had to fulfill six functions: trade, health care, public services, administration, education, culture and sport, and hotel accommodation (Cherkes 2013: 69). Despite the requirement to construct community service buildings, they were not completely accomplished: priority was given to housing facilities. As a result, this modernist mass housing estate might lack places, where locals can meet and spend time together. This is an assumption, which has to be checked.

### 3. Methods and questions

After 1989–1991, modernist mass housing entered the process of still-lasting reinterpretation according to new social conditions, expectations, and visions of the future. What spaces are perceived by local people as the places for community? Are they those envisioned from the very beginning at the level of planning, or constructed after 1991, or constantly reinvented and recreated? How do local residents define the qualities of such spaces? What activities support their existence? I assume that urban space is constantly recreated and redefined through the network of spaces, social structures, everyday practices, objects and symbols with various types of connections that influence each other in different ways. My main focus is made on one of the nodes of this network: people and their activities. Therefore, I used various sociological data: in-depth interviews with inhabitants (total of 11 semi-structured interviews, collected in 2015 with purposive quota sample), unobtrusive observations during Summer 2015 and Summer 2017, purposive sample with quotas of gender and

<sup>&</sup>lt;sup>2</sup> Project for Public Spaces (2009), http://www.pps.org/reference/grplacefeat/ (accessed on: 17.07.2017).

age and results of sociological unstructured survey "Problems and Needs of the Inhabitants of Sykhiv District," which was conducted during July 2017 by the City Institute in cooperation with Civic Network OPORA<sup>3</sup>. This survey used a multi-stage proportional stratification sample with quota selection at the last stage. A total of 600 persons were interviewed with the "face-to-face" method. Based on these materials, I would like to delineate the process of reassembling of both material environment and social life in modernist mass housing.

### 4. Sykhiv case study

Philipp Meuser points out that economic practicability in terms of resources "dictated form, function and structure" (Meuser 2015: 156). As a result, community centers either were not fully constructed or their functions were redefined under new "capitalist" conditions. For example, "Zubra-Center" (named after a local river, popularly referred to as "Santa Barbara" because of visual similarity of its arches with the opening scene of American television soap opera, community center of M22) gradually transformed into a trade center. "Iskra" ("Spark", named after Lviv Electric Lamp Factory, community center of M11) had a similar fate. Together with local public centers in every micro-district, Sykhiv had a large-scale center at the intersection of the major transport and pedestrian flows, Chervona Kalyna avenue and Sykhivska street. This center on the crossroads with exaggerated space became fragmented during 1990s as well. Partly, it was used to construct a Nativity of Blessed Virgin Mary church, partly it was filled with trade, sport, and entertainment facilities, and partly it became a transit area and a green zone for walking or leisure.

The sociological survey "Problems and Needs of the Inhabitants of Sykhiv District" could illustrate the ways how local inhabitants relate to their neighborhood. There was a question about spaces, which I define as "place for community"<sup>4</sup>, and people named courtyards between large-block apartment buildings, green zones, walking areas, cultural infrastructure, such as libraries or cinema (see Table 1). Religious sites also are perceived as the places of communication and interaction, as well as cafés or shops, even when they have limited access and restricted range of activities. Out of those, who agreed on the presence of places for community in their district, 60,6% respondents spend their free time there. Still, there is a big number of people, who feel lack of possibilities to interact with others.

<sup>&</sup>lt;sup>3</sup> Survey "Problems and Needs of the Inhabitants of Sykhiv District" was conducted within the framework of the project "Support to the Reform of Decentralization in Ukraine" funded by the British Embassy in Ukraine.

<sup>&</sup>lt;sup>4</sup> The question was "Are there any places in the district where residents can chat, discuss problems, or spend time together?".



**Figure 1.** Central square of Sykhiv housing estate with "Intercity" trade center and Nativity of Blessed Virgin Mary Church on the background

photo: N. Otrishchenko (2015)

**Table 1.** Places in the district where residents can spend time together (%)\*

Green zones	19,6
Areas near buildings (yards, benches, gazebos, playgrounds)	
Cinema	17,9
Religious sites	16,1
Playgrounds, school	14,3
Public catering (cafés, restaurants), shops	

<sup>\* %</sup> of those who believe there are areas where residents can spend time together.

Source: Lviv City Institute survey (2017)

More detailed picture could be developed with the help of 11 in-depth interviews collected in 2015 by my colleague Natalia Mysak and me<sup>5</sup>. The inter-

<sup>&</sup>lt;sup>5</sup> Interviews were collected for the "Imagined and Experienced: Planned Districts in Late Socialism and Beyond" project, conducted at the Center for Urban History. See details here: http://www.lvivcenter.org/en/ researchprojects/imagined-and-experienced/ (accessed on: 13.12.2017). Quotes are translated from Ukrainian. According to the confidentiality policy, only information about gender and age of interviewees will be provided.

section of Chervona Kalyna avenue and Sykhivska street is perceived as the center of community life of the district: "There is a Nativity of Blessed Mother Mary church with a park and a cinema, perfectly fitted into the public space, in the core of the center, where all young people are going out in the evenings... and further there are intimate inner courtyards, where most of my friends grew up"6; "I think that the center of the city is a square in front of the cinema, near the church. It is the main part of the city of Sykhiv"7. In the second quote the interviewee is referring to Sykhiv as a "city," which is quite a common tendency - during decades it has been infrastructurally and symbolically separated from the rest of Lviv, and, as the other interviewee mentioned, "I could often hear from people 'I am going out to the city'. They do not associate Sykhiv with the city"8. He also recalled courtyards as an important place of socialization. Similar attitude was expressed by another young man who described the role of space in the construction of friendship networks: "During school years, some were rallying around the school... Personally, I was not attached to the courtyards, but I assume that the majority of people were [attached]. The [children from] porches or courtyards were friends and so on. I, we were friends based on our interests, not (laughs) geographic affiliation"9.

Sykhiv playgrounds could be an example of places for local community as well, nevertheless, they are designed mainly for the activities of one target group - children (with the support or supervision of their parents or grandparents): "Recently, I really enjoyed that there has been an increase in the number of areas for children, the playgrounds. And I would like to see big flower beds next to each house. I love flowers, I love when there is a lot of greenery; the more greenery, I think, the better"<sup>10</sup>; "All playgrounds are concentrated... were built during the Soviet Union near schools. There are a few playgrounds near the 'Intercity' [trade center] and small sportsgrounds, too, but it is not enough"11. These two interviewees have different attitudes on the number of playgrounds. The possible reason for this might be the difference in their definitions of a "playground", because it could be perceived either as exclusive outdoor area provided only for children to play on or as inclusive arena for activities like sports or recreation that could also be used by adults. At the same time, local children perceived the whole area as a huge space, which they can appropriate and use for various activities: "I do not remember that we spent time at the territories allocated for children, where there was one swing, one slide and so on. All micro-district was a playground [for us]"12.

<sup>&</sup>lt;sup>6</sup> Male, 26, 14 July 2015.

<sup>&</sup>lt;sup>7</sup> Female, 43, 12 August 2015.

<sup>&</sup>lt;sup>8</sup> Male, 26, 14 July 2015.

<sup>&</sup>lt;sup>9</sup> Male, 30, 6 August 2015.

<sup>&</sup>lt;sup>10</sup> Female, 43, 12 August 2015.

<sup>&</sup>lt;sup>11</sup> Male, 31, 7 August 2015.

<sup>&</sup>lt;sup>12</sup> Male, 22, 16 July 2015.

Greenery is one of the district's benefits, which is among the most frequently mentioned in the interviews: "I always liked the amount of space. A lot of space. It was a lot of greenery, in my mind there always has been the walk as in this huge park, especially I remember [it] during summers. So, this was my first encounter with Sykhiv and with Lviv"13; "After two years, when I became a mother, I realized that Sykhiv is a perfect place not only because of the market and huge bazaar nearby... such a quiet green area extremely pleased me as a mother"14. Green zones played an important role in a "socialist city," as environmental discourse largely contributed to modernist mass housing programs. However, those spaces also transformed because of activities of local community: "Others are making kind of green zones, [with] flowers, lawns. We did not have anything like that. Just a tree and grass. Once there was an attempt to plant something, but it was immediately trampled, destroyed"15. This interviewee continues on the issue of privatization of former spaces for common usage – staircases, garbage piping etc. - and their conversion into pantries and storage rooms. He calls it "a struggle for space"<sup>16</sup>. One of the main changes in spatial development that occurred after the breakdown of the Soviet Union was the increase of the number of actors on various levels, and the blurring of the borders of their responsibility for common spaces, therefore, a number of common places became private property.

Interaction between these actors, coordination of their efforts, and active personal involvement is one of the key mechanisms of development of the places for community. It requires certain investment of resources and is mainly based on the development of local landscape, on making it more convenient: "Well, these initiatives, the greenery around the house was created by us... The playground near our house, we put to order by ourselves, in fact, from the very beginning... It was my initiative as the head of a housing cooperative did not allow to plant potatoes. We decided to make a lawn and we still have this lawn'"; "Maybe [we need] more recreational places, benches, so people, mothers with baby strollers could sit down somewhere... And, of course, the Sykhiv forest, we must improve it—to put in trash bins, benches with tables—to make a parkland" Contemporary Sykhiv (particularly—Santa Barbara) is also an area where one of the first and most interesting examples of Lviv's urban participatory planning is developing now—"the Square of Dignity". Architects and local activists consolidated their efforts to stop the construction of a trade center that violated building norms<sup>19</sup>.

<sup>&</sup>lt;sup>13</sup> Ibidem.

<sup>&</sup>lt;sup>14</sup> Female, 33, 4 August 2015.

<sup>&</sup>lt;sup>15</sup> Male, 30, 6 August 2015.

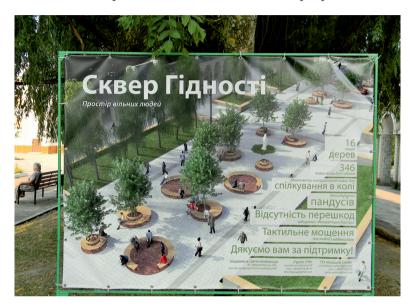
<sup>&</sup>lt;sup>16</sup> Ibidem.

<sup>&</sup>lt;sup>17</sup> Male, 64, 21 August 2015.

<sup>&</sup>lt;sup>18</sup> Female, 25, 14 July 2015.

<sup>&</sup>lt;sup>19</sup> More information about this project is available on its facebook-page: https://www.facebook.com/skverinsykhiv (accessed on: 13.12.2017).

Further, protesters initiated to conduct a research, to involve local residents into decision-making process, to join with city authorities and finally to make this space accessible and attractive for local community. As one of the activists describes her motivation: "And why am I involved in the creation of Sykhiv now? It is the place where I live, I want this place to be better, I believe that people deserve it" 20.



**Figure 2.** Project of reconstruction of "the Square of Dignity. Space of Free People" Text in Ukrainian: 16 new trees, 346 new places for sitting, possibility to use benches for conversation in the circle, arrangement of ramps, no obstacles, remove "decorative barriers", tactile paving for people with visual impairment, thank you for your support! Initiative group of inhabitants, 109 Group, NGO "Better Sykhiv"

photo: N. Otrishchenko (2015)

The majority of persons in a quantitative survey (around 75% of respondents from Sykhiv) agree with local activists and declare that people have to care about the condition of common spaces such as a porch and the adjacent territory to buildings (see Table 2). At the same time, almost one fifth of the sample either agree or completely agree with the statement that people have to care mainly about personal comfort in the apartment. This tendency might be also illustrated with skeptical voices from interviews: "People do not want to take responsibility, they are hiding in the crowd" or "whatever European practices are, you bring them to the table, and people still can say that there is some deception. There is no trust even between neighbors, [only] there is [trust] between the neighbors on the

<sup>&</sup>lt;sup>20</sup> Female, 31, 21 July 2015.

<sup>&</sup>lt;sup>21</sup> Ibidem.

same floor"<sup>22</sup>. Urban spaces might be transformed much faster not by singe actor but by a group of people with the certain level of trust; the mere desire for changes usually is not enough.

Table 2. Attitudes of Sykhiv Inhabitants towards Common Spaces (%)\*

1) I should care only about my personal comfort in the apartment, and do not think about the condition of common spaces, such as porch, territory near building, public places	21,3
2) I should think not only about comfort in my apartment, but also care about the condition of common spaces, such as porch, territory near building, public places	73,0
3) The condition of common spaces, such as porch, territory near building, public space depends on the activities of the residents	75,2

<sup>\* %</sup> of those who either agree or completely agree with the statement.

Source: Lviv city institute survey (2017).

Sykhiv has multiple traditions in terms of existing social networks. First of all, the housing estate was developed mainly for the workers of industrial hub who migrated on a daily basis from the nearby villages. Those people settled together and preserved certain types of connections: "Literally neighbors in the villages settled together in [those] buildings... and certain traditions moved with the village and with these people into these houses"23. There also were strong social bonds between people who were forced to move from Prypiat in 1986: "In fact, this is our house, and it was divided into a 'Chornobyl' [people who were relocated after the accident at ChNPP] part and 'not a Chornobyl' [people from villages nearby] part... Those who come from there [from Chornobyl], when they were young, they wanted to do something together, and they planted trees"<sup>24</sup>. After 1989/1991, social composition changed. As a result, Sykhiv inhabitants now have diverse backgrounds and differ in terms of their economic capacities: "To someone there is no problem there to allocate one hundred hryvnias, someone has the problem of allocating ten hryvnias and, unfortunately, it is very difficult to do something together in such situations"25. This diversity could be one of the key resources of the area – a possibility to develop cross-cultural dialogue and overcome the tendencies of ghettoization.

<sup>&</sup>lt;sup>22</sup> Male, 26, 14 July 2015.

<sup>&</sup>lt;sup>23</sup> Ibidem.

<sup>&</sup>lt;sup>24</sup> Male, 31, 7 August 2015.

<sup>&</sup>lt;sup>25</sup> Male, 30, 6 August 2015.

### 5. Conclusions

Active local community could become an avant-garde of spatial development. It resonated with ideas, expressed by Kenny Cupers: "The concept of community – with all its underlying sociological assumptions – was inserted into a new discourse, that of citizen participation. Community was now an expression of grassroots activism and protest" (Cupers 2016: 1024). Therefore, the difference between "socialist" and "post-socialist" places for common usage might be explained with other types of social bonds behind them, variation in their sustainability, and number of possibilities to use the place for your own.

Sykhiv inherited a number of community centers, libraries, places for practicing sports, green zones etc. Some of them could be used by local community and become centers of social life and interaction between neighbors. This residential area has a big density of populations and, therefore, a significant amount of human resources. Enhancement of existing social links and development of new ones under the favorable circumstances could contribute to the transformation of urban environment. The next challenge is to develop new transparent forms of interaction between spatial actors. After years of socialism and "wild capitalism" of 1990s it is necessary to set up a new system of rules, which would consider interests of all parties. Sykhiv already has an example of involving local residents into urban planning and spatial development of their neighborhood, but the process itself has to be clarified. What are the possibilities and limitations of such involvement? And are people ready to be involved, to invest their time, money, and other resources? Finally, existing places for community are good examples of "the life between the buildings", as they are constantly developed, negotiated, and supported by local inhabitants. These areas point to the connection between social and material tissues and visualize their interdependence.

### Bibliography

- Cherkes B., 2013, Socialistic Birth and Afterlife of the Largest Lviv District of Sykhiv, Dom i Osiedle Jutra, cz. 1, "Środowisko Mieszkaniowe", 11: 68–73.
- Crowley D., Reid S. (eds.), 2002, Socialist Spaces: Sites of Everyday Life in Eastern Bloc, Berg, Oxford.
- Cupers K., 2016, Mapping and Making Community in the Postwar European City, "Journal of Urban History", 42(6): 1009–1028.
- Darieva T., Kaschuba W., Krebs M. (eds.), 2011, *Urban Spaces after Socialism: Ethnographies of Public Places in Eurasian Cities*, Campus, Frankfurt/Main.
- Ihle A., 2002, Wandering the Streets of Socialism: A Discussion of the Street Photography of Arno Fischer and Ursula Arnold, [in:] Crowley D., Reid S. (eds.), Socialist Spaces: Sites of Everyday Life in Eastern Bloc, Berg, Oxford: 85–104.
- Kleims A., Dmitrieva M. (eds.), 2010, *The Post-Socialist City. Continuity and Change in Urban Space and Imagery*, Jovis, Berlin.

- Meuser Ph., 2015, *Ten Parameters for a Typology of Mass Housing*, [in:] Meuser Ph., Zadorin D. (eds.), *Towards a Typology of Soviet Mass Housing: Prefabrication in the USSR 1955–1991*, DOM Publishers, Berlin: 10–159.
- Project for Public Spaces, 2009, *What Makes a Successful Place?*, http://www.pps.org/reference/grplacefeat/ (accessed on: 17.07.2017).
- Sammartino A., 2016, Mass Housing, Late Modernism, and the Forging of Community in New York City and East Berlin, 1965–1989, "American Historical Review", 121.2: 497.
- Szelenyi I., 1996, *Cities under Socialism and After*, [in:] Andrusz G., Harloe M., Szelenyi I. (eds.), *Cities After Socialism. Urban and Regional Change and Conflict in Post-Socialist Societies*, Blackwell Publishers, Oxford: 286–317.
- Zadorin D., 2009, Microrayon Handbook, The Block, 21: 26–35.

### (RE)DEFINIOWANIE MIEJSC WSPÓLNOTOWYCH NA OSIEDLU BLOKOWYM SYKHIV

Zarys treści: Lwów (Ukraina) to miasto Europy Wschodniej z historią sięgającą XIII wieku. Można je sobie wyobrazić jako miejsce przypominające palimpsest o różnych walorach architektonicznych, społecznych i kulturowych. Jednak większość obecnej populacji Lwowa żyje w środowisku miejskim zaprojektowanym i zbudowanym w drugiej połowie XX wieku. Na podstawie danych socjologicznych (wywiady pogłębione częściowo ustrukturyzowane, ankieta i obserwacja ukryta) w artykule dokonano przeglądu specyfiki miejsc w przestrzeni miasta w największym osiedlu mieszkaniowym – Sykhiv. Autorka pokazuje, jakie obszary są postrzegane przez mieszkańców jako miejsca życia społecznego i jakie rodzaje spójności społecznej mogą przyczynić się do transformacji miejskich.

**Słowa kluczowe:** Społeczność, więzi społeczne, miasto postsocjalistyczne, wielkie osiedle mieszkaniowe, transformacja przestrzenna, Sykhiv, Lwów.

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## A C T A U N I V E R S I T A T I S L O D Z I E N S I S FOLIA GEOGRAPHICA SOCIO-OECONOMICA 30, 2017: 39–50

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## FUNCTIONAL DIVERSIFICATION OF POST-WAR NEIGHBOURHOODS – NOVI SAD CASE STUDY

Abstract: This paper discuss the mass housing neighborhoods named Limans in Novi Sad, Serbia, with the specific case study of urban quarter named Liman 3, showing a good example of gradual functional diversification of neighborhood since post-war period up to present days. The research approach of the paper is based on combination of Space Syntax, Spacematrix and Mixed-use index tool, as well as on contextual analysis with the specific interest on societal and economical issues. Aim of the paper is to show how local circumstances joint with global influences, evident in the example of Liman 3 urban area, have induced transition from completely residential to moderately mixed-use neighborhood during more than 40 years development period.

