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THE PERIPHERAL HOUSING ESTATE AS A FORM OF URBAN SPATIAL DEVELOPMENT. THE STATUS QUO AND PERSPECTIVES

Abstract: Presentation of contemporary trends in development of such residential units as peripheral housing estates in large Polish cities, as exemplified by Warsaw, is the objective of the paper. Such units are compared with their counterparts being built in Berlin.

Research was carried out in three housing estates in the western part of the Bemowo District of Warsaw, i.e. Lazurowa (developer J.W. Construction), Nad Jeziorem (developer DoR Group) and Villa L'Azur (developer Bouygues Immobilier Polska). The first two were completed at the turn of 2008/2009. The third is in the final stage of construction. All three are located inside immediate city borders.

Within framework of research were carried out analysis of developers' materials, cartographic materials from the City Hall as well as field research. The results were juxtaposed with research made in 2008 in Berlin.

Key words: housing estate, peripheral housing estate, Warsaw, spatial planning, developers, urban spatial development.

THE PERIPHERAL HOUSING ESTATE AS A PARTICULAR FORM OF A NEW HOUSING ESTATE

In Polish literature, the definition of a housing estate is equivocal. It is most often defined as a housing unit, equipped with technical and social infrastructure of specific size, estimated by Chmielewski and Mirecka (2007) at between 5 to 10 thousand people.

In the popular language used by developers, each housing development complex is called a housing estate. From one to two thousand people may live in the largest of the examined units. In the smallest, their number will rather not exceed 500. Scarce service facilities and meagre recreational areas are the reason that these units can not practically function individually and in reality are housing development complexes.

It may currently be observed that in Western Europe and in the United States there is a growing interest in the new urbanism concept. Leon Krier is one of the key spokesmen of the new concepts. According to him, contemporary urban forms are distinguished by improper scale, because they continue to be designed under the influence of modernistic concepts. The development of a modern city should take place as a result of intensification of settlement forms (housing estates) and not, as the modernists wish, in consequence of hypertrophic growth of one center (Krier L., 2001).

The concept of new suburbs is strongly rooted in the ideology of new urbanism. It is based on the simple presumption that suburbanization generates aspirations to improve living conditions while minimizing costs, maintaining good transport access to the workplace and study centres. Equally good living conditions may be guaranteed by peripheral housing estates, that is located in the outer parts of the city, near transport routes, especially fast local rail systems and highways. In the beginning of the nineties of the past century, this idea was recognized in Berlin as good means of activating peripheral urban areas and constraining urbanization. In Poland, planners and developers refer to similar premises. Does that mean that peripheral housing estates may protect us against urban sprawl?

THE HOUSING MARKET IN WARSAW

Scale. This is the largest market in the country, both in regard to the number of apartments being built and their prices. The number¹ and share² of apartments put to use continue to dynamically increase.

For a long time, prices of apartments in the capital have been on the top national level of 1,8-1,9 thou. € for 1 m² of living space (REAS 2009). On the basis of calculations by Chmielewski and Mirecka (2007), it appears that, in the mid-90-ies, with the price of 1 m² equal to an average monthly salary, an employed person could be granted credit for a 25 m² apartment. Examination of spatial price diversity in Warsaw is difficult because transactional price data is not officially registered. The price paid by a developer for land is also undisclosed. Prices listed in real estate sale offers are examined. On the basis of data from real estate offices it is possible to examine limited samples. Analyses of a sample 1066 real estate offers were carried out at the Faculty of Geography and Regional Studies (Hejłasz, 2008). The results indicate a significant real estate price decrease from the city center to its borders. Average prices for 1 m² of real estate in the vicinity of the city borders, in

¹ Between 1996 and 2007 the number of completed dwellings increased from 4 to 15.7 thousand [Rynek mieszkaniowy w Polsce...]

 $^{^{2}}$ The share of Warsaw in the total number of new flats in Poland amounts 24-30% [Rynek mieszkaniowy w Polsce...]

the Bemowo District, constituted only 66% of the analogous price in the city centre³.

Conditions. Obtaining grounds for new real estate investment projects in Warsaw meets with numerous obstacles of legal, organizational, spatial, infrastructural or social character. Many of these obstacles are rooted in the city's history (land communalization within city borders, extensive planning in the reality of socialist economy). The ownership status of many plots has still not been regulated. Another aspect of the legal problems is the contemporary spatial planning system in which diverse procedures for granting building permits are provided. Infrastructure problems include not only provision of technical infrastructure. They may also come up at the end of an investment project, e.g. large traffic concentration, insufficient transport facilities.

