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REGENERATION ISSUES RELATED TO RESIDENTIAL HOUSING FROM THE 70s OF THE TWENTIETH CENTURY BASED ON THE EXAMPLE OF THE I.J. PADEREWSKI HOUSING ESTATE IN KATOWICE

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Abstract

Housing estates of the 70s of the twentieth century in Poland are usually based on vast urban-architectonic foundation having diverse functional and spatial structure designed for living in large social groups (from a few thousand to several thousand people). In many aspects, however, the aging housing estates do not meet the standards expected by modern users. The analysis of these issues as well as of the ways and directions of regeneration of the housing estates has been performed on the basis of the I.J. Paderewski Housing Estate in the city of Katowice.

Streszczenie

Osiedla mieszkaniowe z lat 70-tych XX wieku w Polsce to z reguły spore założenia urbanistyczno-architektoniczne o zróżnicowanej i bogatej strukturze funkcjonalno-przestrzennej, przeznaczonej do zamieszkania znacznych grup społecznych (od kilku do kilkunastu tysięcy mieszkańców). Starzejące się osiedla obecnie nie spełniają w wielu aspektach standardów, jakich oczekują współcześni użytkownicy. Analiza owych problemów oraz sposobów i kierunków rewitalizacji osiedli mieszkaniowych została dokonana na przykładzie Osiedla im. I.J. Paderewskiego w Katowicach.

Keywords: 70s of the twentieth century; Housing estate; Regeneration; Modern standards.

1. DEFINITION OF TERMS

Modernisation – making modern and contemporary; a long-lasting improvement of the existing object (building) resulting in the increase of its functional value; including works connected with the improvement of the aesthetics and functionality of the building. Within the framework of modernisation one may enrich the architecture of the buildings which were previously designed according to one universal model. This leads to the adaptation of the building to current fashion and tastes. [13]

Restoration – restoring the original state, splendour and magnificence. (As opposed to

Renovation (only) – renovating, doing up.) In the case of building engineering, it may refer to the facade, roof or other elements of the building. [14]

Restructuring – is equivalent to transformation (i.e., in other words: a change, metamorphosis, transfiguration) [16]

Regeneration – as opposed to modernisation, renovation, reconstruction, rehabilitation, etc., means complex activities resulting in the improvement of spaces, buildings and natural environment so that they satisfy certain quality conditions; improvement of living conditions of the dwellers and making development possible for the whole housing estates, districts, towns, cities and regions which are deteriorating, falling into ruin or endangered by such processes. (The term came into being in the new Athens Declaration, 1998.) [8]

2. INTRODUCTION – THE ULTIMATE GOAL OF REGENERATION AND SELECTION OF OUALIFYING CRITERIA

It can be stated that the **ultimate goal** of restructuring, modernisation and restoration activities is the **regeneration of a particular area**, understood as the improvement of the quality of the existing environment and creation of the surroundings enhancing rich and diverse social contacts and interactions.

According to A. Bańka, **qualifying criteria** should be as follows [1]:

- reintroduction of good quality of life in a standard housing environment
- adaptation of the housing environment to the needs of aging society
- prevention of social disintegration and vandalism by increasing the degree of identification with the place of residence.

One more criterion can be added, the fourth one, which is inspired by the Project for Public Spaces (PPS) [14], [6]: creation of the social space "among the buildings" which would stimulate social contacts and integration. Regeneration is treated here as a process of restoring a place to life. Moreover, the life means here diverse and varied social contacts and interactions taking place in the shared spaces, such as: recreation and leisure spaces - parks, public transport infrastructure, open-air marketplaces, local centres, spaces connected with public buildings and public utilities, places of mixed functions, municipal squares and waterfronts. [1]

3. PADEREWSKI HOUSING ESTATE IN THE CITY OF KATOWICE

The Ignacy Paderewski Housing Estate in the city of Katowice is located south-east of the city centre. Along with a sports airfield "Muchowiec", it forms a city district called the Paderewski Housing Estate – Muchowiec District. Its investor was the Katowice Housing Association which made the decision to construct the housing estate in 1965. The designers of the housing estate were Jurand Jarecki, Stanisław Kwaśniewicz and Ryszard Ćwikliński. The construction began in 1970 and was completed in 1980. Today the housing estate is administered by **the I. Paderewski Housing Association**, which emerged from the Katowice Housing Association on 05.04.1991. [17]