**Keywords:** Novi Sad, residential neighborhoods, land-use patterns, mixed uses, Mixed-use index

#### 1. Introduction

Political priorities in post-war Yugoslavia, common to Central and Eastern Europe countries at that time, have led to the massive construction of residential areas in the cities. As the overall progress in former Yugoslavia has been delivered with delayed effects and consequences, urban development in the city of Novi Sad, Serbia, was no exception. Conditions for intense expansion of Novi Sad were achieved only in the sixties – almost twenty years after the end of the World War II. This paper discusses the mass housing neighborhoods named Limans in Novi Sad with the specific case study of urban quarter named Liman 3, showing a good example of gradual functional diversification of neighborhood.

Limans are urban quarters situated on the left bank of the Danube river, in close proximity to the city centre. Typical morphology of these quarters was completely in accordance with the urban doctrine at the time. Residents were provided with enough sun, space and greenery, but the quality of life was not fully accomplished. The older parts of Liman 3 were designed as so-called dormitory neighborhoods,

common for the period of mass housing production and characterized by a negligible number of non-residential facilities. Only in the late 20<sup>th</sup> and early 21<sup>st</sup> century, favorable conditions for the construction of a significant number of non-residential facilities were created, which has changed the ratio between the uses and functional balance. The aim of the paper is to show how local circumstances joint with global influences, as shown in the example of Liman 3 urban area, have induced the transition from completely residential to the moderately mixed-use neighborhood during more than 40 years of development period.

### 2. Methodology

Previous research of the land-use patterns showed the diversity of issues and complexity of relations among land-use patterns and other urban phenomena in the contemporary city. The research approach of the paper is based on the combination of Space Syntax<sup>1</sup> (for movement network analyses), Spacematrix<sup>2</sup> (for densities analyses) and Mixed-use index tool<sup>3</sup> (for land-use analyses), as well as on contextual analysis with the specific interest on societal and economic issues. Urban indexes are calculated for block segments (shown in Graph 1 and Graph 3) and for the whole sample of Liman 3 (shown in Table 1).

#### 3. Broader context

Accelerated industrialization and urbanization after World War II has initiated mass construction of modern residential neighborhoods as one of the political priorities in Yugoslav cities. Newly born state of Yugoslavia gradually established specific form of government, the liberal socialism, which resulted in strong economic development of the country, especially in the 1960s and 1970s<sup>4</sup>. New socio-economic circumstances boosted the need for new society to be marked in space or through space (Pušić 2009). That is the reason why residential neighborhoods

<sup>&</sup>lt;sup>1</sup> A formal way of looking at cities that sets out from the study of the network of space – streets and roads – that holds the system together (Hillier 2009).

<sup>&</sup>lt;sup>2</sup> In Spacematrix, density is defined as a multi-variable phenomenon to be able to relate density and urban form (Berghauser Pont, Haupt 2009).

<sup>&</sup>lt;sup>3</sup> Defined by J. van den Hoek (2009) and here used redefined version where uses are classified on residential, primary non-residential and secondary (non-residential) uses (Carević 2017), based upon Jane Jacobs's theory (Džejkobs 1961/2011).

<sup>&</sup>lt;sup>4</sup> Such a powerful economic development has led to the fact that most of the population had a living standard never witnessed before: free education at all levels, free health services, apartment, car, cottage, summer and winter holidays, travelling around the world, training and education. Wages and personal standards of a great share of the population at that time have been even higher than in some Western countries (Srbulović 2000).

have been built according to the modernistic urban ideas which mostly resulted in monofunctional residential zones. Conditions for intensified expansion of Novi Sad towards the South to the Danube were created by the relocation of the railroad in the 1960s when the construction of multifamily housing on the Limans begins. The construction has been done in several phases while some parts of the area are still waiting for the completion.

In the modern de-industrialized city the conditions for the mixed-use construction are more favorable than ever before, due to the predominance of the knowledge economy and the service sector. The overall modern lifestyle in the city, along with transformed business operation modes, dependence on global socio-economic flows, and heterogeneity of lifestyles had formed the framework for transition from monofunctional to polyfunctional spatial planning. Similarly, in recent years Novi Sad has witnessed the expansion of IT sector which nowadays represents one of the main potentials for economic development, positioning the city as "the capital of IT sector in Serbia" and even "the European IT Center" (KLER 2011). Increased entrepreneurship initiatives in the tertiary sector and the entry of foreign companies into the local market generated an increased demand for space that would qualitatively and quantitatively meet the standards and requirements of modern business operation (Nedučin 2014).

Restructured economy has also influenced changes in spatial distribution of work activities in the city. Recent decades have witnessed a gradual mixing of residential and business programs, and increasing share of businesses in traditionally residential areas, as a result of both the planning measures, as well as the citizen initiatives.

## 4. Case study – Liman 3

The selected fragment is located between Bulevar cara Lazara street, Bulevar oslobodjenja, Bulevar Despota Stefana and Balzakova street (Fig. 1), about 2 km from the city center. Due to the Modernistic construction style, there are only 5 superblocks on the area of 57 ha. For the purpose of more precise research results, these blocks were divided during the calculation so they form the fragments defined by the local street network. The basic character of Liman 3 is reflected in multifamily housing, although main streets contain non-residential facilities comprising local linear centers and connecting the area with other parts of the city. The near surrounding of the fragment consists of residential areas, the marketplace, the post office and the headquarters of the company for electricity distribution, as well as the student dormitories and partly revitalized former industrial zone.



**Figure 1.** Case study area – Liman 3 Source: Google Earth, adapted by D. Tomić

#### 4.1. Development of Liman 3

The construction of multifamily housing on Liman 3 started in 1970, on the formerly unregulated territory of Veliki Liman (Large Liman), located between the old railway station and the industrial zone. Overcoming the concept of dormitory neighborhood (Jovanović 2011), parallel to the construction of residential buildings, the inner spaces with greenery, the park, playgrounds, sports field, and parking places were also created, along with the preschool and the elementary school – altogether indicating the attention dedicated to the quality of life of future residents.

Following decades has brought new programs and large-scale developments on Liman 3, accompanied with just a few new multifamily residential buildings. Considering future perspectives, construction of the new music and ballet school on one of the undeveloped plots should contribute to the functional diversity of the area. The intensive construction of housing estate in Novi Sad, which started at the end of the 20<sup>th</sup> and the beginning of the 21<sup>st</sup> century, has left no evidence on Liman 3 neighborhood – even though the building roofs are flat, there is still a small number of upward building extensions, contrary to some other parts of the city. On the other hand, recent unsystematic individual adaptations aimed at improving the thermal comfort in flats threaten to undermine the character of the architecture of this part of the city.

#### 4.2. Morphology and open spaces

The typical morphology of Liman 3 is in accordance with urban practice of that time. Since the blocks are very large, the buildings were arranged on the whole area but forming human scale entities. These open or semi-open "subblocks" are also used in numerical calculations done for the purpose of the research presented in this paper. The Ground space index (GSI) in these sub-blocks range from 9% to 24%, and they are clearly grouped in the diagram (Graph 1). The massive volumes of residential buildings have 8 floors on average, resulting in significant Floor Area Ratio (FAR) – generally between 1.0 and 2.0. Therefore, the open space ratio (OSR) is usually between 0.5 and 1.0, regardless of the large of undeveloped area.

Over time, new urban ideas and plans resulted in the changed typology of the later built structures – primarily in terms of programs, but also considering other characteristics. Newly built segments are characterized by similar FAR, but greater coverage (GSI) (Graph 1). More recent construction was intended to improve the treatment of public spaces. These now free-standing buildings are positioned on the very regulation line of the blocks, resulting mainly in very narrow sidewalks, which, however, are inadequate to the current pedestrian flow.



Figure 2. Black plan of Liman 3

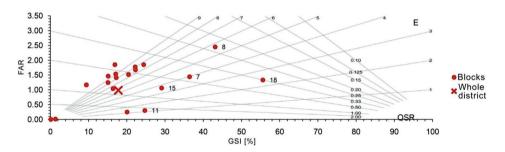
Source: D. Tomić and S. Tomić

Area	Built up area	Unbuilt area	Gross floor area	GSI	FAR	Number of residents	Residential density	Open space per capita	OSR
ha	ha	ha	m <sup>2</sup>	%	_	res	res/ha	m²/res	_
56,98	10,13	46,85	561014	18	0,98	11476	254	40	0,84

Table 1. Numerical data for Liman 3 fragment

Network length: 6384\* 4808\*\* m Network density: 112 84 m/ha

Source: own elaboration



**Graph 1.** Spacemate diagram for Liman 3 Source: M. Carević Tomić



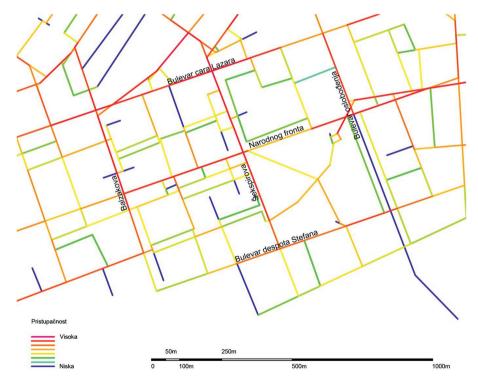
**Figure 3.** Typical Liman 3 environment *photo: M. Carević Tomić* 

<sup>\*</sup> Main roads and main inner-block paths are entered in calculations

<sup>\*\*</sup> Only with main roads entered in calculations

#### 4.3. Traffic analysis

Liman 3 movement system consists of the primary network made of the main streets with wide cross-sectional profiles, and the secondary network, referring to inner-block roads. The spacious blocks result in small network density (Table 1), which has led to increased intensity of both vehicular and pedestrian movements along the main streets. Due to this fact and according to the Space Syntax calculations (Graph 2), routs with the greatest potential at the same time are parts with the greatest share of non-residential programs. Narodnog fronta Street is especially significant because it represents the axle that connects Limans and also functions as linear local center. It is interesting to note that, although planned as temporary structures, many kiosks and small shops set and built along this rout, have stayed for decades and are still functional. This is also the area where informal street vendors mostly gather, indicating together with previous observation that the intensity of pedestrian movements is of the great importance for the development of both the outdoor and indoor activities.

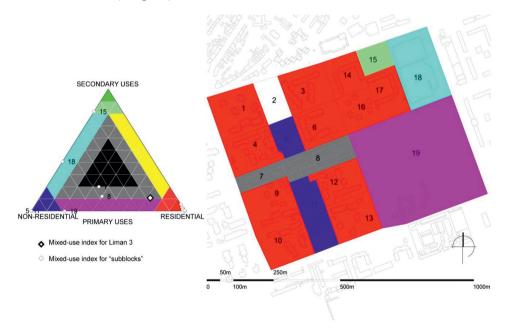


**Graph 2.** Spatial accessibility for Liman 3 – through-movement potential for combination of local (400 m) and global radius

Source: M. Carević Tomić

#### 4.4. Land use patterns

The older parts of Liman 3 were built in the 1970s and constructed as dormitory neighborhood, typical for the urbanization of that time. Only a few buildings were designed to have shops at the ground level, while the number of individual non-residential buildings was negligible. For many years, the main non-residential facilities were a primary school and two preschool institutions. Over the time, the lack of service sector facilities has been solved by the transformation of ground-floor rooms, but also by raising a large number of kiosks at the most frequent locations, while some apartments on higher floors have been rearranged into offices<sup>5</sup>. Only at the end of the 20<sup>th</sup> and the beginning of the 21<sup>st</sup> century, favorable conditions were created for more intensive construction of non-residential facilities, which resulted in a changed relationship between the primary uses, and consequently in the development of secondary ones. Today, residential, primary non-residential and secondary non-residential uses are in following ratio 72%: 17%: 11% (Graph 3).



**Graph 3.** Diagram of the mixed-use and representation by blocks Source: M. Carević Tomić

<sup>&</sup>lt;sup>5</sup> Large amount of office space were acquired by reconstruction of a parts of apartments, which was previously prevented by a series of regulations (Milosavljević 1994).

The business-commercial zone of Liman 3, along Bulevar oslobodjenja Street, has been developed as a part of the new city centre. However, although the opening of the headquarter of oil industry company of Serbia "NIS" (1998) has induced a large number of jobs, given the company's profile, size, and the global market orientation, it has no greater local influence on flows and vitality of near surrounding. It is similar to the Mercator supermarket (opened in 2007), which functions as a living, but quite an introvert system.

Regarding the local center along Narodnog fronta Street, it has great importance for the local neighborhood, even though for many years it has not been conformed to designated use, except for one business facility. The local center has been finally formed at the beginning of the 21st century when a mixed--use complex "Park City" was built - where the IT sector is dominant when it comes to non-residential facilities. The introduction of new programs has initiated regeneration of ground floors of surrounding older buildings, but the issue of insufficient activation of open spaces in-between buildings of the local center is still present and has multiple explanations. Besides the inadequate integration of the pedestrian network segments and unsatisfactory visibility from the main street, the ground floors of the Park City complex, which shape this area, are intended for large-format premises. There is obviously an insufficient demand for this kind of business facilities, so some of them are rearranged into offices as primary non-residential uses which, however, do not activate facade front, while the rest of the premises are still empty. However, considering the staying in the space, the biggest problem is the lack of the attractive open spaces – due to the lack of the street furniture and unregulated parking.

Limanski park represents a large park area significantly contributing to the quality of life of the entire neighborhood. Over the years, increased diversity of facilities has been developed for diverse categories of users in the park, which support the greater attendance of people. The study of green and recreational areas of Novi Sad (2009) showed that the visitors of Limanki park are the most regular users in relation to respondents in other parks. The study also revealed that there is a greater share of those who declared that they establish new contacts and acquaintances in the park, which leads to the conclusion that the park is a significant source of social capital.

Typologically observed, the fragment of Liman 3 belongs to the group of moderately mixed-use neighborhoods with the prevailing share of housing. Separately in segments or sub-blocks, monofunctionality with the domination of one of the three elementary uses is still observed. The exception is only the local center along Narodnog fornta street, where the ratio of the elementary uses is more balanced. In other words, the functional structure of the neighborhood is of a coarse grain – the monofunctional buildings prevail, while uses are combined exclusively horizontally for the largest part of the fragment. Only present-day

architectural interventions have introduced more complex ways of combining programs, meaning that, for example, the same building contains both horizontal and vertical mixing of uses.

#### 5. Conclusions

The observed fragment of Liman 3 has been developed for over 40 years, from a completely residential to moderately mixed-use neighborhood. The gradual introduction of primary non-residential uses, along with the development of entrepreneurship and other socio-economic circumstances, has also created favorable conditions for the initiation of programs and activities in the field of secondary uses. Their disposition in space, i.e. concentration along the busiest streets, but at the same time in areas where there is a mixture of primary uses of higher capacity<sup>6</sup>, confirms the dependence of the development of secondary uses based on these two aspects. High FAR followed by greater residential density, together with constantly increasing number of employees, ensure adequate concentration of users for secondary uses. Explicit obstacle for further boasting of the service sector in the area of mixed primary uses, is the lack of an adequate space – premises of smaller surface area adjusted for the activities of local significance.

Since the completion of the music and ballet school will fulfill planned capacities, it is certain that new primary programs will not be constructed in the near future. Therefore, we may conclude that the current ratio between elementary uses will keep the *status quo*. Possible improvements may be found in the form of a permanent solution for temporary shops/kiosks and street vendors, which would improve the overall experience in the space. Small GSI that is common for post-war neighborhoods allows the interpolation of new structures without disturbing the existing conditions of living comfort. Also, many post-war areas, are characterized by significant transformability of the ground floors because of the auxiliary rooms positioned there – an extensive study conducted on the neighborhoods in Novi Sad has shown that the auxiliary rooms in the ground floors are more easily and more frequently converted to non-residential uses (especially secondary) than apartments.

In summary, we may conclude that the complex combination of causes leads to an exact land-use pattern, while the wider socio-economic and cultural context, and the accessibility are the two most important factors determining

<sup>&</sup>lt;sup>6</sup> When one primary use is successfully combined with another, owing to which people appear on the street at different times, then their common performance can be economically stimulating: thus, a fertile environment is formed to flourish the secondary diversity, that is, economic and other activities that appear as a consequence of already existing primary content/programs (Džejkobs 1961/2011).

the multifunctionality in a certain part of the city. In addition, the position of the area in relation to the center of the city, as well as the building and residential density, are to be highlighted, as creating favorable conditions for the spontaneous development of secondary uses.

#### Acknowledgement

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### **Bibliography**

Berghauser Pont M., Haupt P., 2009, Space, Density and Urban Form, Delft.

Carević M., 2017, A tool for optimization of mixed-use planning, [in:] Kurtović Folić N., Krklješ M. (eds.), Optimizacija arhitektonskog i urbanističkog planiranja i projektovanja u funkciji održivog razvoja Srbije, Fakultet tehničkih nauka, Novi Sad.

Džejkobs D., 1961/2011, Smrt i život velikih američkih gradova, Mediterran Publishing, Novi Sad.

Hillier B., 2009, *The genetic code for cities – is it simpler than we think?*, [in:] Portugali J. *et al.* (eds.), *Complexity theories of cities have come of age*, TU Delft, Delft: 129–152.

Jovanović S., 2011, *Arhitektura Novog Sada druge polovine XX veka*, Društvo arhitekata Novog Sada – DaNS, Novi Sad.

KLER, 2011, IT City – Novi Sad evropski IT centar, Kancelarija za lokalni ekonomski razvoj, Novi Sad.

Milosavljević M., 1994, *Urbanizam u Novom Sadu između dva broja DaNS-a*, DaNS br. 9–10, 26–27, Novi Sad.

Nedučin D., 2014, *Postsocijalistički grad – promena društvene i prostorne strukture Novog Sada u periodu tranzicije*, PhD dissertation, Novi Sad.

Poljoprivredni fakultet Univerziteta u Novom Sadu, 2009, *Studija zelenih i rekreativnih površina*, Novi Sad.

Pušić L., 2009, Grad bez lica, Mediterran Publishing, Novi Sad.

Srbulović D., 2000, Kratka istorija Novog Sada, Prometej, Novi Sad.

van den Hoek J., 2009, *The Mixed Use Index (MXI) as Planning Tool for (New) Towns in the 21st Century*, [in:] Provoost M. (ed.), *New Towns for the 21st Century: the Planned vs, the Unplanned City*, Almere, The Netherlands.