The social factors in the investment location are the least significant. The developer acts from the position of a strong player. Taking advantage of legal assistance he may carry on the investment project despite protests on the part of owners of neighboring plots.

CHARACTERISTICS OF THE EXAMINED HOUSING ESTATES

Resident profile. The developers' offer is mainly directed to young, dynamic, single people who are looking for a seemingly luxurious lifestyle. Often underscored is the character of the housing estate itself, its enclosure and security which are of importance to people who, for long hours, remain outside their apartment. Little space is dedicated in brochures to green recreational areas. They include perfunctory phrases "[...] (the housing estate) has a recreational zone for residents and their children" [the Lazurowa housing estate website]. Therefore, the conclusion is that the need for rest and recreation will be satisfied beyond the housing estate.

Spatial structure. The examined housing estates were designed for maximum use of the plot area (Fig.1). The Nad Jeziorem housing estate has the highest building development intensity index (Table 1). It is also characterized by the least favourable spatial structure. Buildings are situated at minimal distance from each other and the space between them is occupied by communication routes. Green areas have been limited to minimum. The other two housing estates have more favourable development indices (Table 1). In consequence, sun light will be better used and it will be easier to arrange the green areas.

The accepted practical solution prevents creation of cosy urban interiors. The monotonous building pattern is the reason why the constructions are exposed to strong west winds.

³ Data for 2007

Housing estate	Area of housing estate (a)	Built-up area (a)	Built-up in- tensity (%)	No. of service establish- ments	No. of apart- ments
Lazurowa	633	145	23	No data	569
Nad Jeziorem	99	99	48	13	268
Villa L'Azur	190	6	3	No data	169

Table 1. The unit area and residential and service facilities in the examined housing estates

Source: Own calculations based on map surveys (data from October 2009 r.) www.mapa.um.warszawa.pl/mapa/.

Own calculations on the basis of materials on the housing estates' websites http://jwconstruction.com.pl//pl/dla_klientow/inwestycje/art6.html, http://www.dor.pl/inwestycje.php?id=5 http://www.bi-polska.pl/villalazur opis.html

Enclosures and security systems have been designed in all the aforementioned units. Enclosures generate an illusion of protection, increase communication problems forcing to use only one (Nad Jeziorem), two routes. Often pedestrian, bicycle and car traffic takes place on the same roadway.

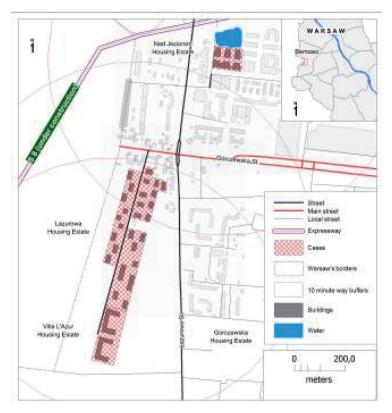


Fig. 1. Build-up areas of the examined housing estate and their surroundings
Source: own study on the basis of field research and cartography materials from the Warsaw
City Hall (www.mapa.um.warszawa.pl/mapa/);
GDDKiA (http://www.drogi.waw.pl/index.php?nr=29)

In consequence, social relations, so important for children and youths, may be disturbed.

The problem is deepened by the lack of public space, characteristic places and signs. Playgrounds are designed in out-of-the-way places. Only in the Villa L'Azur Project the green areas with alleys and playgrounds occupy the interiors. Avoidance of designing public space may stem from economic, social, legal or technical reasons. Organizing public space out of the necessity to build additional elements, squares, alleys or small architecture multiplies the construction costs.

The surroundings and spatial accessibility. The examined housing estates are characterized by meagre structure and functions. Units are not self-sufficient. The number of service establishments is small. They were not planned in Villa L'Azur. Therefore, new "housing estates" are condemned to use the infrastructure in their vicinity. Most of its elements, however, is located within a radius greater than 700 m, that is within a range of a 10-minute walk. Such a limit is accepted as the scale of designing new housing estates (Krier, 2001). Recreational facilities, described on the developers' websites as being "close by", are, in reality, dispersed within a radius of over 5 km from the investment project.

The Nad Jeziorem housing estate is located near similar small, enclosed housing complexes. The Lazurowa and Villa L'Azur housing estates, from the west, border with rural grounds on which the S8 express road is being built. It will direct traffic into Warsaw from the new highway. From the east stretches the Górczewska housing estate, built in 1978-1982.