## ZRÓŻNICOWANIE FUNKCJONALNE POWOJENNYCH OSIEDLI MIESZKANIOWYCH – PRZYKŁAD NOWEGO SADU (SERBIA)

Zarys treści: W artykule przedstawiono przykład osiedla mieszkaniowego o nazwie Limans w Nowym Sadzie, w Serbii. Studium przypadku stanowi jego część o nazwie Liman 3. Jest to dobry przykład świadczący o stopniowej funkcjonalnej dywersyfikacji osiedla od czasów powojennych do dzisiaj. Podejście badawcze Autorek opiera się na połączeniu narzędzi: Space Syntax, Spacematrix i Mixed-use index. Wykorzystano także analizę

kontekstualną ze szczególnym uwzględnieniem zagadnień społecznych i gospodarczych. Celem artykułu jest pokazanie, w jaki sposób lokalna specyfika w połączeniu z globalnymi wpływami spowodowały przejście od całkowicie mieszkaniowego do umiarkowanie mieszanego osiedla w ciągu ponad 40 lat rozwoju.

**Słowa kluczowe:** Nowy Sad, osiedla mieszkaniowe, wzory użytkowania gruntów, zastosowania mieszane, Mixed-use index.

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## A C T A U N I V E R S I T A T I S L O D Z I E N S I S FOLIA GEOGRAPHICA SOCIO-OECONOMICA 30, 2017: 51-63

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#### Karol Görner

# SLOVAK HOUSING ESTATES AND THE ACCESSIBILITY OF THE KEY AMENITIES. CASE STUDY BANSKÁ BYSTRICA

Abstract: Housing estates, which have emerged during the post-war mass housing development, became the significant part of an urban structure of many cities across the eastern bloc. In Slovak cities, they still represent the major part of residential complexes. Housing estates usually ignored the original urban structure and isolated themselves declaring their independence from the rest of the city. In an effort to a strict functional segregation housing estates paradoxically became dependent on the traditional urban structure. The original plans of the housing estates mostly proposed the local centers with a relatively broad spectrum of amenities; however, these were often greatly reduced or unfinished under the pressure of solving housing problems. Since the functional mixing with an emphasis on the walking accessibility of the key amenities from the place of a residence is one of the important aspects of livable and sustainable neighborhoods, the questions arises: To what extent do housing estates provide the key amenities necessary for the everyday life of their inhabitants? Are they in this respect truly self-sufficient or fail to fulfill their original ambition? Answering these questions is important not only in terms of the evaluation of their quality but also for setting strategies for the further development of housing estates (for example, intensification).

The goal of the paper was to examine the current structure of Slovak housing estates in terms of accessibility of the key amenities and the evaluation of the results from the perspective of the future development of housing estates. The research was carried out within 18 selected housing estates of varying size, nature and location within the city of Banská Bystrica (county city in Central Slovakia). The key amenities and optimal walking distances (radius of accessibility) were defined based on a comparison of existing researches and recommendations. Within the territory of housing estates, the percentage of overall coverage by key amenities (percentage of the territory of the individual housing estate with access to all key amenities in walking distance), the average percentage of coverage of the key amenities and the percentage of coverage of the selected key amenities were assessed. The results of the research demonstrate a large diversity of housing estates in terms of accessibility of the key amenities and their relation to other features of housing estates.

**Keywords:** Housing estate, accessibility, amenities, walking distance, intensification, Slovakia, Banská Bystrica.

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#### 1. Introduction

In the second half of the 20th century, mass housing construction has become a phenomenon that has permanently changed the face of European cities. This concept was firmly rooted especially in the countries of the former Eastern Bloc because it perfectly fitted into the functioning of the planned economy. Also in Slovakia, despite a growing criticism, mass housing construction, represented by "sidliská" (housing estates), were emerging until the 1990s. Thus, the housing estates in the Slovak Republic became a dominant form of the urban residential structure associated with many specific problems of functional-operational, mass-spatial, technical and socio-economic nature. Currently, the housing estates represent one of the most discussed issues in the field of architecture and urban planning. The specific topic of the housing estates is their completion or so called process of intensification. This can be understood as a process involving all interventions in the structure of housing estates which contribute to increasing its efficiency or try to maximize its use. The key issue of intensification is finding its optimal proportions and forms depending on a number of factors. One of these factors is the accessibility of key amenities that creates potentials or limits the possibilities of further development of the housing estates.

## 2. Theoretical background

The functional-operational structure of the residential area is (together with the mass-spatial, social and economic structure) one of the determining aspects of the creation of a sustainable city. As the key features of the functional--operational structure can be considered the accessibility of amenities (except for basic amenities, also higher and specific amenities), accessibility of jobs, interconnection of complementary functions (for example a café with a patio by a playground), good transport connection (walking, cycling, public transport), reducing the burden of car traffic, introduction of innovative forms of transport and others (Stangel 2013). O. Melcerová (2013) emphasizes, in particular, a sufficient mix of functions within a residential complex (approximately 500 m). According to B. Komar (2014), optimal state of the housing estate in terms of civic amenities is reflected by its even distribution, quantity and a variety of shops and services providing alternative options for residents. Based on these statements it can be said that from a functional-operational point of view, a varied and evenly distributed network of amenities (especially key amenities) with efficient transport links is crucial.

Among the forms of transport ensuring accessibility of amenities, a pedestrian transport with a good connection to public transport is decisive. Urban Task Force (2005) pays close attention to the issue of efficient spatial planning, highlighting

in particular the need to create a hierarchical and well-connected network of urban local centers (with amenities) serving the territory in a certain amount of time – from local centers (up to 2 minutes' walk) through quarter centers (5 minutes' walk) and the city center (within 20 minutes' walk). A specific attention to pedestrian movement pays J. Gehl (2012) who set the average distance that people are still willing to walk on at 500 m (about 5 minutes' walk). Despite the fact that in the literature (Bartková, Vyšinka 1980; Kavan 1983; Urban Task Force 1999; Komar 2014) we can find differently defined optimal walking distances to civic amenities, in principle it can be stated that the average distance to the key amenities is actually around 500 m. Under the key amenities, we understand mainly basic amenities – the amenities of everyday use that should be located within the walking distance from the place of residence. Based on the aforementioned authors (Bartková, Vyšinka 1980; Kavan 1983; Urban Task Force 1999; Komar 2014), a list of key amenities (bus stop, primary school, kindergarten, post office, park, groceries, doctor, local center and others) can be derived.

In the market economy, the priority is given to a detailed analysis of the needs of a territory or, in other words, to the demand analysis. In the planned economy (until 1989) standards, norms and indicators played a key role (Vitková 2008). The so--called technical and economic indicators also played a crucial role in the planning of deployment of civic amenities. According to Z. Rothbauer (2014), a number of schools, kindergartens, shops, services or cultural amenities were defined in terms of quantity per flat. In this way, the optimal accessibility of both basic and higher civic amenities should be theoretically ensured. Housing estates also referred to as "komplexná bytová výstavba" (complete housing construction), should have been self-sufficient and independent from the city itself (Moravčíková et al. 2011). But the construction of housing estates was not fully in line with the plans. Decisive criterion of successful development was the number of finished flats, while other aspects of development were often forgotten. L. Vitková, K. Görner (2016) point to the large differences between the original plans and their implementation, especially, in terms of amenities, infrastructure and public spaces. In the context of current efforts to complete the structure of housing estates, it is necessary to examine the real ability of a housing estate to provide the key amenities for its inhabitants within the range of pedestrian accessibility and thus to determine the optimum form of further development of the housing estate.

In terms of intensification, the accessibility of key amenities is one of the basic potentials but also the limits of the territory. One of the pillars of the sustainable compact urban structure is its multi-functionality – good coverage of the amenities within walking distance. While a well-covered territory creates prerequisites for further development, intensification of underdeveloped territory could result into creation of unsustainable neighborhood dependent on the other city structures. This is especially dangerous when we consider that in the current market economy,

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an increase in key amenities is not automatically guaranteed together with an increase in population (it concerns mainly less cost-effective or non-profit-making amenities such as primary schools, kindergartens, parks and the like). From this point of view, the process of intensification should be concentrated mainly on housing estates with a well-built network of key amenities, or on the completion of key amenities in the housing estates with a perspective of future development.

#### 3. Methodology

Case study: Research of the accessibility of key amenities was carried out on a sample of 18 housing estates within the county city of Banská Bystrica (around 80000 inhabitants). The selected city has undergone extreme growth during the period of mass housing construction. During the period 1950–1991, the number of inhabitants increased more than six times and Banská Bystrica moved in the hierarchy of Slovak cities from the 14<sup>th</sup> to the 5<sup>th</sup> place (actually 6<sup>th</sup>). The structure of the city (with the exception of the historical core and the associated rural settlements) is dominated by housing estates. In Banská Bystrica, it is possible to find a variety of housing estates with a typical structure for the 50<sup>th</sup>, 60<sup>th</sup>, 70<sup>th</sup> and 80s of the 20<sup>th</sup> century, which represents a wide range of diverse housing estates. A number of diverse housing estates within a coherent area and the middle size of the city are making the city of Banská Bystrica one of the best case study choices corresponding to research needs.

Key amenities: The key amenities were selected on the basis of the theoretical background (Bartková, Vyšinka 1980; Kavan 1983; Urban Task Force 2005; Komar 2014) based on the most frequently mentioned local amenities: bus stop, primary school, kindergarten, post office, park, grocery, local center, doctors (general practitioner for children and adults).

A park was defined by J. Komrska (2009) as a public space with greenery and amenities for short-term relaxation and sport-recreational activities that do not disturb relaxing people. An area of the park should be at least 0.5 ha. The local center is understood as a public space with adjacent buildings (it can also be single building) in which at least the following amenities are concentrated: shops, gastronomy, services.

Optimal accessibility: In terms of accessibility, the emphasis was placed on walking distance. According to J. Gehl (2012), about 5 minutes of walking (500 m) was considered to be a walking maximum. Regarding accessibility of kindergartens, at which authors pointed to significantly lower walking distance: R. Bartková, J. Vyšinka (1980) 250–500 m, J. Kavan (1983) up to 400 m and B. Komar (2014) 200 m, this criterion was tightened to 250 meters. As the territory

with a full accessibility of the selected amenity was considered a territory, which was located in the range of 500 m (250 m) circuit from the selected amenity.

The selected key amenities within the city were identified using two complementary methods. In the first step, the internet map applications (Google Maps, OpenStreetMap) were used to identify the key amenities within the city. In the second step, the recency of the data collected was verified by the Google search engine and the field survey. All identified key amenities were drawn on a digital map using the AutoCAD software. To specify the range of coverage of the identified key amenities the circles with the centers in key amenities were created.

Three aspects of accessibility of key amenities were monitored individually in all selected housing estates:

- 1. Percentage of overall coverage by key amenities (percentage of the territory of the individual housing estate with access to all key amenities within walking distance).
- 2. Average percentage of coverage of key amenities.
- 3. Percentage of coverage of selected key amenities.

The coverage of a single key amenity (for example school) within the housing estate was represented by the total area of housing estate overlapping with the circles which have the centers in the position of the key amenities (in this case schools) and the radius of 500 m (250 m in the case of kindergartens). The coverage was expressed in percentage instead of the real area to make it more comparable. Percentage of overall coverage by key amenities represented the percentage of the area of housing estate covered by all selected key amenities. The average percentage of coverage of key amenities was represented by an average of percentages of coverage of all selected amenities within the housing estate. Percentage of coverage of all selected amenities within the housing estate.

To better describe the results, the percentage rating was scaled (0–24%, 25–49%, 50–74%, 75–100%). Interpretation of the results was carried out on the basis of comparison of results, average assessments of individual aspects and comparison of results with selected characteristics of settlement (area, population). For a more accurate and simpler evaluation of relations between variables, there was a used correlation analysis. Pearson's correlation coefficient was calculated using Microsoft Excel 2010 (fx CORREL function). Statistically significant correlation coefficients R (greater than 0.5/less than -0.5) were taken into account. Just the findings evaluated as the most relevant from the point of view of research are mentioned in the results.

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#### 4. Results and discussion

The highest percentage of overall coverage by key amenities was recorded in housing estates Sásová II (59.9%) and Rudlová II (58.8%) (Fig. 1). Housing estates Fončorda Mládežnícka (45.8%) and Fončorda Tulská (45.3%) have approached the 50%. The lowest percentage of 0% of overall coverage by key amenities was recorded in the housing estates Bakossova, Uhlisko, Trieda Hradca Králové, Kráľová, Mateja Bela (Fig. 2), Rudlová-Sásová I and Severná. Fig. 3 shows the overall coverage by key amenities within the city of Banská Bystrica.



**Fig. 1.** The central axis of housing estate Rudlová-Sásová II includes many of the key amenities

photo: K. Görner

Significantly better than percentage of overall coverage by key amenities was average percentage of coverage of key amenities where the coverage of 75% was overcome in 9 housing estates – Fončorda Mládežnícka (90.85%), Podlavice (90.6%), Sásová II (88.6%), Rudlová II (87.3%), Fončorda Tulská (86.8%), Sídlisko SNP (81.7%), Radvaň (77.76%), Fončorda Internátna (77.7%) and Fortnička (75.1%). The lowest recorded average percentage of coverage of key amenities was not in any housing estate lower than 25% – Kráľová (35.8%), Mateja Bela (37.7%), Severná (39.1%), Uhlisko (46%), Rudlová-Sásová I (46.15%).



**Fig. 2.** Housing estate Mateja Bela located eccentrically to urban development axes is one of the housing estates with the worst accessibility of the key amenities

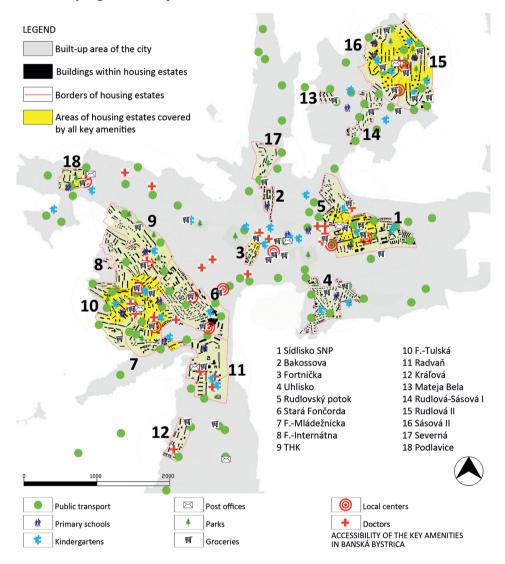
photo: K. Görner

Among the key amenities, the best percentage of coverage of selected key amenities in average was achieved by public transport (100%) and groceries (98%). A little worse coverage in average had primary schools (74%), doctors (68.9%), parks (60.7%), and local centers (60.4%). The worst result with coverage lower than 50% had kindergartens (42.4%) and post offices (40.3%). Coverage of individual key amenities within the surveyed area is shown in Fig. 4.

A summary of the results is published in the table (Table 1). Based on the analysis of the obtained data, several observations can be made. The accessibility of the key amenities within housing estates in Banská Bystrica can be generally considered as uneven. The results suggest that the higher populated housing estates are better covered by all key amenities (R = 0.7) and therefore better meet the vision of complex housing construction (mainly housing estates Sásová II, Rudlová II, practically the entire residential complex of Fončorda and housing estate Sídlisko SNP). Exceptions are housing estates Radvaň, and Trieda Hradca Králové. The reason of low percentage of overall coverage by key amenities in housing estate Radvaň is, in particular, the uneven distribution of basic amenities (schools and kindergartens) as well as the poor maintenance of the greenery around the Radvanských manor which does not meet the attributes of the park. Housing estate Trieda Hradca Králové also suffers because of uneven distribution of key amenities and absence of post office within the walking distance. From a comparison of the results, it can be concluded that the population of the housing estate influences mainly the accessibility of kindergartens (R = 0.67), post offices

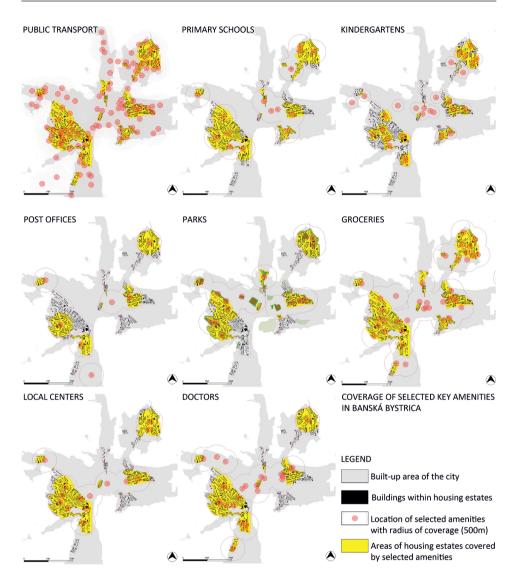
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(R=0.58), and local centers (R=0.52). In the smaller and mainly less populated housing estates, they often absent or cover only part of their territory. Interesting is also the fact, that the relationship between the accessibility of key amenities and population density (which was subsequently verified) did not confirm any statistically significant dependence.



**Fig. 3.** The overall coverage by key amenities within the city of Banská Bystrica with highlighted individual key amenities

Source: own compilation



**Fig. 4.** Coverage of individual key amenities within the surveyed area Source: own compilation

More significant differences between the percentage of overall coverage by key amenities and average percentage of coverage of key amenities result from uneven distribution or lower coverage of only some of the selected key amenities. In many housing estates, therefore, a significant improvement in the accessibility of key amenities would have been achieved by adding one of the key amenities.

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In some cases, it would only be to move the kindergarten to a more suitable position or to improve the current state of greenery so that it would meet the attributes of the park. Relatively low accessibility of parks can be perceived as a paradox due to the high percentage of greenery in housing estates. A low number of activities, poor maintenance of greenery and the frequent fragmentation of the green areas to the small fragments do not correspond to the size and functions of a park.

**Table 1.** Summary of the results of accessibility of the key amenities within the housing estates in Banská Bystrica

Housing estate	Area / ha - population	Percentage of overall coverage by key amenities	Average percentage of coverage of key amenities	Percentage of coverage of selected key amenities
1 Sídlisko SNP	45,9 - 4426	37,9%	81,7%	Public transport: 100%; Primary schools: 71,3%; Kindergartens: 69,6%; Post offices: 61,4%; Parks: 100%; Groceries: 99,9%; Local centers: 92,1%: Doctors: 59,4%
2 Bakossova	6,3 - 1047	0%	55%	Public transport: 100%; Primary schools: 100%; Kindergartens: 13,9%; Post offices: 13,6%; Parks: 58,5%; Groceries: 100%; Local centers: 4%; Doctors: 49,6%
3 Fortnička	5,2 - 928	24%	75,1%	Public transport: 100%; Primary schools: 24,2%; Kindergartens: 60,1%; Post offices: 16,6%; Parks: 100%; Groceries: 100% Local centers: 100%; Doctors: 100%
4 Uhlisko	28,6 - 2670	0%	46%	Public transport: 100%; Primary schools: 90,5%; Kindergartens: 70%; Post offices: 0%; Parks: 11,8% (pond and surroundings can be revitalized, recreational potential of Urpin hill); Groecieries: 100%; Local centers: 4%; Doctors: 49,6%
5 Rudlovský potok	21,6 - 1993	22,6%	67,5%	Public transport: 100%, Primary schools: 39,8%; Kindergartens: 58%; Post offices: 75,8%; Parks: 36,1% (greenery along the Rudlovský stream can be revitalized); Groceries: 97,6%; Local centers: 32,1%; Doctors: 94,8%
6 Stará Fončorda	52,2 - 2272	2,4%	66,5%	Public transport: 100%; Primary schools: 83,3%; Kindergartens: 38,3%; Post offices: 5,6%; Parks: 24,1%; Groceries: 100%; Local centers: 100%; Doctors: 81%
7 Fončorda Mládežnícka	36,4 - 3539	45,8%	90,85%	Public transport: 100%; Primary schools: 100%; Kindergartens: 65,3%; Post offices: 74%; Parks: 90,8%; Groceries: 100% Local centers: 100%; Doctors: 96,7%
8 Fončorda Internátna	47,8 - 4038	30,5%	77,7%	Public transport: 100%; Primary schools: 88,3%; Kindergartens: 36,9%; Post offices: 41,2%; Parks: 88,3%; Groceries: 95,3%; Local centers: 84,2%; Doctors: 87,3%
9 Trieda Hradca Králové	35,8 - 3412	0%	68,8%	Public transport: 100%; Primary schools: 75,4%; Kindergartens: 42,4%; Post offices: 0%; Parks: 100%; Groceries: 100%; Local centers: 63,5%; Doctors: 68,9%
10 Fončorda Tulská	30,7 - 5559	45,3%	86,8%	Public transport: 100%; Primary schools: 95,9%; Kindergartens: 45,3%; Post offices: 83,2%; Parks: 100%; Groceries: 93,5%; Local centers: 85,3%; Doctors: 91,2%
11 Radvaň	46,1 - 5770	3,4%	77,76%	Public transport: 100%Primary schools: 74,6%; Kindergartens: 54,5%; Post offices: 89,9%; Parks: 6,1% (greenery around the manor Radvanských can be revitalized); Groceries: 100%; Local centers: 98,6%; Doctors: 98,4%
12 Kráľová	11,9 - 2040	0%	35,8%	Public transport: 100%; Primary schools: 0%; Kindergartens: 0%; Post offices: 0%; Parks: 0%; Groceries: 86,6%; Local centers: 0%; Doctors: 100%
13 Mateja Bela	3,4 - 529	0%	37,7%	Public transport: 100%; Primary schools: 100%; Kindergartens: 1,9%; Post offices: 0%; Parks: 0%; Groceries: 100%; Local centers: 0%; Doctors: 0%
14 Rudlová- Sásová I	14,9 - 2276	0%	46,15%	Public transport: 100%; Primary schools: 100%; Kindergartens: 25,5%; Post offices: 0%; Parks: 0%; Groceries: 98,7%; Local centers: 45%; Doctors: 0%
15 Rudlová II	43,3 - 10505	58,8%	87,3%	Public transport: 100%, Primary schools: 76,99%; Kindergartens: 86%; Post offices: 73,4%; Parks: 94,3%; Groceries: 100%; Local centers: 94,5%; Doctors: 73,6%
16 Sásová II	44,5 - 6721	59,9%	88,6%	Public transport: 100%; Primary schools: 92%; Kindergartens: 70%; Post offices: 89,8%; Parks: 83,1%; Groceries: 100%; Local centers: 83,2%; Doctors: 90,4%
17 Severná	13,6 - 1164	0%	39,1%	Public transport: 100%; Primary schools: 20,3%; Kindergartens: 0%; Post offices: 0%; Parks: 100%; Groceries: 92,4%; Local centers: 0%; Doctors: 0%
18 Podlavice	10,1 - 1705	25,1%	90,6%	Public transport: 100%; Primary schools: 100%; Kindergartens: 25,1%; Post offices: 100%; Parks: 100%; Groceries: 100%; Local centers: 100%; Doctors: 100%
AVERAGE	-	19,76%	67,72%	Public transport: 100%; Primary schools: 74%; Kindergartens: 42,4%; Post offices: 40,3%; Parks: 60,7%; Groceries: 98%; Local centers: 60,4%; Doctors: 68,9%

Source: own compilation

#### 5. Conclusion

The research focused on examining the accessibility of the key amenities on the selected housing estates within the city of Banská Bystrica has led to several findings. On one hand, it pointed out the great differences between the housing estates in terms of accessibility of the key amenities and the need for an individual approach to the housing estates in the process of their completion. On the other hand, the research indicated some relations between the accessibility of the key amenities and the character of the housing estate. Housing estates with a higher population within the surveyed sample showed better accessibility of the key amenities. Although this fact would still be appropriate to verify on a larger sample of the housing estates, this finding seems logical with regard to their construction. The larger number of inhabitants, due to the technical and economic indicators, forced more investments in amenities, while in the housing estates with a lower population some amenities were completely missing or covered by the amenities built in the surroundings (within another housing estate or other urban structure). Some of the housing estates even lacked a local center that should be the basis of every residential complex. Thus it can be said that in terms of availability of the key amenities the housing estates failed to fulfill the vision of functional-operational independent urban structures. The needs of the residents of the housing estates are often supplemented by an inner city or by housing estates with the better accessibility of key amenities. This is ensured by relatively good coverage by public transport. With the current tendency of intensification of the structure of housing estates and its organic connection with the other urban structures, it is necessary to take into account the individual ability of the housing estates to ensure the accessibility of the key amenities for new residents, workers or visitors. In housing estates with low coverage of the key amenities, the completion of the lacking key amenities should be a condition of further development.

The objectivity of the research would be increased by its verification on a larger sample of housing estates in different cities and regions. It could be also beneficial to add other key amenities to the research (playgrounds, sports facilities, cultural facilities, community centers, churches *etc.*) which were not included in this research.

## **Bibliography**

Bartková R., Vyšinka J., 1980, Zonální struktury, SNTL, Brno.

Gehl J., 2012, Města pro lidi, Partnerství, Brno.

Kavan J., 1983, Zonálne štruktúry, SVŠT, Bratislava.

Komar B., 2014, Współczesna jakość spółdzielczej przestrzeni osiedlowej w świetle zasad rozwoju zrównoważonego na wybranych przykładach, Wydawnictwo Politechniki Śląskiej, Gliwice.

62 Karol Görner

Komrska J., 2009, *Hľadanie optimálneho podielu zelene v urbanistickej štruktúre*, [in:] Rakšányi P., Coplák J. (eds.), *Plánovanie ekologických sídlisk*, ROAD, Bratislava: 72–87.

Melcerová O., 2013, Potenciály polyfunkčného rozvoja sídlisk ilustrované na príklade sídliska Dúbravka v Bratislave a Prosek v Prahe, "Alfa", 4: 42–53.

Moravčíková H. et al., 2011, Bratislava: atlas sídlisk, Slovart, Bratislava.

Rothbauer Z., 2014, Zdeňek Rothbauer on Work between Indicators, [in:] Hejl M. et al., 2x 100 mil. m², KOLMO.eu, Praha: 244–259.

Stangel M., 2013, Kształtowanie współczesnych obszarów miejskich w kontekście zrównoważonego rozwoju, Wydawnictwo Politechniki Śląskiej, Gliwice.

Urban Task Force, 2005, Towards an Urban Renaissance, Taylor & Francis, London.

Vitková Ľ., 2008, Úvod do problematiky urbanistických ukazovateľov význam a charakteristika ukazovateľov, [in:] Vitková Ľ. (ed.), Kvantitatívne parametre urbanistických štruktúr, Road, Bratislava: 5–7.

Vitková Ľ., Görner K., 2016, *The Strength and Degradation of Mass Housing Concepts in Slovakia*, 3<sup>rd</sup> International Multidisciplinary Scientific Conference on Social Sciences and Arts SGEM 2016, Conference Proceedings Book 4, STEF92 Technology Ltd., Sofia: 463–470.

## SŁOWACKIE MIESZKALNICTWO BLOKOWE A DOSTĘPNOŚĆ DO PODSTAWOWYCH WYGÓD, PRZYKŁAD BAŃSKIEJ BYSTRZYCY

Zarys treści: Osiedla, które powstały po II wojnie światowej stały się istotną częścią miejskiej struktury wielu miast bloku wschodniego. W słowackich miastach nadal stanowia one znaczna cześć kompleksów mieszkalnych. Osiedla te zazwyczaj ignorowały pierwotna strukture miejska i izolowały sie od niej, deklarujac niezależność od reszty miasta. Paradoksalnie, dażac do ścisłej segregacji funkcjonalnej, osiedla stały się zależne od tradycyjnej struktury miejskiej. Pierwotne plany osiedli mieszkaniowych najcześciej zakładały lokalne centra o stosunkowo szerokiej dostępności usług; jednakże w praktyce planowane inwestycje o charakterze usługowym były realizowane w mniejszym wymiarze lub niedokończone, ponieważ w pierwszej kolejności rozwiązywano problemy mieszkaniowe. Aby tereny mieszkaniowe były przyjazne dla mieszkańców, ich struktura funkcjonalna powinna być zróżnicowana, zapewniając dostęp do usług. Zatem można postawić następujące pytania: W jakim stopniu osiedla zapewniają dostęp do podstawowych usług niezbędnych do codziennego życia ich mieszkańców? Czy w tym względzie osiedla są naprawdę samowystarczalne? Odpowiedź na te pytania jest ważna nie tylko pod względem oceny ich jakości, ale także w celu ustalenia strategii dalszego rozwoju osiedli mieszkaniowych (na przykład intensyfikacji).

Celem artykułu było zbadanie aktualnej struktury słowackich osiedli pod kątem dostępności do usług oraz ocena perspektyw przyszłego rozwoju osiedli. Badania przeprowadzono w 18 wybranych osiedlach o różnej wielkości, charakterze i lokalizacji w mieście Bańska Bystrzyca (miasto powiatowe w środkowej Słowacji). Dostępność do podstawowych usług i optymalne odległości piesze (promień dostępności) zostały określone na podstawie porównania istniejących badań i zaleceń. Ocenie poddano ogólną dostępność według podstawowych usług (odsetek terenu pojedynczego osiedla z dostępności według podstawowych usług (odsetek terenu pojedynczego osiedla z dostępności według podstawowych usług (odsetek terenu pojedynczego osiedla z dostępności według podstawowych usług (odsetek terenu pojedynczego osiedla z dostępności według podstawowych usług (odsetek terenu pojedynczego osiedla z dostępności według podstawowych usług (odsetek terenu pojedynczego osiedla z dostępności według podstawowych usług (odsetek terenu pojedynczego osiedla z dostępności według podstawowych usług (odsetek terenu pojedynczego osiedla z dostępności według podstawowych usług (odsetek terenu pojedynczego osiedla z dostępności według podstawowych usług (odsetek terenu pojedynczego osiedla z dostępności według podstawowych usług (odsetek terenu pojedynczego osiedla z dostępności według podstawowych usług (odsetek terenu pojedynczego osiedla z dostępności według podstawowych usług (odsetek terenu pojedynczego osiedla z dostępności według podstawowych usług (odsetek terenu pojedynczego osiedla z dostępności według podstawowych usług (odsetek terenu pojedynczego osiedla z dostępności według podstawowych usług (odsetek terenu pojedynczego osiedla z dostępności według podstawowych usług (odsetek terenu pojedynczego osiedla z dostępności według podstawowych usług (odsetek terenu pojedynczego osiedla z dostępności według podstawowych usług (odsetek terenu pojedynczego osiedla z dostępności według podstawowych usług (odsetek terenu pojedynczego osiedla z dostępności wedłu

pem do wszystkich podstawowych usług w odległości spaceru), średni odsetek pokrycia podstawowymi usługami i procent pokrycia wybranymi usługami. Wyniki badań wskazują na dużą różnorodność osiedli pod względem dostępności usług i ich związku z innymi cechami osiedli mieszkaniowych.

**Słowa kluczowe:** Osiedle mieszkaniowe, dostępność, udogodnienia, odległość, intensyfikacja, Słowacja, Bańska Bystrzyca.

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## A C T A U N I V E R S I T A T I S L O D Z I E N S I S FOLIA GEOGRAPHICA SOCIO-OECONOMICA 30, 2017: 65–84

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## ŻYCIE Z PSAMI W MIEŚCIE

**Zarys treści:** Celem artykułu jest wskazanie na wybrane przestrzenne konsekwencje posiadania psów w mieście. Diagnoza obejmuje zarówno elementy przestrzeni realnej, jak i dotyczy społecznej percepcji zjawiska posiadania i życia psów w mieście. Przestrzeń została powiązana z przestrzenią publiczną, rekreacją i wypoczynkiem. Studium przypadku stanowi Łódź. Badania prowadzono od roku 2013 do 2017.

**Słowa kluczowe:** Przestrzeń miasta, psy, posiadacze psów, użytkowanie przestrzeni publicznych, samorząd.

#### 1. Wprowadzenie

Miasto, ze swej definicji, to przestrzeń zawłaszczona przez kulturę, środowisko sztuczne, antropogeniczne, miejsce zamieszkania ludzi. Człowiek jednak od wielu tysięcy lat otacza się zwierzętami. Domestykacja nastąpiła już w epoce kamiennej (Lorenz 2013). W Europie ślady archeologiczne wskazują na ok. 17000 lat wstecz (Veriginelli *et al.* 2005). Pierwszym udomowionym zwierzęciem był pies. Jak pisze K. Lorenz (2013) w swojej słynnej książce *I tak człowiek trafił na psa*, sposoby jego udomawiania różniły się w różnych częściach ekumeny. Pies i kolejne oswojone stworzenia stały się dla ludzi narzędziami pracy, pożywieniem, a nawet częścią kultów religijnych. Hodowla była i jest domeną wsi. Jednak zwierzęta zamieszkały z ludźmi również w miastach.

Liczby są znamienne. W USA liczba gospodarstw domowych z psami przewyższa liczbę gospodarstw domowych z dziećmi. W 2016 roku było tam ponad 60 mln (liczbę psów szacuje się na 70 mln) gospodarstw posiadających psa. Wartość rynku produktów związanych z utrzymaniem domowych pupili szacowano w 2017 roku na ok. 70 mld USD. Oznacza to prawie 60 pp. wzrostu przez ostatnie 10 lat. Przeciętny właściciel psa oceniał swoje roczne wydatki na ok. 1600 USD. Największa ich część przeznaczana była na opiekę weterynaryjną i hotele dla zwierząt. Warto wspomnieć także o stale powiększającym się rynku ubezpieczeń dla zwierząt¹.

<sup>&</sup>lt;sup>1</sup> Pet Industry Market Size & Ownership Statistics, American Pet Products Association, http://www.americanpetproducts.org/press\_industrytrends.asp.

W Polsce sytuacja wygląda podobnie. Jak podaje GUS² w 2016 roku liczba dzieci (wiek 0–17 lat) w naszym kraju wynosiła 6,8 mln. W tym samym czasie liczbę psów szacowano na 7,1 mln³. Obserwuje się stały wzrost rynku karm dla psów – ok. 6% rok do roku w ciągu ostatnich lat. W 2017 roku wartość tego rynku oceniano na 1,3 mld PLN⁴. Dla psów kupuje się jednak nie tylko karmę. W ofercie są m.in. zabawki, artykuły pielęgnacyjne, kojce, budy, sprzęt do tresury, akcesoria samochodowe, specjalna odzież dla właścicieli. Pieniądze wydaje się także na usługi. Do niech zaliczyć można wspomnianą wyżej opiekę weterynaryjną, pielęgnację, tresurę, opiekę hotelową *etc*.

Oprócz znaczenia dla gospodarki posiadanie psów ma inne konsekwencje. Przede wszystkim można tu wskazać na ich rolę społeczną. Psy i inne zwierzęta domowe stały się "członkami rodziny" i "najlepszymi przyjaciółmi". Można zaryzykować tezę, że są, w niektórych przypadkach, substytutem partnerów lub dzieci – przynajmniej część właścicieli tak je traktuje (por. Konecki 2005). Wydaje się, że to one stanowią element prewencji w zachowaniu normalnych relacji społecznych czy wręcz pozostaniu przy życiu (por. Szacki 1964; Durkheim 2011). W społeczny wymiar posiadania psów wpisuje się na pewno także pojęcie rekreacji i czasu wolnego. Spacery, zabawy, wystawy, sport i treningi (np. *agility*<sup>5</sup>) to tylko niektóre sposoby spędzana czasu z pupilem.

Niezależnie od tego czy mówimy o aspektach ekonomicznych, czy o aspektach społecznych posiadania psów, życie z psami ma postać przestrzenną. To oraz znaczenie gospodarcze i społeczne, powinno być wystarczającą przesłanką dla geografów do zajęcia się problematyką psów. Miasto wydaje się być szczególnym przypadkiem. Wszelkie interakcje zarówno pozytywne, jak i negatywne zachodzą tutaj na małej przestrzeni, która ze swej definicji jest przestrzenią kultury, a nie natury, ludzi, a nie zwierząt. Może powodować to wiele konfliktów. Propozycje ich rozwiązania to także potencjalne zadanie dla geografów.

Celem artykułu jest wskazanie na wybrane przestrzenne konsekwencje posiadania psów w mieście. Diagnoza obejmuje zarówno elementy przestrzeni realnej, jak i dotyczy społecznej percepcji zjawiska posiadania i życia psów w mieście. To co przestrzenne zostało przede wszystkim powiązane z przestrzenią publiczną, rekreacją i wypoczynkiem. Studium przypadku stanowi Łódź. Badania prowadzo-

<sup>&</sup>lt;sup>2</sup> Stan i struktura ludności według wieku w latach 1989–2016, stan na 31.12.2016, GUS, http://stat.gov.pl/obszary-tematyczne/ludnosc/ludnosc/struktura-ludnosci,16,1.html.

<sup>&</sup>lt;sup>3</sup> *Number of dogs in the European Union in 2016*, Statista The Statistics Portal, https://www.statista.com/statistics/414956/dog-population-european-union-eu-by-country/.

<sup>&</sup>lt;sup>4</sup> *Dog food in Poland*, 2017, Euromonitor International, http://www.euromonitor.com/dog-food-in-poland/report.

<sup>&</sup>lt;sup>5</sup> Rodzaj sportu, polegający na przebyciu przez psa i jego opiekuna specjalnego toru przeszkód.

no od roku 2013<sup>6</sup> do 2017. Wykonano inwentaryzację wybranych terenów zieleni w Łodzi i wywiady eksperckie z przedstawicielami Straży Miejskiej w Łodzi oraz Oddziału ds. ekonomicznych i kontrolnych Wydziału Gospodarki Komunalnej w Łodzi. Dodatkowo przeanalizowano dane pozyskane z instytucji, takich jak: Straż Miejska w Łodzi, Powiatowy Inspektorat Weterynarii (PIW) w Łodzi oraz Bank Danych Lokalnych Głównego Urzędu Statystycznego. Skoncentrowano się na sytuacji bieżącej, co w praktyce oznacza okres ostatnich pięciu lat.

# 2. Diagnoza – liczba psów i konsekwencje interakcji z mieszkańcami miasta – perspektywa władz samorządowych

Liczbę psów w Łodzi da się ustalić jedynie szacunkowo. Po pierwsze można odwołać się do zapisu prawa. Zgodnie z art. 56 pkt. 2 *Ustawy o ochronie zdrowia zwierząt oraz zwalczaniu chorób zakaźnych zwierząt* "posiadacze psów są obowiązani zaszczepić psy przeciwko wściekliźnie w terminie 30 dni od dnia ukończenia przez psa 3 miesiąca życia, a następnie nie rzadziej niż co 12 miesięcy od dnia ostatniego szczepienia". Niestety, znaczna liczba właścicieli psów nie przestrzega tego przepisu. Zatem dane udostępnione przez PIW nie są w pełni miarodajne. Wynika z nich, że w latach 2006–2016<sup>7</sup> na terenie miasta szczepionych było ok. 15 tys. psów (ryc. 1).