Currently, for the new residents, cars will be the fundamental means of transport, even though there are bus and tram stops within a 10-minute radius.

THE PERSPECTIVES OF PERIPHERAL HOUSING ESTATES IN THE CONTEXT OF GERMAN EXPERIENCES

After the fall of the Berlin Wall, planners had to face the challenge of creating new directions of development for the capital of Germany. In 1990, the Senate of the City of Berlin enacted, among others, a strategy for apartment construction which stated that 80-100 thousand new apartments would be built up to 1995. It was assumed that new housing estates were to be built in the form of public-private partnership, in which the investor would be obliged to carry out an urbanization program defined in the agreement. Thus, it was accepted in Berlin that that peripheral housing estates will constitute a new city spatial development form. In the city and its immediate vicinity came into being Karow-Nord in the Pankow District, Falkenhöh in Falkensee and Kirchsteigfeld in Potsdam (Pieniążek, 2009). The Author, in 2008, conducted research in the first of the aforementioned complexes.

Origin of the Karow-Nord Housing Estate. The housing estate was developed on about 100 ha of grounds, bought from about 30 owners, by an investment group supported by the district authorities.

It was stipulated in the guidelines that the new "town in the suburbs" is to allude to the traditional building model, but must also offer the highest quality of construction and infrastructure. Plans executed by Moore, Ruble, Yudell, an American design firm, assumed construction of a housing estate for about 8-9 thousand residents (4.5 thousand apartments). The domination of peripheral street development to the height of 3-4 stories was planned. In the central part of the unit were designed a square surrounded by apartment buildings with service establishments on the ground floor and educational centres (schools, libraries, clubs). In 1998, about 90% of the buildings were ready. Up to 2001, 4505 apartments were built (Hesse, Wolff, 2005).

Location and spatial structure. The housing estate is located in the immediate proximity of the city border. From the north it borders a highway, from the east it borders farmlands and from the south one family houses. Thus, development of the housing estate in no way corresponds to the surrounding forms. Therefore, Karow-Nord may be described as a form of an implant.

Axial assumptions are clearly marked in the spatial pattern. Their course is outlined by three star-shaped squares (Fig. 2). The principles of peripheral development were rigorously observed and the quarters were build up in about 30%. The space of the housing estate is not closed. Urban interiors, constituting neighboring space, are accessible. The length of a unit along the longer axis does not exceed 1750 m. Taking under consideration the location of services in the geometric center of the unit, Krier's postulate (2001) on accessibility within a radius of a 10-minute walk, was realized.

The new housing estate, despite its attractive shape, did not attract many new residents. Also, little success was achieved in creating the expected social structure. The notion to activate the eastern part of the city and to homogenize urban society remained in the sphere of declarations. Most of the residents of Karow-Nord comes from the former East Berlin (81%) and foremost, from housing developments built from prefabricated concrete (Hesse, Wolff, 2005, p. 20). Housing estates designed for young people, especially families with children, did not prove to be sufficiently attractive despite the fact that, at the time when the buildings were being settled, two schools with youth centres were opened as well as an urban library, 15 kindergartens and fully equipped playgrounds (Pieniążek, 2009). It is hard to estimate the share of the unsettled apartments. It probably is about 10% (Hesse, Wolff, 2005).

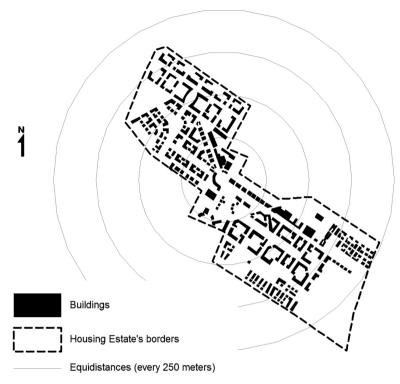


Fig. 2 Buildings of the Karow-Nord housing estate Source: own study on the basis of field research, FPB (on the basis of: Hesse, Wolff, 2005)

CONCLUSIONS

The peripheral housing estate concept is an interesting solution to the issue of suburbanization. In Warsaw, planning documents do not comprise cohesive concepts of solving the housing problem. The initiative is on the part of developers who are mainly driven by economic calculus. Such an approach has characteristics of impact planning. Therefore, it is difficult to speak about distinct trends in urban development. New apartment complexes built in Warsaw, even though they are located in the vicinity of the city borders, are not peripheral housing estates. They differ from housing estates being built in Berlin in scale and planning approach. Developers have moved to city borders because it is possible to buy relatively inexpensive plots with regulated ownership. Nevertheless, they attempt to maximize profits by setting up high building density indices. Apartment units without public space and recreational areas outside the buildings are being built. Such complexes, devoid of social infrastructure, become a certain kind of parasites on the urban tissue. They do not directly develop the neighbour-

hood's service offer and only increase the load of the existing facilities. This aspect is further underlined by the unit enclosures.