Szacunki ekspertów Urzędu Miasta w Łodzi są zgoła inne. Podają oni, że liczba psów w mieście waha się między 70 a 80 tys. Ostatnie rzetelne badania pochodzą jednak z 2003 roku. Brak wiedzy o liczbie zwierząt jest oczywiście konsekwencję braku obowiązku rejestracji.

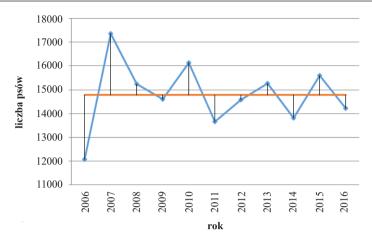
Warto zwrócić uwagę, że od 2008 roku nie płaci się podatku od posiadania psów. Obowiązujące od tego roku przepisy zmieniły podatek w opłatę i pozostawiły ją w gestii samorządów – opłata, inaczej niż podatek, nie jest obligatoryjna (Szkwarek 2016). W Łodzi kolejne próby przywrócenia<sup>8</sup> opłaty są odrzucane przez Radę Miasta. Zakładając jednak, że wysokość opłaty wynosiłaby 50 zł – takie były ostatnie propozycje Prezydent Łodzi, a jego ściągalność sięgnęłaby 80%, to przychód miasta mógłby wynieść nawet 3 mln zł.

Choć brakuje przychodów z tytułu posiadania psów, samorządowcy podejmują różnorodne działania mające na celu ułatwienie funkcjonowania zwierząt

<sup>&</sup>lt;sup>6</sup> W 2013 roku badania ankietowe prowadzone były przez studentów Wydziału Nauk Geograficznych Uniwersytetu Łódzkiego. Badania uzupełniono w 2015 roku w ramach projektu indywidualnego w Katedrze Geodezji, Kartografii Środowiska i Geometrii Wykreślnej Politechniki Łódzkiej.

<sup>&</sup>lt;sup>7</sup> Dane statystyczne Powiatowego Inspektoratu Weterynaryjnego w Łodzi dotyczące liczby zaszczepionych psów przeciwko wściekliźnie.

<sup>&</sup>lt;sup>8</sup> Jest to możliwe na podstawie *Ustawy z dnia 12 stycznia 1991 roku o podatkach i opłatach lokalnych* (Dz.U., 2006, 121.844).



Ryc. 1. Liczba zaszczepionych psów przeciwko wściekliźnie w latach 2006–2016 na terenie miasta Łodzi

Źródło: opracowanie własne na podstawie danych udostępnionych przez Państwowy Inspektorat Weterynaryjny w Łodzi

w mieście i ograniczenie konfliktów z tym związanych. Działania te dotyczą nie tylko psów, a zwierząt w ogóle, w tym w części zwierząt bezdomnych. W znacznej części wynikają one z obowiązujących w Polsce przepisów prawnych – ustaw samorządowych i innych branżowych. Do najważniejszych branżowych zaliczyć można: Ustawę z dnia 13 września 1996 roku o utrzymaniu czystości i porządku w gminach<sup>9</sup> oraz Ustawę z dnia 21 sierpnia 1997 roku o ochronie zwierząt<sup>10</sup>, Ustawę z dnia 11 marca 2004 roku o ochronie zdrowia zwierząt oraz zwalczaniu chorób zakaźnych zwierząt<sup>11</sup> i Rozporządzenie Ministra Spraw Wewnętrznych i Administracji z dnia 26 sierpnia 1998 roku w sprawie zasad i warunków wyłapywania bezdomnych zwierząt<sup>12</sup>. Rozwiązania dotyczące zwierząt bezdomnych w Łodzi opisane zostały w uchwałach Rady Miasta. Corocznie przyjmuje się np. "Program opieki nad zwierzętami bezdomnymi oraz zapobieganiu bezdomności zwierząt w Łodzi". Ostatni obowiązuje od marca 2017 roku. Zakłada on<sup>13</sup> m.in.:

- 1. Zapewnienie bezdomnym zwierzętom miejsca w Schronisku dla Zwierząt z siedzibą w Łodzi (ul. Marmurowa 4);
- 2. Opiekę nad wolno żyjącymi kotami, w tym ich dokarmianie w sezonie zimowym;

<sup>&</sup>lt;sup>9</sup> Dz.U., 1996, nr 132, poz. 622.

<sup>&</sup>lt;sup>10</sup> Dz.U., 2003, nr 106, poz. 1002, z późn. zm.

<sup>&</sup>lt;sup>11</sup> Dz.U., 2008, nr 213, poz. 1342, z późn. zm.

<sup>&</sup>lt;sup>12</sup> Dz.U., 1998, nr 116, poz. 753, z późn. zm.

<sup>&</sup>lt;sup>13</sup> Uchwała nr XLIII/1154/17 Rady Miejskiej w Łodzi z dnia 15 marca 2017 roku w sprawie przyjęcia "Programu opieki nad zwierzętami bezdomnymi oraz zapobiegania bezdomności zwierząt w Łodzi na rok 2017".

- 3. Odławianie bezdomnych zwierzat;
- 4. Plan sterylizacji lub kastracji zwierząt, zapewniający właścicielom zwierząt lub innym osobom, pod których opieką zwierzęta pozostają finansowanie 50% kosztów zabiegów sterylizacji i kastracji psów i kotów utrzymywanych na terenie Miasta Łodzi;
- 5. Obligatoryjną sterylizację lub kastrację zwierząt w Schronisku dla Zwierząt z siedzibą w Łodzi;
- 6. Poszukiwanie właścicieli dla bezdomnych zwierząt;
- 7. Usypianie ślepych miotów;
- 8. Wskazanie gospodarstwa rolnego w celu zapewnienia miejsca dla zwierząt gospodarskich;
- 9. Zapewnienie całodobowej opieki weterynaryjnej w przypadkach zdarzeń drogowych z udziałem zwierząt;
- 10. Plan znakowania zwierząt, obejmujący znakowanie psów utrzymywanych na terenie miasta Łodzi oraz kotów posiadających właściciela;
- 11. Wskazanie wysokości środków finansowych przeznaczonych na jego realizację oraz sposób wydatkowania tych środków;
- 12. Prowadzenie przez Straż Miejską w Łodzi i inne podmioty lub organizacje działań edukacyjnych i informacyjnych mających na celu promowanie właściwych postaw i zachowań w stosunku do zwierząt.

Podstawowym aktem prawnym regulującym utrzymanie zwierząt domowych na terenie miasta Łodzi jest Uchwała Nr XXXI/808/16 Rady Miejskiej w Łodzi z dnia 15 czerwca 2016 roku w sprawie wprowadzenia Regulaminu utrzymania czystości i porządku na terenie miasta Łodzi<sup>14</sup>. Regulamin określa obowiązki osób utrzymujących zwierzęta domowe oraz wymagania w zakresie utrzymywania zwierząt gospodarskich. Właściciele psów mają obowiązek:

- 1. Utrzymywać stałą i skuteczną kontrolę nad zwierzętami, wyjątek stanowi sytuacja kiedy zwierzęta pozostają na terenie ogrodzonym;
- 2. Utrzymywać psy na uwięzi podczas spacerów w miejscach publicznych;
- 3. Utrzymywać psy agresywne wszystkich ras wymienionych w *Rozporządzeniu Ministra Spraw Wewnętrznych i Administracji z dnia 28 kwietnia 2003 roku w sprawie wykazu psów uznawanych za agresywne* (Dz.U., nr 77, poz. 687) oraz mieszańców tych ras na uwięzi w założonych kagańcach;
- 4. Podczas spacerów, gdy nie stwarza to zagrożenia dla innych osób, dopuszcza się spuszczenie z uwięzi psa w założonym kagańcu pod stałą kontrolą właściciela i niezwłoczne założenie uwięzi psu na wezwania funkcjonariusza Straży Miejskiej;

<sup>&</sup>lt;sup>14</sup> Uchwała Nr XXXI/808/16 Rady Miejskiej w Łodzi z dnia 15 czerwca 2016 roku w sprawie wprowadzenia Regulaminu utrzymania czystości i porządku na terenie miasta Łodzi (Rozdział 5 § 19.2).

- 5. Niezwłoczne usuwanie odchodów zwierząt z terenów publicznych oraz z nieruchomości użytku publicznego i gromadzenie tych zanieczyszczeń w specjalnie oznakowanych koszach lub zwykłych koszach ulicznych wyłożonych workami z tworzyw sztucznych;
- 6. Posiadania worków, torebek lub urządzeń do zbierania odchodów.

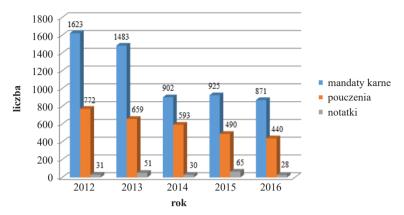
Jednostką odpowiedzialną za realizację ww. uchwał na terenie miasta jest Wydział Gospodarki Komunalnej w Łodzi. Jest to komórka organizacyjna Departamentu Spraw Społecznych. Jak wynika z rozmów z ekspertami, największym problemem w mieście jest utrzymanie czystości. Szacuje się, że łódzkie psy zostawiają dziennie ok. 20 ton odchodów. Niestety, prowadzony od 2003 roku program "Posprzątaj! To nie jest kupa roboty", nie przynosi oczekiwanych skutków. Trzeba dodać, że choć program kojarzony jest przez łodzian głównie z akcją promocyjną, to podjęte zostały także działania "twarde". Powstały "psie toalety" – wydzielone miejsca dla psów. W mieście rozstawiono specjalnie oznakowane pomarańczowe kosze do gromadzenia psich odchodów. Dla mieszkańców miasta są dostępne bezpłatne torebki do zbierania nieczystości po psach. Niestety, niedługo po wprowadzeniu tych udogodnień, "psie stacje" i "psie toalety" zostały w większości zniszczone. Obecnie pozostały tylko specjalne pomarańczowe kosze.

Z myślą o psach został stworzony także program "Wzorcowy Właściciel Psa", którego celem było uświadamianie społeczeństwa o tym, jakie obowiązki niesie ze sobą posiadanie czworonoga. Kolejną inicjatywą miasta było utworzenie w 2005 roku pierwszego w Polsce "psiego parku" przy ul. Liściastej. Niestety, zaraz po otwarciu, już drugiego dnia okazało się, że park został zdewastowany przez chuliganów i obecnie na terenie miasta nie ma specjalnych terenów przeznaczonych dla właścicieli psów. Jak podkreśliła jedna z ekspertek, dewastacja parku przy ul. Liściastej może wskazywać na brak gotowości mieszkańców miasta na rozwój podobnej infrastruktury.

To co jest najbardziej widoczne w przestrzeni miasta, to z pewnością działania Straży Miejskiej egzekwującej obowiązujące przepisy. Dane pozyskane ze Straży Miejskiej w Łodzi dotyczące liczby wystawionych mandatów, pouczeń i notatek w latach 2012–2016 wskazują na systematyczną poprawę. W 2012 roku Straż Miejska interweniowała w sprawach związanych z posiadaniem psów ponad 2,5 tys. razy. W 2016 roku liczba interwencji spadła do 1330 (ryc. 2). Jak komentuje ekspert ze Straży Miejskiej jest to prawdopodobnie efekt wzrostu świadomości właścicieli. Dodać można do tego presję wywołaną na "psiarzy" przez innych łodzian.

W strukturze wykroczeń dominują te związane z utrzymaniem czystości. Nie jest to jednak niesprzątanie po psie, lecz brak torebki na odchody. Brak nadzoru nad zwierzęciem stanowił najmniejszy problem (tab. 1). Najwięcej interwencji podjęto na Bałutach<sup>15</sup>, najmniej na Polesiu. Gdy jednak odnieść działania Straży

<sup>&</sup>lt;sup>15</sup> Tradycyjnie Łódź podzielona była na pięć jednostek: Bałuty, Polesie, Górną, Śródmieście i Widzew.



**Ryc. 2.** Liczba mandatów, pouczeń i notatek wystawionych przez Straż Miejską w Łodzi w latach 2012–2016

Źródło: opracowanie własne na podstawie danych statystycznych ze Straży Miejskiej w Łodzi

Tabela 1. Wykroczenia i podjęte przez Straż Miejską w Łodzi działania w 2016 r.

W/1/	Oddziały dzielnicowe					Oddziały					
Wykroczenia/ działania	Bałuty	Górna	Śród- mieście	Polesie	Widzew	Pre- wencja	Ogólno- miejski	Razem			
Brak właściwego nadzoru nad psem											
Mandaty karne	28	42	7	13	9	31	72	202			
Pouczenia	25	18	11	13	17	0	0	204			
Notatki	1	1	0	0	0	2	1	5			
Niesprzątanie psich odchodów, Akcja "Posprzątaj! To nie jest kupa roboty"											
Mandaty karne	48	79	84	18	27	2	7	265			
Pouczenia	26	25	5	7	8	2	3	76			
Notatki	2	3	2	2	1	0	0	10			
	Brak tore	ebki lub ı	ırządzeń o	do zbiera	nia psich	odchodó	w				
Mandaty karne	181	132	47	18	25	0	1	404			
Pouczenia	98	37	5	4	11	3	2	160			
Notatki	12	1	0	0	0	0	0	13			
Łącznie											
Mandaty karne	257	253	138	49	61	33	80	871			
Pouczenia	149	80	21	24	36	5	5	440			
Notatki	15	5	2	2	1	2	1	28			
,											

Źródło: opracowanie własne na podstawie danych statystycznych Straży Miejskiej w Łodzi

do liczby mieszkańców okazuje się, że największe ich natężenie było w Śródmieściu, dalej na Bałutach i Górnej – najmniej na Polesiu. Wydaje się, że na podstawie tych wartości wnioskować można raczej o aktywności strażników, nie zaś o liczbie psów bądź niefrasobliwości mieszkańców. Ekspert Straży Miejskiej zwrócił uwagę na wzrost zaniedbań związanych z poczuciem bezkarności – czyli oddaleniem od monitoringu.

#### 3. Diagnoza – aspekt przestrzenny

Jak zaznaczono wyżej posiadanie psów w mieście wiąże się ze specyficznym wykorzystaniem przestrzeni publicznych. Gdy połączyć to z rekreacją pojawia się pojęcie przestrzeni rekreacyjnej. M. Drzewiecki pisze: "Przestrzeń rekreacyjna to ta część przestrzeni geograficznej, która ma cechy korzystne dla realizacji różnych form zachowań w czasie wolnym, jak również charakteryzującym się istnieniem procesów rekreacyjnych o rozmiarach istotnych społecznie i przestrzennie" (za: Sławek et al. 2011: 276). Jednym z typów przestrzeni rekreacyjnej są miejskie przestrzenie rekreacyjne (por. Toczek-Werner 2007). W tej kategorii mieszczą się parki zabawy i rozrywki, dokładnie: parki zabawy i rozrywki, parki z kąpieliskami, parki ogrodowe i zooparki, parki gier i sportów (Duricek, Obodyński 2006). Przez właścicieli psów wykorzystywane są, lub mogą być, parki ogrodowe i parki gier i sportów. Dodatkowo psy pojawiają się na skwerach, zieleńcach osiedlowych i po prostu chodnikach.

W Łodzi w skład systemu zieleni miejskiej wchodzą wszystkie z wymienionych typów zieleni. Według danych statystycznych GUS, w roku 2015<sup>16</sup> ogólna powierzchnia terenów zieleni wraz gruntami leśnymi wynosiła 9133,3 ha, co stanowiło ok. 31% powierzchni geodezyjnej miasta. Parki i zieleńce stanowiły ok. 2,4% tej powierzchni. Na terenie miasta Łodzi znajduje się 13 zabytkowych parków, które zostały objęte ochroną konserwatorską. Parki te są wpisane do rejestru zabytków nieruchomych województwa łódzkiego<sup>17</sup>. Badaniom inwentaryzacyjnym poddane zostało sześć jednostek. Dobór miał charakter celowy. Przesłanki stanowiły lokalizacja i funkcje parku lub skweru (tab. 2).

Inwentaryzacja wybranych parków została przeprowadzona w czerwcu 2017 r. Na jej podstawie można stwierdzić, że infrastruktura w postaci ławek, latarni i koszy na śmieci oraz czystość terenów rekreacyjnych pozostaje na dobrym poziomie. Wszystkie parki mają regulaminy, lecz w żadnym z nich nie ma przepisów dotyczących właścicieli psów. Nie ma także jasno wyznaczonych obszarów dla psów. Zakazy wejścia dla czworonogów pojawiają się dopiero przed ogrodzonymi placami zabaw i siłowniami miejskimi, które znajdują się w granicach parków.

<sup>&</sup>lt;sup>16</sup> *Statystyka Łodzi 2016*, Urząd Statystyczny w Łodzi, http://lodz.stat.gov.pl/publikacje-i-foldery/roczniki-statystyczne/statystyka-lodzi-2016,4,12.html (dostęp: 09.06.2017).

<sup>&</sup>lt;sup>17</sup> Oficjalna strona Zarządu Zieleni Miejskiej w Łodzi, http://www.zzm.lodz.pl/o-zzm/parki (dostęp: 22.06.2017).

Inwentaryzowana jednostka Dzielnica Podstawy wyboru Typ parku osiedlowego, prognozowani Park Piastowski Bałuty użytkownicy: duża liczba właścicieli psów Lokalizacja przy największym centrum handlowym i kulturalno-rozrywkowym Park Staromiejski Bałuty w Łodzi Park im. H. Sienkiewicza Śródmieście Lokalizacja w centrum miasta Najwiekszy park w Łodzi, popularne Polesie i najbardziej uczeszczane miejsce przez Park im. J. Piłsudskiego właścicieli psów Wysokie walory krajobrazowe (staw) Park im. W. Reymonta Górna i estetyczne parku zachęcające właścicieli psów do odwiedzania tego miejsca Pasaż osiedlowy zlokalizowany

Tabela 2. Uzasadnienie wyboru parków i skwerów do przeprowadzenia inwentaryzacji

Źródło: opracowanie własne

Pasaż Abramowskiego

Zauważalny jest brak wyposażenia parków w specjalne kosze na odchody. Tylko w Parku Staromiejskim (3 szt.) i Parku Piastowskim (5 szt.) znajdują się takie pojemniki. Brakuje również dyspozytorów na worki na odchody oraz ujęć wody do picia i kąpieli dla psów. W żadnym z badanych miejsc nie było wyznaczonych dla zwierząt miejsc "do wybiegania". Infrastruktura do uprawiania sportów z psami jest tym bardziej nieosiągalna. Problemem są także pozostające poza kontrolą właścicieli, spuszone ze smyczy, psy. Stanowią one potencjalne zagrożenie dla innych użytkowników terenów. Często także dewastują zieleń.

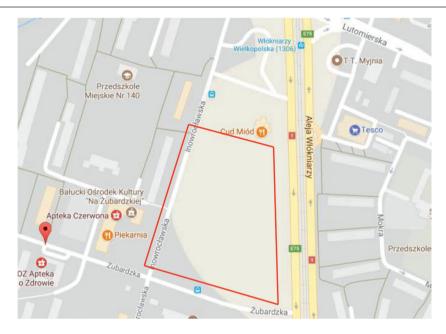
w gęstej tkance miejskiej

Widzew

Szanse na zmiany pojawiły się na osiedlu Teofilów-Wielkopolska. Rada Osiedla zgłosiła bowiem projekt Centrum Rekreacji dla Mieszkańców Osiedla Wielkopolska do XI edycji konkursu na zadania inwestycyjne zgłaszane przez jednostki pomocnicze Miasta Łodzi. Zgłoszenie zostało zweryfikowane pozytywnie i zatwierdzone do realizacji w 2017 roku. Przyznano na nie 674950 zł<sup>18</sup>.

Projekt Centrum Rekreacji składa się z trzech części: siłowni zewnętrznej dla młodzieży, dorosłych i osób starszych, placu zabaw dla dzieci do lat czternastu oraz psiego parku. Centrum będzie zlokalizowane na niezagospodarowanym terenie zielonym pomiędzy ulicami: Żubardzką, Inowrocławską i al. Włókniarzy (ryc. 3).

<sup>&</sup>lt;sup>18</sup> Zadania zatwierdzone do realizacji w 2017 roku w związku z zakończeniem XI edycji konkursu na zadania inwestycyjne zgłoszone przez jednostki pomocnicze Miasta Łodzi – osiedla, http://bip.uml.lodz.pl/plik.php?id=44786 (dostęp: 25.06.2017).

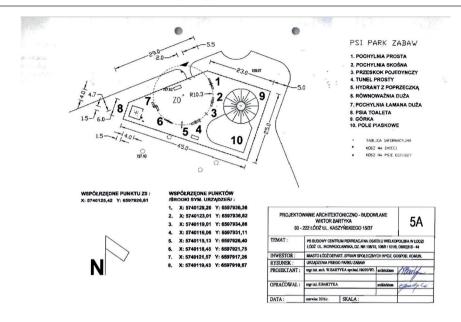


**Ryc. 3.** Lokalizacja Centrum Rekreacji dla Mieszkańców Osiedla Wielkopolska w Łodzi Źródło: opracowanie własne + podkład mapowy, https://www.google.pl/maps/place/Żubardzka, + Łódź/@51.7879742,19.4208502,17z/data=!4m5!3m4!1s0x471bcaa46cf8d6b 7:0x6720b36606e996c3!8m2!3d51.7869854!4d19.4163334 (dostęp: 25.06.2017)

Psi park będzie miał wyposażenie dostosowane do potrzeb psów i ich właścicieli. Teren będzie ogrodzony. Projekt urządzeń psiego parku<sup>19</sup> (ryc. 4) zawiera m.in. tor przeszkód, wybieg, różne rodzaje pochylni. Nawierzchnia będzie dostosowana do wyposażenia. Dodatkowo w projekcie znalazły się: psia toaleta, kosze z podajnikami worków na odchody, hydranty i górka stanowiąca dodatkową przeszkodę dla psów. Przewiduje się stworzenie regulaminu korzystania z psiego parku oraz ustawienie tablic informacyjnych zawierających instrukcję obsługi wszystkich urządzeń w parku. Dopełnienie projektu będą stanowiły elementy małej architektury, takie jak: ławki, latarnie i kosze<sup>20</sup>. Korzystanie z kompleksu będzie bezpłatne. Celem głównym projektu jest integracja mieszkańców. Centrum rekreacji zostało zaprojektowane w taki sposób, by każda grupa wiekowa mogła z niego korzystać, a funkcje terenu będą od siebie oddzielone w celu zapewnienia komfortu i bezpieczeństwa różnym użytkownikom Centrum. Koniec budowy zaplanowano na rok 2018 (Rada Osiedla... b.d.).

<sup>&</sup>lt;sup>19</sup> Rysunek urządzeń psiego parku w Projekcie budowlanym Centrum Rekreacji na Osiedlu Wielkopolska (dostęp: 02.02.2017).

<sup>&</sup>lt;sup>20</sup> Projekt budowlany Centrum Rekreacji na Osiedlu Wielkopolska w Łodzi (dostęp: 02.02.2017).



Ryc. 4. Rysunek urządzeń psiego parku zabaw

Źródło: Projekt budowlany Centrum Rekreacji na Osiedlu Wielkopolska w Łodzi (dostęp: 02.02.2017)

#### 4. Diagnoza – aspekt społeczny, właściciele psów

Diagnozy dokonano na podstawie analizy ankiet pt. "Przestrzenie posiadaczy psów". Ankieta została przeprowadzona w dwóch terminach – w 2013 i 2015 r. Wzięło w niej udział 177 osób. Ze względu na brak możliwości precyzyjnego określenia populacji (operatu), próba miała charakter dostępnościowy. W badaniu wzięło udział 60% mężczyzn, 36% kobiet, a 4% ankietowanych (7 osób) nie określiło swojej płci. Średnia wieku wszystkich respondentów to 35 lat. Najliczniejszą grupę osób stanowiły kobiety do lat 24 (ok. 21% wszystkich respondentów). Najmniej liczną grupę respondentów stanowili mężczyźni w kategorii wiekowej powyżej 65 lat – ok. 2% ogółu respondentów. Dominowały osoby z wykształceniem średnim (58) i wyższym magisterskim (32). Ponad połowę stanowiły osoby czynne zawodowo. Uczniowie i studenci stanowili ok. 27% respondentów, emeryci i renciści ok. 13,5%. Postali nie pracowali.

Respondenci zapytani zostali o swój stosunek do zwierząt w ogóle. Najbardziej kontrowersyjne wśród stwierdzeń opisujących relacje z nimi okazało się to dotyczące posiadania przez zwierzęta duszy. Niewiele, bo połowa respondentów zgodziła lub zdecydowanie zgodziła się z tym. Odpowiedzi na inne pytania były dla psiarzy bardziej oczywiste – prawie każdy potwierdzał, że pies to najlepszy przyjaciel człowieka, że zwierzęta odczuwają ból tak jak ludzie, czy że pies to

członek rodziny (tab. 3). Łódzkie wyniki są zasadniczo podobne co do kierunku do badań ogólnopolskich. W badaniu CBOS-u w 2003 roku odsetek twierdzących, że zwierzęta odczuwają ból wynosił 79% (*Postawy...* 2003). Różnica procentowa może wynikać z faktu, że w Łodzi pytani byli posiadacze psów.

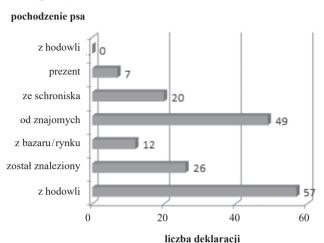
Tabela 3. Ogólny stosunek respondentów do zwierząt (tylko ważne odpowiedzi w %)

	Odpowiedzi respondentów					
Opis relacji ze zwierzętami	zdecydo- -wanie zgadzam się	zgadzam się	ani zga- dzam się ani nie zgadzam się	nie zgadzam się	zdecydo- -wanie się nie zgadzam	trudno powiedzieć
Pies to najlep- szy przyjaciel człowieka	46,3	46,9	4,5	0,0	0,6	1,7
Zwierzęta od- czuwają ból tak jak człowiek	50,8	39,0	2,3	0,6	0,6	6,8
Zwierzęta mają duszę	28,2	27,7	10,7	7,9	4,5	20,9
Dzieci wycho- wujące się ze zwierzętami le- piej się rozwijają	32,4	48,3	6,8	0,6	0,0	11,9
Mój pies jest członkiem mojej rodziny	43,4	48,0	6,3	0,6	0,0	1,7

Źródło: opracowanie własne

Ponieważ wiedza na temat posiadaczy psów i psów w Łodzi jest bardzo skromna, znaczna część ankiety poświęcona została na zebranie informacji faktograficznych, a nie opinii. Udało się dzięki temu ustalić przeciętną liczbę psów w gospodarstwie domowym. Wynosi ona 1,23. Oznacza to, że dominują gospodarstwa z jednym psem (80%). Zalewie 6 badanych miało trzy psy – nikt nie podał większej liczby. Łódzkie psy miały średnio prawie 6,5 roku. Dominowały mieszańce. Następne w kolejności popularności były owczarki niemieckie i jamniki. Średnia podana waga psa wynosiła 17,5 kg. Oznacza to, że dominują psy średniej wielkości. Należy jednak po pierwsze pamiętać o znacznym rozproszeniu wartości wagi – od 1 do 85 kg, po drugie, o jak się wydaje, słabej w tym zakresie wiedzy właścicieli.

Kolejne pytanie dotyczyło sposobu w jaki ankietowani stali się właścicielami psów. Najwięcej osób pozyskało psa z hodowli lub dostało od znajomych. Najmniej osób otrzymało psa w prezencie. Jedynie 20 osób adoptowało psy ze schroniska (ryc. 5).



**Ryc. 5.** Pochodzenie psów respondentów Źródło: opracowanie własne

Psy były kupowane przede wszystkim, by stać się towarzyszami człowieka ("dla towarzystwa"). W dalszej kolejności miały prowokować do spacerów i być towarzyszami zabaw dla dzieci. Okazało się, że stosunkowo mało osób kupowało psa z myślą o jego użytkowości – stróżowaniu bądź założeniu hodowli. Zapytani o obecną rolę psa w domu, respondenci najczęściej podawali "towarzystwo" (75%), na drugim miejscu wymieniając rekreację (12%), czyli spacery. Nawet Ci, którzy nabyli psa z myślą o wykorzystaniu go do uprawiania sportu lub ochrony domu mieli psa, w chwili badania, głównie do towarzystwa.

Stosunek respondentów do pupili wydaje się być bardzo zdroworozsądkowy. Ponad 80% badanych powiedziało, że pies jest dla nich "bardzo ważny, ale choć staram się o niego dbać, nie podporządkowuję mu całego życia" (tab. 4).

Trudno stwierdzić czy stosunek do psa przekłada się pozytywnie na czas mu poświęcony. Respondenci deklarowali bowiem, że przeciętnie poświęcają pupilom ok. 90 min w tygodniu i ponad 120 min w dni wolne od pracy. Czas ten wypełniony jest głównie spacerami. W tym przypadku przeciętna w tygodniu wynosi 20 min, w weekend 40 min, dominanta to jednak odpowiednio 10 min i 30 min (tab. 5). W 2013 roku oznaczało to, że tyle samo czasu poświęcono psu i internetowi (por. *Badanie...* 2013).

Tabela 4. Znaczenie psa w życiu respondentów

Pies jest dla mnie	Częstość	Procent	Procent ważnych
Najważniejszy i jemu podpo- rządkowuję całe swoje życie	13	7,3	7,5
Bardzo ważny, ale choć staram się o niego dbać, nie podpo- rządkowuję mu całego życia	146	82,5	83,9
Nieważny, ale dbam o niego	13	7,3	7,5
W ogóle nieważny	2	1,1	1,1
Ogółem	174	98,3	100,0
Brak odpowiedzi	3	1,7	_
Suma	177	100,0	_

Źródło: opracowanie własne

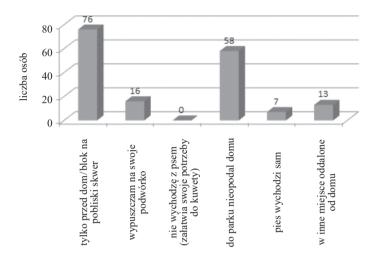
**Tabela 5.** Czas poświęcony psu (w minutach)

Wyszczególnienie	Średnia	Mediana	Dominanta
Ile czasu poświęca psu w ciągu dnia w tygodniu pracy	93,3	60,0	60,0
Przeciętnie ile czasu poświęca psu w ciągu dnia wolnego od pracy	126,9	120,0	120,0
Ile razy dziennie wychodzi z psem na spacer	2,7	3,0	3,0
Przeciętny spacer w tygodniu	22,0	15,0	10,0
Długi spacer w tygodniu	40,4	30,0	30,0
Przeciętny spacer w weekend	37,7	30,0	30,0
Długi spacer w weekend	56,7	45,0	60,0

Źródło: opracowanie własne

W ankiecie zaproponowano także blok pytań dotyczących użytkowania przestrzeni publicznych (ryc. 6). W pierwszym pytaniu poproszono o wskazanie miejsc codziennych spacerów. Okazało się, że najwięcej osób wychodzi ze swoimi pupilami tylko przed dom (blok) lub na najbliżej zlokalizowany skwer, rzadziej do

parku nieopodal miejsca zamieszkania. Jedynie 13 osób ze wszystkich odpowiadających wychodzi z psami w miejsca oddalone od domu. Świadczy to o dużej eksploatacji terenów zieleni osiedlowej. Respondenci wybierają tereny zlokalizowane najbliższej miejsca zamieszkania, by oszczędzić swój czas.



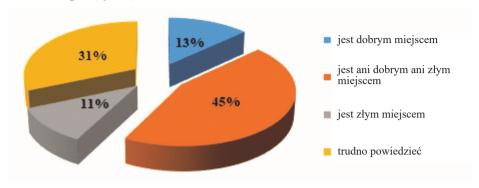
Ryc. 6. Najczęściej wybierane miejsca spacerów z psami Źródło: opracowanie własne

Następne dwa pytania odnosiły się do terenów, gdzie można swobodnie "wybiegać" psa w Łodzi oraz do szczególnych miejsc spotkań "psiarzy" na terenie miasta. Respondenci wybierając miejsce do "wybiegania" psa najczęściej polecali: Las Łagiewnicki (20 wskazań), Park Podolski (11 wskazań), Park im. J. Piłsudskiego (potocznie zwany Zdrowie – 8 wskazań), Park Helenów (7 wskazań), Park 3. Maja (5 wskazań) i Park im. J. Poniatowskiego (4 wskazania). Osiemnaście osób nie potrafiło podać takiego miejsca. Odpowiedzi respondentów wskazują na to, iż wybierają oni parki o stosunkowo dużej powierzchni, gdzie można swobodnie zwolnić psa ze smyczy. Warto podkreślić, że wymieniane miejsca rozproszone były na terenie całego miasta.

Jeśli chodzi o wskazanie szczególnych miejsc spotkań "psiarzy", aż 130 respondentów stwierdziło, że nie ma takich miejsc w Łodzi. Dalsze 5 osób zaznaczyło odpowiedź "trudno powiedzieć". Nieliczni wymieniali: Park Podolski i Park im. J. Piłsudskiego na Zdrowiu – po 4 wskazania. Respondenci wymieniali pojedynczo także obszar Bałut, Park Helenów, Park im. Mickiewicza, Park im. J. Matejki i obszar przy ul. Konstantynowskiej (wjazd od Retkini).

Czy zatem Łódź to dobre miejsce dla psów? Większość ankietowanych (45%) stwierdziło, że Łódź nie jest ani dobrym ani złym miejscem dla czworonogów. Prawie co trzeci respondent miał trudności z odpowiedzią na zadane pytanie.

Jedynie 13% osób uważało, że Łódź jest dobrym miejscem dla posiadaczy psów. Z drugiej strony miasto zostało ocenione negatywnie tylko przez co dziewiątego właściciela psa (ryc. 7).



Ryc. 7. Stosunek ankietowanych do Łodzi jako miejsca dla posiadaczy psów Źródło: opracowanie własne

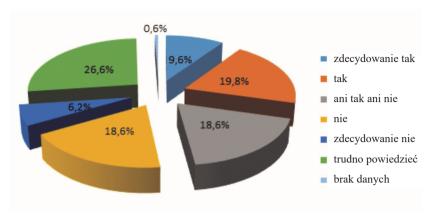
Konsekwentnie zapytano o zmiany jakie należałoby wprowadzić, by mieszkanie w Łodzi z psem było łatwiejsze. Okazało się, że największe znaczenie dla respondentów miało wyznaczenie na terenie miasta obszarów przeznaczonych dla psów (tab. 6).

**Tabela 6.** Działania jakie należałoby podjąć, by Łódź stała się miejscem przyjaznym dla posiadaczy psów

Co należałoby zmienić w Łodzi?	% odpowiedzi
Nic, to miasto przyjazne dla "psiarzy"	6,4
Wyznaczyć tereny przeznaczone dla psów (np. w parkach)	68,9
Udostępnić miejsca publiczne (np. sklepy, restauracje)	14,2
Inne	2,8
Trudno powiedzieć	19,8

Źródło: opracowanie własne

Bardzo szczególnym miejscem związanym z psami jest cmentarz dla zwierząt. W Łodzi od wielu lat funkcjonuje takie miejsce. Cmentarz zlokalizowany jest przy ul. Malowniczej. Około 30% ankietowanych uważa, że jest on (cmentarz dla zwierząt) potrzebny na terenie Łodzi. Z kolei ok. 25% respondentów nie jest przeciwnego zdania, a ok. 20% badanych ma ambiwalentny stosunek do tego stwierdzenia (ryc. 8).



Ryc. 8. Czy w Łodzi potrzeby jest cmentarz dla zwierząt? Źródło: opracowanie własne

#### 5. Podsumowanie

Celem artykułu było przedstawienie wybranych przestrzennych konsekwencji posiadania psów w mieście. Jak dowiedziono, zjawisko ma relatywnie dużą skalę – liczbę psów w Łodzi ocenia się nawet na 80 tys. Dla swoich właścicieli są ważnymi towarzyszami życia. Każdego dnia "odpowiadają" za organizację prawie dwóch godzin z czasu wolnego domowników. Dzięki nim blisko ¾ właścicieli poszerzyło krąg znajomych.

Działania władz samorządowych w zasadzie ograniczają się do realizacji zapisów prawnych i kończą na zapewnieniu porządku w mieście. Oznacza to działania na rzecz psów bezdomnych oraz zapobieganie bezdomności. Ostatnie z działań polega głównie na dofinansowaniu sterylizacji i chipowania.

Na pewno jednak najbardziej znaną akcją władz miasta jest "Posprzątaj! To nie jest kupa roboty". Łodzianie są w niej namawiani do sprzątania po swoich psach. Akcja wydaje się przynosić efekty, szczególnie że wspierana jest przez Straż Miejską. Dane z tej instytucji wskazują na spadek w ciągu ostatnich pięciu lat wszelkich wykroczeń związanych z posiadaniem psów (głównie czystość i bezpieczeństwo). Czy jednak oznacza to podniesienie poziomu czystości w mieście? Chyba raczej dostosowanie się do przepisów. Skoro mandat najczęściej wystawia się za brak sprzętu do posprzątania, a nie za faktyczne pozostawianie nieczystości, to sprzątanie się nie liczy, lecz posiadanie torebki na odchody. Konflikt między niesprzątającymi po psach właścicielami a innymi łodzianami trwa.