Unfortunately, the imminent characteristic of peripheral housing estates is the weak access to the city center. Warsaw developers attempt to pass over uncomfortable facts or underestimate transport problems. It was assumed in Berlin that an apartment complex will be an alternative to houses situated in distant suburbs. In Warsaw, such a comparison is without sense because the cost of house construction outside the city is about half the price of building an apartment of the same area in the capital.

The Karow-Nord housing estate has not fulfilled the assumptions of its authors. The investment project proved to be little attractive in a city where, in the center, one may find an attractive apartment for an affordable price. In Warsaw, the need for apartments continues to be unsatisfied. At the time when this text is being written last apartments were sold in the examined housing estates. In a situation when there is a lack of balance between supply and demand, certain product characteristics cease to be of significance to the buyer. Currently, for most apartment buyers, price is the most important issue. Enclosures and protection are to give an impression that location errors will not jeopardize the residents' security and calm. In reality, these complexes are isolated housing machines.

In the long run, the Warsaw real estate market will achieve a balance between supply and demand. At that time, housing estates such as the examples discussed above, to maintain their attractiveness, will have to change their form and relationship with the environment.

REFERENCES

Chmielewski J.M., Mirecka M., 2007, Modernizacja osiedli mieszkaniowych [Upgrading of housing estates], PW, Warszawa.

Hejłasz B., 2008: Przestrzenne zróżnicowanie wartości rynkowej mieszkań w Warszawie w latach 2006-2007, [Spatial diversification of the market value of apartments in Warsaw in the years 2006-2007] WGiSR UW. Typescript.

Hesse M., Wolff U., 2005, Die "neue Vorstadt" – Urbanisierung der Peripherie durch Dichte, RaumPlanung, 118, s. 17-21.

Krier L., 2001, Architektura. Wybór czy przeznaczenie, [Architecture. Choice or Fate] Arkady, Warszawa.

Pieniążek M., 2009, Koncepcja "nowych przedmieść" w Berlinie i jej realizacja na przykładzie osiedla Karow-Nord. Geneza, funkcjonowanie, wnioski [The concept of "new suburbs" in Berlin and its realization on the example of the Karow-Nord housing estate. Origin, functioning, conclusions], *Prace i Studia Geograficzne*, no 39, 175-186.

Ustawa o planowaniu i zagospodarowaniu przestrzennym (Dz.U.2003.80.717) [Law on planning and spatial development, *Journal of Laws*, no. 80.717 of 2003].

Websites and publications in the Internet:

www.bi-polska.pl/villalazur_folder.html, 14.10.2009

Generalna Dyrekcja Dróg Publicznych i Autostrad, *Przebieg trasy S8 na odcinku Konotopa-Al. Prymasa Tysiąclecia* [The course of the S8 express road on the Konotopa-Al. Prymasa-Tysiąclecia segment], http://www.drogi.waw.pl/index.php?nr=29, 10.10.2009

www.stat.gov.pl/bdr_s/, 10.10.2009

www.mapa.um.warszawa.pl/mapa/, 12.10.2009

Rynek mieszkaniowy w Polsce – jesień 2009 raport, REAS, publikacja internetowa, [Poland's apartment market fall 2009, report, REAS, Internet publication] - www.reas.pl/publikacje. html, 02.11.2009

Studium uwarunkowań i kierunków zagospodarowania przestrzennego Miasta st. Warszawy, [Study of conditions and spatial management of the capital city of Warsaw] www. um.warszawa.pl/wydarzenia/studium/1.php, 10.10.2009

Website for Lazurowa housing estate http://jwconstruction.com.pl//pl/dla_klientow/inwestycje/art6.html, 14.10.2009

Website for Nad Jeziorem housing estate http://www.dor.pl/inwestycje.php?id=5, 14.10.2009 Website for Villa L'Azur housing estate http://www.bi-polska.pl/villalazur_opis.html, 14.10.2009

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