Niestety, do końca 2017 roku w Łodzi nie było żadnego specjalnie wyznaczonego dla psów parku czy też innej przestrzeni. Jedyna podjęta w ostatnich latach próba budowy takiego miejsca zakończyła się fiaskiem – a dokładnie dewastacją

obiektu. Z inicjatywy jednej z rad osiedla w ramach większego kompleksu rekreacyjnego powstać ma niewielki "psi park". Zakończenie budowy przewiduje się w 2018 roku. Osiągnięcia władz miasta w zakresie dostosowania przestrzeni publicznych do potrzeb psów i ich właścicieli polegają przede wszystkim na wystawieniu specjalnych koszy na odchody. Jak wykazała jednak inwentaryzacja terenowa ich liczba jest mała.

Brak aktywności samorządowców w tworzeniu miejsc przyjaznych psom przełożył się na oceny właścicieli czworonogów. Niewiele osób uważało, że Łódź to miasto dobre dla psów i "psiarzy". Podstawowy zgłaszany problem to wyznaczenie miejsc, gdzie swobodnie z psami można chodzić na spacery. Wziąwszy pod uwagę, że respondenci w większości czas z psami spędzali w niewielkiej odległości od domów, takich miejsc brakuje głównie na dużych osiedlach mieszkaniowych. Jak się wydaje nie chodzi o wielkie wybiegi, a raczej o wygrodzone części istniejących parków lub trawniki, na których utrzymanie porządku i czystości byłoby łatwe. Jednocześnie nie dochodziłoby do konfliktów między posiadaczami psów a innymi osobami.

Podobne rozwiązania istnieją już w innych miastach. Choćby w Warszawie znajdują się cztery takie miejsca. Większość została zrealizowana w ramach budżetów obywatelskich. Ich powstanie i istnienie zależy od kultury posiadania i nieposiadania psów.

#### **Bibliography**

Badanie budżetu czasu ludności w 2013 r., GUS, https://stat.gov.pl/files/gfx/portalinfor-macyjny/pl/defaultaktualnosci/5486/18/1/1/notatka\_bc\_2013\_22\_08\_ost\_\_2\_.pdf.

Duricek M., Obodyński K., 2006, *Syntetyczne podstawy rekreacji i turystyki*, Wydawnictwo Uniwersytetu Rzeszowskiego, Rzeszów.

Durkheim E., 2011, Samobójstwo, Oficyna Naukowa, Warszawa.

Konecki K., 2005, Ludzie i ich zwierzęta. Interakcjonistyczno-symboliczna analiza społecznego świata właścicieli zwierząt domowych, Wydawnictwo Scholar, Warszawa.

Lorenz K., 2013, *I tak człowiek trafił na psa*, Grupa wydawnicza Foksal sp. z o.o., Warszawa.

Postawy wobec zwierząt, 2003, BS/79/2013, CBOS, http://www.cbos.pl/SPISKOM.POL/2013/K 079 13.PDF

Rada Osiedla Teofilów-Wielkopolska, b.d.

Rozporządzenie Ministra Spraw Wewnętrznych i Administracji z dnia 26 sierpnia 1998 roku w sprawie zasad i warunków wyłapywania bezdomnych zwierząt (Dz.U., 1998, nr 116, poz. 753, z późn. zm.).

Rozporządzenie Ministra Spraw Wewnętrznych i Administracji z dnia 28 kwietnia 2003 roku w sprawie wykazu psów uznawanych za agresywne (Dz.U., 2003, nr 77, poz. 687).

Sławek M., Śleboda R., Bajorek W., Rzepko M., Nowak A., 2011, Przestrzeń rekreacyjna aktywności ruchowej w całorocznych zamkniętych obiektach sportowo-rekreacyjnych na podstawie wybranych jednostek osiedlowych Łodzi, "Ekonomiczne Problemy Usług", 79: 275–301.

- Szacki J., 1964, Durkheim, Wydawnictwo Wiedza Powszechna, Warszawa.
- Szkwarek M., 2016, *Miasta, które nadal pobierają opłatę za psa*, Bankier.pl, https://www.bankier.pl/wiadomosc/Miasta-ktore-nadal-pobieraja-oplate-za-psa-7421102.html.
- Toczek-Werner S., 2007, *Podstawy rekreacji i turystyki*, Wydawnictwo AWF Wrocław, Wrocław.
- Uchwała Nr XXXI/808/16 Rady Miejskiej w Łodzi z dnia 15 czerwca 2016 roku w sprawie wprowadzenia Regulaminu utrzymania czystości i porządku na terenie miasta Łodzi (Rozdział 5 § 19.2).
- Uchwała nr XLIII/1154/17 Rady Miejskiej w Łodzi z dnia 15 marca 2017 roku w sprawie przyjęcia "Programu opieki nad zwierzętami bezdomnymi oraz zapobiegania bezdomności zwierząt w Łodzi na rok 2017".
- Ustawa z dnia 12 stycznia 1991 roku o podatkach i opłatach lokalnych (Dz.U., 2006, 121.844).
- Ustawa z dnia 13 września 1996 roku o utrzymaniu czystości i porządku w gminach (Dz.U., 1996, nr 132, poz. 622).
- *Ustawa z dnia 21 sierpnia 1997 roku o ochronie zwierząt* (Dz.U., 2003, nr 106, poz. 1002, z późn. zm.).
- Ustawa z dnia 11 marca 2004 roku o ochronie zdrowia zwierząt oraz zwalczaniu chorób zakaźnych zwierząt (Dz.U., 2008, nr 213, poz. 1342, z późn. zm.).
- Verginelli F., Capelli C., Coia V., Musiani M., Falchetti M., Ottini L., Palmirotta R., Tagliacozzo A., De Grossi Mazzorin I., Mariani-Costantini R., 2005, Mitochondrial DNA from Prehistoric Canids Highlights Relationships between Dogs and South-East European Wolves, "Molecular Biology and Evolution", 22(12), 1 December 2005: 2541–2551, https://doi.org/10.1093/molbev/msi248.

#### LIFE WITH DOGS IN THE CITY

**Abstract:** The city is by its definition a space appropriated by culture, it is artificial and anthropogenic environment, the place of residence of people. The numbers, however, are significant. In the United States, the number of households with dogs exceeds the number of households with children. In 2016 there were over 60 million (the number of dogs is estimated at 70 million) of households with a dog. The value of the market of products related to the maintenance of domestic pets was estimated in 2017 at approx. USD 70 billion. It means almost 60 pp. growth over the past 10 years. The average dog owner assessed his annual expenses for about 1,600 USD. The largest part was devoted to veterinary care and hotels for animals. It is also worth mentioning the ever-growing animal insurance market.

In addition to the importance for the economy, having dogs has other consequences. First of all, you can point out their social role here. Dogs and other pets have become "family members" and "best friends". One can risk the thesis that they are, in some cases, a substitute for partners or children – at least some of the owners treat them as such.

The aim of the article is to indicate the selected spatial consequences of having dogs in the city. The diagnosis covers both the elements of real space as well as the social perception of the phenomenon of having and housing dogs in the city. What is spatial is primarily related to public space, recreation and leisure. The case study is Łódź, a city of 700,000 residents and 80,000 dogs (estimates). The research was carried out from 2013

to 2017. An inventory was made of selected green areas in Łódź and expert interviews with representatives of the Municipal Police in Łódź and the Department for Economic and Control Affairs of the Department of Municipal Economy in Łódź. In addition, data obtained from institutions such as: Municipal Police in Łódź, Poviat Veterinary Inspectorate (PIW) in Łódź and the Local Data Bank of the Central Statistical Office were analyzed. Self-administrative interviews with dogs' owners were conducted as well. The focus was on the current situation, which in practice means the last five years.

Keywords: City space, dogs, dogs' owners, use of public spaces, local government.

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#### Karolina Rychta

# SUSTAINABLE DEVELOPMENT OF THE HOUSING ESTATES THROUGH THE EXAMPLE OF RADOGOSZCZ-EAST IN ŁÓDŹ

**Abstract:** In case of progressive degradation of the natural environment, more emphasis is put on the actions which would minimize the humanity's negative influence on the environment. An attempt to answer ecological issues is the concept of sustainable development which assumes permanent development of humanity but not at the expense of the natural environment.

Nowadays environmentally friendly solutions are frequently used in modern residential buildings. However major challenge is to adapt existing buildings to contemporary requirements. Especially demanding problems are large housing estates built in socialism which dominated the structure of Polish cities before the propagation of sustainable development principles.

Research problem of this article is a question: can blocks of flats develop in a sustainable way? In order to answer this question a research based on a methodology by Beata Komar<sup>1</sup> through the example of Radogoszcz-East – housing complex located in Łódź was conducted. The object of this study was appraisal of particular aspects of sustainable development (ecological, economic, social and cultural) with reference to block of flats. Additional materials to this analysis were questionnaires for inhabitants about the quality of life in this area.

**Keywords:** Sustainable development, block of flats, large housing estates, urban audit, degradation.

#### 1. Sustainable development

Rapid civilization development which occurred in the second half of the 19<sup>th</sup> century and Earth's population increase had major impact on the idea of sustainable development. In those days the human's effort was focused on constant economic growth regardless the negative impact on the natural environment which progressed considerably.

<sup>&</sup>lt;sup>1</sup> B. Komar (2014).

Up until the 60's of the 20<sup>th</sup> century none had suspected how serious the consequences of unreasonable environmental policy would be. The international community was alarmed at 23<sup>rd</sup> United Nations session of the General Assembly in 1967 where it was indicated that lack of immediate action pose a threat to life on Earth.

Since that time many significant documents were published. One of the most crucial was the Report of the Secretary-General of the United Nations Sithu U Thanta (1969), titled: *The problems of human environment* because it initialized global discussion about the environmental crisis.

The definition of sustainable development which emerged in "Our common future" named "Brundtland Report" in 1987 is considered as the most popular and imaginative:

Humanity has the ability to make development sustainable to ensure that it meets the needs of the present without compromising the ability of future generations to meet their own needs<sup>2</sup>.

The emphasis was laid not only on the responsibility towards all humanity but also towards future generations which would live in the environment left after present mankind.

As a consequence of international tendency for environmental protection, the concept of sustainable development was written into the *Constitution of the Republic of Poland*<sup>3</sup>. However more detailed legal definition can be found in the *Environmental Protection Law*<sup>4</sup>.

To conclude sustainable development implies economic growth together with the protection of environmental quality, each reinforcing the other. The essence of this form of development is a stable relationship between human activities and the natural world, which does not diminish the prospects for future generations to enjoy a quality of life at least as good as nowadays (Fig. 1).

#### 2. Blocks of flats

Large housing estates built in the era of socialism accomplished the aim they were built for – considerable number of average standard flats was delivered promptly. Nowadays it is hard to imagine the landscape of Polish cities without extensive block of flats complexes. Despite the criticism of housing estates, the numerous advantages of these residential buildings must be emphasised. First and foremost,

<sup>&</sup>lt;sup>2</sup> Report of the World Commission on Environment and Development: Our Common Future, "Sustainable development knowledge platform", 1987: 16, www.sustainabledevelopment.un.org/content/documents/5987our-common-future.pdf (accessed on: 02.06.2016).

<sup>&</sup>lt;sup>3</sup> Constitution of the Republic of Poland from 2<sup>nd</sup> April 1997 (Dz.U., 1997, nr 78, poz. 483, art. 5).

<sup>&</sup>lt;sup>4</sup> Environmental Protection Law from 27th April 2001 (Dz.U., 2017, poz. 519, art. 3).

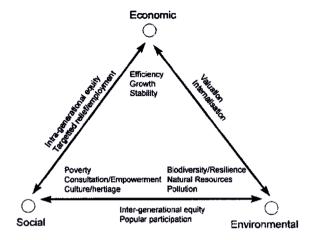


Fig. 1. Sustainable development triangle

Source: http://fao.org

usually blocks of flats are located near city centres and are very well linked to other city parts by public transport. However the distance is far enough for inhabitants to feel the relief from big city bustle. Another convenience is good accessibility to basic services and well developed social and technical infrastructure. Nowadays block of flats' residents can satisfy most of their needs inside the estate thanks to various shops, supermarkets, playgrounds and green areas.

Despite all the profits, large housing estates are still considered pejoratively. This kind of residential buildings has many drawbacks which resulted from those days government's faults as well as economic insufficiency of that time.

First housing estates built from giant slab in Łódź emerged in the late 50's of 20th century. According to Ewa Szafrańska Łódź's big residential complexes divide into three categories related to its built date because of different normative provisions which had an influence on the flats' area and social or demographic structure of residents. Radogoszcz belongs to the youngest group (80's and 90's). Flats in this category are characterized by largest area, the lowest average age of inhabitants, biggest percentage of employed people and smallest number of one-person household (Szafrańska 2010).

#### 3. Urban audit of space in Radogoszcz-East estate

According to recommendations from Athens Charter and Leipzig Charter on Sustainable European Cities, the idea of sustainable development should be the core to elaborate quality requirements for blocks of flats (Komar 2014: 90). To investigate if the estate is developing in a sustainable way it is necessary to conduct an urban audit. Beata Komar has devised research tool which facilitates all kinds

of urban studies. In her methodology quality requirements are divided in three groups of factors: ecological, economic, social and cultural, what corresponds with the sustainable development triangle (Table 1). Some of the factors may be assigned to more than one group. It means that sustainable development can be achieved only if all three spheres are integrated. Beata Komar presented her tool through the example of three estates in Katowice in comparison with Grünau estate in Leipzig. Her methodology proved to be very universal and can be used to assess space in other complexes after slight modifications.

**Table 1.** Quality requirements to housing estates according to sustainable development principles

	Sustainable development triangle			
Criterion	Ecology	Economy	Society and culture	
1. Public transport, cycling, walking	X			
2. Waste separation	X			
3. Energy efficiency	X	X		
4. Parking lots	X		X	
5. Green areas	X		X	
6. Water management	X	X		
7. Safety and design out crime			X	
8. Universal design			X	
9. Urban layout			X	
10. Recreation areas			X	
11. Aesthetic quality of space			X	
12. Social infrastructure			X	
13. Social participation			X	

Source: own elaboration based on B. Komar (2014: 94)

According to Agenda 21 – the action programme adopted on the Earth Summit in 1992, the most crucial requirement towards ecological issues is to enhance the natural environment, instead of damaging it. In case when some loss in inevitable, the consequences must be minimized and compensated<sup>5</sup>. In author's opinion water management should be added to ecological requirements because clean water

<sup>&</sup>lt;sup>5</sup> Agenda 21, United Nations Conference on Environment and Development, Rio de Janeiro, 3–14 June 1992, based on: B. Komar (2014: 94).

is extremely precious and its rational usage affects the condition of the natural environment.

When it comes to economic aspects of sustainable development, all kinds of actions reducing costs should be considered, e.g. thermal modernizations or water saving solutions. Moreover every investment which leads to improvement in life quality is valuable because although in does not bring financial benefits directly, in the future it may increase investment attractiveness of the estate.

Social and cultural requirements are all of the operations which improve inhabitants' life quality, their safety and level of content (Komar 2014: 105). The author assumes that one of the most important factors is social participation which allows achieving the most effective solutions, reinforcing the residents' integration and creating an attachment to the local community.

The construction of Radogoszcz-East began in 1979. The estate is located in the north of Łódź, near the border with city Zgierz. It belongs to Łódź-Bałuty district. Radogoszcz estate is divided into three parts. The East part, managed by the cooperative of people (SMRW) is the subject of this dissertation. The structure of the estate is based on system of yards which differ from each other with shape and size. Thanks to that the inhabitants of the yard have some privacy. It also helps to create a bound between the people and their living place. In Radogoszcz-East there are several green areas and recreation objects like playing fields, outdoor gyms and playgrounds. Shops and other services are mostly located in the ground floors of buildings around Plac Słoneczny which has a function of local market. Most of residents' needs can be satisfied inside the estate what is especially crucial for elderly people. The biggest issue of the estate is the lack of parking places. Unfortunately there are no modern ecological solutions like rainwater harvesting or solar panels. Radogoszcz-East has satisfactory connection with city centre (about 6 km away) as well as by public transport and by car. It is only 2,6 km away from enormous forest called Las Łagiewnicki (Fig. 2).

#### 4. The result of the urban audit for Radogoszcz-East in Łódź

Every criterion was graded in the scale from 1–5 or 1–3. The final outcome has been divided into three groups of results:

- positive (green colour): in scale 1–5 grades 4 and 5, in scale 1–3 grade 3;
- warning (yellow colour): in scale 1–5 grade 3, in scale 1–3 grade 2;
- negative (red colour): in scale 1–5 grades 1–2, in scale 1–3 grade 1 (Table 2).

Most of the criteria were assessed positively in Radogoszcz-East. Notwith-standing the only aspect graded 5/5 was green areas. It means that there are still some improvements that can be done. The worst aspects are parking lots and water management.



**Fig. 2.** Radogoszcz-East Estate in Łódź

Source: www.smrw.lodz.pl

**Table 2.** The result of the urban audit for Radogoszcz-East in Łódź

Criterion	Grade			
Ecology				
Public transport, cycling, walking	4/5			
Waste seperation	2/3			
Parking lots	1/3			
Green areas	5/5			
Water management	0/3			
Economy				
Energy efficiency	4/5			
Society and Culture				
Safety and design out crime	2/3			
Universal design	2/3			
Urban layout	4/5			
Parking lots	1/3			
Green areas	4/5			
Recreation areas	4/5			
Social infrastructure	4/5			
Aesthetic quality of space	4/5			
Social participation	2/3			
Sum	43/61			

Source: own elaboration

To conclude, even blocks of flats can be adapted to nowadays quality requirements and be a competition for modern residential housing. Some of the housing estates in Poland are 50 years old and require immediate actions in order to avoid irreversible devastation. The result of this research confirms that elaborating revitalization projects should be done according to the sustainable development principles. Moreover the methodology devised by Beata Komar after a slight modifications appear to be flexible enough to be used in different locations and estates.

#### **Bibliography**

Agenda 21, United Nations Conference on Environment and Development, Rio de Jane-iro, 3–14 June 1992, based on: B. Komar (2014: 94).

Constitution of the Republic of Poland from 2<sup>nd</sup> April 1997 (Dz.U., 1997, nr 78, poz. 483, art. 5).

Environmental Protection Law from 27th April 2001 (Dz.U., 2017, poz. 519, art. 3).

Komar B., 2014, Współczesna jakość spółdzielczej przestrzeni osiedlowej w świetle zasad rozwoju zrównoważonego na wybranych przykładach, Wydawnictwo Politechniki Śląskiej, Gliwice.

Report of the World Commission on Environment and Development: Our Common Future, "Sustainable development knowledge platform", 1987, www.sustainabledevelopment. un.org/content/documents/5987our-common-future.pdf (accessed on: 02.06.2016).

Szafrańska E., 2010, Wielkie osiedla mieszkaniowe w okresie transformacji – próba diagnozy i kierunki przemian na przykładzie Łodzi, [w]: Jażdżewska I. (ed.), Osiedla blokowe w strukturze przestrzennej miast, Wydawnictwo Uniwersytetu Łódzkiego, Łódź.

#### ROZWÓJ ZRÓWNOWAŻONY OSIEDLI BLOKOWYCH NA PRZYKŁADZIE OSIEDLA RADOGOSZCZ-WSCHÓD W ŁODZI

Zarys treści: W świetle postępującej degradacji środowiska naturalnego, coraz większy nacisk kładzie się na działania mające na celu zminimalizowanie negatywnego wpływu człowieka na środowisko. Próbą odpowiedzi na problemy ekologiczne jest koncepcja zrównoważonego rozwoju, która zakłada zapewnienie trwałego rozwoju ludzkości, ale nie kosztem środowiska. W nowoczesnym budownictwie mieszkaniowym coraz bardziej powszechne są rozwiązania proekologiczne. Ogromnym wyzwaniem jest natomiast dostosowanie budynków już istniejących do dzisiejszych wymagań. Szczególnie trudnymi przypadkami są osiedla blokowe, masowo budowane w epoce socjalizmu, które zdominowały struktury polskich miast. Budowane były w czasach, gdy ochrona środowiska była zepchnięta na najdalszy możliwy plan. Zatem pytanie brzmi: czy osiedla blokowe mogą się rozwijać w sposób zrównoważony? Podmiotem badań zostało osiedle blokowe Radogoszcz-Wschód w Łodzi. W celu rozwiązania problemu badawczego przeprowadzono audyt urbanistyczny przestrzeni osiedla według metodologii opracowanej przez Beatę Komar.

W pierwszym kroku wyznaczono wymagania jakościowe wobec osiedli blokowych w świetle zasad zrównoważonego rozwoju, z podziałem na czynniki ekologiczne, ekonomiczne i społeczno-kulturowe. Następnie zinwentaryzowano zasoby osiedla Radogoszcz-Wschód i dokonano oceny poszczególnych kryteriów. W efekcie zostały wskazane mocne strony przestrzeni osiedla oraz obszary problemowe, które nie spełniają wymagań zrównoważonego rozwoju. Wyniki badań wskazują jednak, że pomimo złej sławy, osiedla blokowe po pewnych modyfikacjach mogą rozwijać się w sposób zrównoważony. Metodologia oparta na koncepcji zrównoważonego rozwoju jest uniwersalna i pomaga w sposób kompleksowy ocenić stan przestrzeni osiedlowych i wskazać wytyczne do strategii rewitalizacji blokowisk.

**Słowa kluczowe:** Rozwój zrównoważony, osiedla blokowe, blokowiska, audyt urbanistyczny, degradacja.

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## A C T A U N I V E R S I T A T I S L O D Z I E N S I S FOLIA GEOGRAPHICA SOCIO-OECONOMICA 30, 2017: 95–102

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#### Przemysław Cieślak

# GUIDELINES FOR THE REHABILITATION OF THE HOUSING ESTATE WITH THE CPTED STRATEGY

Abstract: Contemporary urbanists and architects are faced with the problem of adapting degraded post-communist neighbourhoods to the current needs of their inhabitants. Most of those housing estates need rehabilitation which is understood as an aspiration for reconstruction of settlement's range as a human-friendly environment and regain it's lost values. A CPTED strategy could be very helpful to define guidelines for the rehabilitation. Based on Crime Prevention through Environmental Design strategy the features of space like natural surveillance, space clarity, territoriality, the feeling of responsibility for public space and management can affect it's quality. These aspects were very useful set of criteria for the author to try to express guidelines for the rehabilitation of the housing estate in Pabianice. Methods used in the research included physical inventory of the neighbourhood and questionnaire survey among the sample of 100 inhabitants of the analysed area. Conclusions from the use of both mentioned methods are well supplementing each other and are pointing the most severe spatil and social problems in the area. This how the environment of the housing estate looks like in the eyes of it's inhabitants and visitors were crucial while shaping guidelines for rehabilitation.

**Keywords:** Rehabilitation, housing estate, CPTED strategy, physical inventory, survey research, Pabianice, post-communist housing estate, neighbourhood, safe environment, blocks of flats, living quality.

#### 1. Introduction

Neighbourhoods built of blocks of flats are very common in almost every Polish city or town. They are inhabited by millions of people of different wealth or social status and living in such dwellings is standard in Poland. These settlements – the legacy of communism – have different infrastructures and functional programmes which stems from the economical conditions that change over the years. The standard of living in blocks of flats depends on the quality of workmanship and their future improvements. Housing estates, built as a housing back-up for

the national industry, have mostly degraded after the fall of some national factories. These processes, which contributed to the lack of workplaces, combined with the impossibility to frequently change a place of living, created pathological socio-spatial structures. Post-communist neighbourhoods are frequently unable to provide people with a functional programme which would satisfy their needs (Basista 2001). Therefore, the housing estates built in the second half of the 20th century require rehabilitation. Contemporary urbanists and architects are faced with adapting these neighbourhoods to the needs of their inhabitants and creating places with favourable living conditions.

#### 2. Methods used

One of such post-communist housing estates is the subject of this analysis, which aims to present spatial development of the neighbourhood over the years and try to determine guidelines for its rehabilitation. While implementing rehabilitation activities there is a need of making certain premises and using appropriate methods. Rehabilitation is understood as an aspiration for reconstruction of settlement's range as a human-friendly environment and regain it's lost values (Chmielewski, Mirecka 2001). A very useful strategy to draw guidelines for rehabilitation could be CPTED strategy. CPTED is an acronym for Crime Prevention through Environmental Design what means appropriate design of urban environment and it's effective usage that can lead to crime and crime-caused fear reduction and increase of standard of living (Cozens 2014).

Based on the CPTED strategy, the following features of space can affect its quality:

- natural surveillance.
- space clarity,
- territoriality,
- the feeling of responsibility for public space,
- management (Maczka 2012; Wieteska-Rosiak 2014).

All these above-mentioned aspects can be a useful set of criteria during a physical inventory of the area or a survey, both of which are methods used by the author to analyse spatial structure and quality of life in the neighbourhood and draw conclusions.

The physical inventory was made by the author on the area of the neighbourhood which is a subject of the rehabilitation. This inventory was made with the use of inventory table where according to CPTED strategy the following features of environment were judged:

- spatial development (infrastructure),
- possibility of surveillance,

- space legibility,
- visibility of the ownership in space,
- technical condition of infrastructure (Lake 2007).

The second method used by the author to recognize inhabitants opinions about the housing estate they live in was questionnaire survey research. Statistical sample at the number of 100 people consisted of inhabitants of blocks of flats in the area of interest. The questionnaire included three questions which asked respondents for:

- their opinion of the neighbourhood according to standard of living and the subjective level of safety,
- their judge about possible problems in the neighbourhood and to point where they appear if so,
- proposals of necessary changes in the area.

#### 3. History and spatial development

The neighbourhood which is the subject of these analysis is located in the western part of Pabianice near the town centre. The examined area is surrounded by Zamkowa Street, Wyszyńskiego Street, Skłodowskiej-Curie Street and Konopnickiej Street. This place was originally developed into a housing complex built for the workers of the cotton products factory. The urban structure, including 20 single-storey houses made of brick and a school, was set up at the end of the 19th century by the Krusche and Ender factory. That neighbourhood covered half of the area of the current housing estate (Brzeziński, Gramsz 2004; Adamczyk 2007).

Today, the area of the housing estate is dominated by 4- to 11-storeyed habitable buildings. There are numerous service points located along Zamkowa Street which is considered a local "centre of activity". Services like a grocer's, a supermarket, a church, a hairdresser, a ground school and others can be found there. The space between blocks of flats is occupied by car parks and greenery (trees and grass). The green areas are interspersed with fenced playgrounds. The locals use the lanes between the blocks of flats, or the driveways, as well as the sides of main streets to park their vehicles. Most of the streets in the area have asphalt surfaces except driveway lanes and Zamkowa Street – those are still covered with old cobblestone. Zamkowa Street also has a tramway track. All these elements of spatial development influence both the functioning of the neighbourhood and its image. The situational plan of the housing estate is presented in the picture (Fig. 1).



**Fig. 1.** Situational plan of the housing estate in Pabianice Source: own, based on basic map and physical inventory

#### 4. Physical inventory conclusions

The natural surveillance in the analysed area is limited because of groups of trees which restrict the view of areas between blocks of flats. Additionally in the eastern part of the area appears several gable ends which reduce passive surveillance as a result of the leak of windows in buildings' gables. Another problem is the lighting of the area which is inaccurate. However there are lamps above the enters to the buildings they are not efficient enough to lighten areas between blocks of flats.

The neighbourhood seems to be isolated from the rest of the surroundings in terms of connection the inside of the neighbourhood structure with the communication strings. Moreover the view on the Saint Mary's Church which stands for the local dominant is reduced by high-rise blocks of flats. That all means the space legibility does not allow those users of the space, who do not know exactly the urban structure of the neighbourhood, to know his accurate localization.

The walls of the blocks of flats are the formal borders between public and private space — with public space outside the buildings and private space — inside. However, the areas around blocks of flats are not visibly ascribed to either category. This issue concerns the whole neighbourhood, but in several places in the western part of the area there are little gardens underneath the windows which are the beginnings of semi-private space. There can be seen a dependence that the more

intensive the building is, the smaller is identification with the neighbourhood and responsibility for the common space among inhabitants.

In the neighbourhood, there are also numerous places in a bad technical condition. One of them is the majority of infrastructure in western part of the housing estate. Another, very significant, is Zamkowa Street with its old cobblestone road surface and driveway lanes also covered with cobblestone. This kind of road surface when it is neglected is a considerable noise generator and affects destructively on vehicles driving by. The greenery also requires maintenance as it covers quite a lot of area and is full of unused potential.

Basing on the physical inventory two zones with a bit more different characteristics can be separated. The western with older and lower intensity building and the newer with higher, up to 11-storeyed blocks of flats. The border between these zones makes Wyspiańskiego Street.

The conclusions from questionnaire survey research are reflected in the physical state of the housing estate. The residents who participated in the survey also mentioned inaccurate lighting of the housing estate. In their opinion this is especially noticeable in the eastern part of the neighbourhood. The fact that people identify with the area is more visible in the western part than in the eastern one. A lower intensity of a building development is a positive quality, which can be supported by the example of little gardens, filled with greenery and flowers, near older blocks of flats. Zamkowa Street is a kind of a "centre of activity" because it is an axis on which many services cluster. Respondents confirmed that access to services available in the neighbourhood is a positive quality. However, movement in the area between buildings in the middle of the housing estate is sparse, because of a lack of movement generators. This results in a feeling that the inside of the housing estate is partially abandoned.

#### 5. The survey research conclusions

What is more people do not feel very safe in that area. This can be due to the problems noticeable in the neighbourhood. According to the survey, drunk people on the streets, of whom women are mostly afraid, appear to be the biggest problem. The issue is dominating only in the eastern part of the housing estate and appears to be related to the close location of a bar, a pub and a liquor store near Wyspiańskiego Street. Other important problems mentioned by respondents were trashing of the area, dog issue, bad technical condition of the road surface and small possibilities to spend their free time.

Inhabitants taking part in the survey had an opportunity to propose their solutions on the neighbourhood. People aged 65+ constituted the majority of the respondents. That was probably the reason why putting benches around the blocks of flats was high on the list of their requirements. The second most needed

thing according to the survey is more greenery. This suggestion can be surprising because of huge amount of trees and grass between the buildings. However this greenery is badly managed but it has a big potential and needs to regain utility function. Other changes suggested by the inhabitants included among others renewal of the blocks of flats, bigger car park and more playgrounds.

The results of survey research are a good supplement of physical inventory of the neighbourhood and are pointing which of the diagnosed problems are the most severe. This how the environment of the housing estate looks like in the eyes of it's inhabitants can be crucial while shaping guidelines for rehabilitation.

#### 6. Summary

The realization of the aim of that thesis is a trial to express the guidelines for the rehabilitation of the housing estate. The main problem of this neighbourhood, inebriated people on the streets, can be solved by opening a restaurant with a limited number of alcoholic drinks on offer, near the bar. Therefore, the pub would host some meetings for the inhabitants and the restaurant would serve to encourage people to eat out and socialize. However these actions are the first steps to resolve the phenomenon of inebriated people on the streets. This problem should be still under observation by the housing council. Another issue that needs addressing is the road surface of Zamkowa Street. As the main street in town, it needs asphalt surface along its whole length. This modernisation would decrease the level of noise and increase the quality of movement along the street. Another action that should be taken is filling the area with elements of small architecture like benches, rubbish bins and bike parks. Creating places where people can meet, maintain their garden, maybe barbecue, simply play some games or talk could help in integrating inhabitants and increasing the sense of responsibility for their place of living. By giving people a chance and place to meet, maintain their surroundings and become more engaged in the neighbourhood life, the modernization of infrastructure could help create a safe, beautiful and well--maintained place about which an inhabitant could say with a smile: "I live here. This is my neighbourhood".

#### Bibliography

Adamczyk A., 2007, *Pabianice. Przewodnik po historii i współczesności miasta*, Muzeum Miasta Pabianic, Pabianice.

Basista A., 2001, *Betonowe dziedzictwo. Architektura w Polsce czasów komunizmu*, Wydawnictwo Naukowe PWN, Warszawa.

Brzeziński K., Gramsz A., 2004, *Ulica Zamkowa w Pabianicach 1824–2004*, Grako, Łódź. Chmielewski J.M., Mirecka M., 2001, *Modernizacja osiedli mieszkaniowych*, Oficyna Wydawnicza Politechniki Warszawskiej, Warszawa.

- Cozens P., 2014, Crime Prevention through Environmental Design (CPTED): A Review and Modern Bibliography, [in:] Property Management.
- Lake T., 2007, Crime Prevention through Environmental Design. Guidelines for Queensland. Part A: Essential features of safer places, The State of Queensland.
- Mączka J., 2012, *CPTED teoria, praktyka, skuteczność*, [in:] Czapska J. (ed.), *Zapobieganie przestępczości przez kształtowanie przestrzeni*, Wydawnictwo Uniwersytetu Jagiellońskiego, Kraków.
- Wieteska-Rosiak B., 2014, Kształtowanie przestrzeni publicznej z uwzględnieniem aspektów bezpieczeństwa publicznego, Biuletyn, 164, Komitet Przestrzennego Zagospodarowania Kraju PAN, http://skpzk.czasopisma.pan.pl/images/data/skpzk/wydania/No 164 2014/15WIETESKA ROSIAK.pdf (accessed on: 10.06.2017).

#### WYTYCZNE DO REHABILITACJI ZESPOŁU MIESZKANIOWEGO Z WYKORZYSTANIEM STRATEGII CPTED

Zarys treści: Bloki mieszkalne są bardzo często spotykane w niemal każdym polskim dużym czy też małym mieście. Są zamieszkane przez miliony ludzi o różnym statusie majątkowym i społecznym. Mieszkanie w tego typu budynkach jest w Polsce standardem. Postkomunistyczne osiedla są najczęściej niezdolne do zapewnienia mieszkańcom programu funkcjonalnego, który zaspokoiłby ich potrzeby. Wiele z nich potrzebuje działań rehabilitacyjnych. Jednym z takich zespołów mieszkaniowych jest osiedle w Pabianicach, które jest przedmiotem niniejszego opracowania.

Do wyznaczenia wytycznych do rehabilitacji osiedla mieszkaniowego, co jest celem tego opracowania, może posłużyć strategia CPTED (zapobiegania przestępczości przez kształtowanie przestrzeni). Bazując na CPTED można wyróżnić cechy przestrzeni, które wpływają na jej jakość, a są to: możliwość obserwacji, czytelność przestrzeni, zaznaczenie granic własności w przestrzeni, poczucie odpowiedzialności za przestrzeń publiczną oraz zarzadzanie, a co a tym idzie stan techniczny infrastruktury.

W celu zbadania stanu przestrzeni na analizowanym osiedlu, autor wykonał inwentaryzację terenową. Bazując na założeniach CPTED, zbadane zostały własności przestrzeni osiedla mieszkaniowego. Drugą metodą badawczą wykorzystaną przez autora była ankieta kwestionariuszowa, przeprowadzona wśród 100 mieszkańców osiedla. Dotyczyła ona opinii mieszkańców o miejscu zamieszkania, w tym subiektywnego poczucia bezpieczeństwa oraz problemów mogących wystąpić w przestrzeni.

Na podstawie inwentaryzacji terenowej zostały określone cechy przestrzeni, które nie wpływają korzystnie na jakość i poczucie bezpieczeństwa w przestrzeni. Zaliczają się do nich: ograniczona możliwość obserwacji ze względu na nieuporządkowane grupy zieleni, wrażenie izolacji przestrzeni osiedla od reszty miasta, brak wyraźnie widocznej przestrzeni półprywatnej, a także zły stan zieleni i infrastruktury, w tym budynków i nawierzchni ciągów komunikacyjnych. Biorąc pod uwagę cechy przestrzenne osiedla, można wyznaczyć podział na dwie strefy – wschodnią i zachodnią – o odmiennej charakterystyce, w tym intensywności zabudowy o układzie przestrzennym.

Wnioski z badań ankietowych znajdują swoje odbicie w stanie fizycznym osiedla mieszkaniowego. Według respondentów, pozytywnymi cechami osiedla mieszkaniowego jest przede wszystkim dostępność do usług, jak również niska intensywność zabudowy

w zachodniej części osiedla. Mieszkańcy wskazali także problemy, które ich zdaniem występują i wymagają interwencji. Zdaniem ankietowanych wśród najważniejszych znalazły się: problem pijanych osób na ulicy, zły stan nawierzchni jezdni, zaśmiecenie obszaru, psi problem, a także skromne możliwości spędzania czasu wolnego. Respondenci zostali poproszeni o zaproponowanie zmian, które poprawiłyby jakość przestrzeni i życia na osiedlu. Najczęściej pojawiającą się sugestią było ustawienie większej ilości ławek, ale też zwiększenie, a raczej uporządkowanie zieleni na osiedlu. Wspomniano także o potrzebie remontu bloków, większym parkingu i nowych placach zabaw dla dzieci.

Badania ankietowe stanowią dobre uzupełnienie inwentaryzacji zespołu mieszkaniowego i stanowią podstawę do podjęcia próby sformułowania wytycznych do rehabilitacji osiedla w Pabianicach. Rozwiązaniem głównego problemu, czyli pijanych na ulicy, może być otworzenie w pobliżu baru, restauracji z ograniczoną ofertą napojów alkoholowych. Są to pierwsze kroki do integracji tych problemowych jednostek ze społecznością osiedla i problem ten powinien pozostać pod obserwacją rady osiedla. Istotnymi działaniami, które wydają się być niezbędne na obszarze opracowania, są m.in.: modernizacja nawierzchni ciągów komunikacyjnych, uzupełnienie obszaru obiektami małej architektury oraz stworzenie miejsc, gdzie mieszkańcy mogliby się spotkać, rozpalić grilla czy też pograć w gry. Rozwiązania te mogą pomóc w utworzeniu zadbanego i bezpiecznego osiedla, odpowiadającego potrzebom jego mieszkańców.

**Slowa kluczowe:** Rehabilitacja, blokowisko, osiedle mieszkaniowe, strategia CPTED, badania terenowe, badania ankietowe, Pabianice, wielkomiejski zespół mieszkaniowy, osiedle postkomunistyczne, przestrzeń bezpieczna, bloki, jakość życia.

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