Percentage of the built-up area of the housing estate

amounts to 15%, plot ratio (net) – 1.28 WIZ, weighted average of number of storeys is 8.53. The building development consists first of all of tall (10- and 11-storey) blocks of flats (20 units). The Housing Estate is inhabited by around 12 thousand people. In the years 2000-13 three small enclaves of 4-storey buildings were constructed in the area of the estate. They have a varied architecture: first 7 units (the so-called "Bay" – "Zatoka"), then subsequent 4 units (the so-called "Cyprus Estate" – "Cyprysowe Osiedle") and next 4 units (the so-called "Recreation Valley" – "Rekreacyjna Dolina"). New investments are being planned. At the moment a complex of 4- to 8-storey buildings is being built (the so-called "Three Ponds" - "Trzy Stawy") [17].



Figure 1.
Bird's eye view of Paderewski Housing Estate [18]

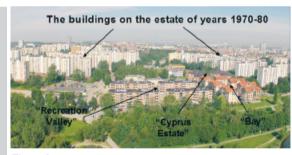
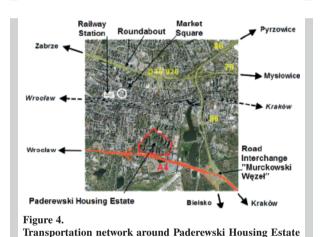


Figure 2.
Panorama of Paderewski Housing Estate with building enclaves seen from Valley of Three Ponds [18]

The location of the Paderewski Housing Estate is extremely convenient: it borders the city centre in the north-west as well as it has an easy access to motorway A4 and to the express road connecting cities in the Silesian Metropolis.



Figure 3. Location of Paderewski Housing Estate - Muchowiec District in the scale of the whole city and in relation to the city centre of Katowice [18]



On the east side the Housing Estate borders a beautiful recreation and sports area: the Valley of Three Ponds (Dolina Trzech Stawów). The area features three big ponds and many smaller ones, numerous bicycle lanes, fitness trails a horse riding club as well as water sports facilities including a harbour a court for beach volleyball and restaurants with open-air theatre, Camping site****. This is a green spot on the city map where you can find peace and quiet and enjoy time with family and friends.

- connections with main arteries and railways (own drawing)

The amenities in the vicinity of the Paderewski Housing Estate include: the Silesian Library, the University of Music, facilities belonging to the Silesian University of Technology, the Silesian Voivodeship Emergency Ambulance Service in the City of Katowice, the Voivodeship Court, banks: BGZ Bank and PKO BP Bank, several office towers, Silesian Library at Council, "Campanilla" Hotel, Church of the Assumption of the Blessed Virgin Mary, "Three Ponds" shopping mall as well as "Biedronka" and "Belg" supermarkets.

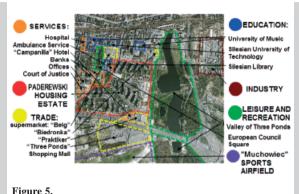


Figure 5. Functions located in the closest vicinity of Paderewski Housing Estate (own drawing)

In the area of the Housing Estate there are numerous shops too, including "Lidl" supermarket and an open-air marketplace. Moreover, on the ground floors of all buildings there are 241 utility, business and service establishments of the total usable surface of 10 777 m². They house small shops like grocer's or greengrocer's as well as repair and services shops such as: shoemaker's, watchmaker's, tailor's, hairdresser's, beauty parlours, etc. An additional advantage is the location of educational institutions: primary school and middle school, three kindergartens and one crèche within the Housing Estate, which encourages young couples to settle in this place. [17]

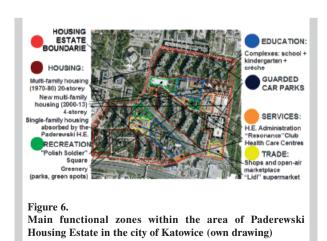




Figure 7.

Types of squares on Paderewski Housing Estate (own drawing)

4. FACTORS TO BE CONSIDERED AT HOUSING ESTATE REGENERATION

Factors have been selected on the basis of the reading matter written by the following authors: Chmielewski [2] and Gehl [3] as well as Podwojewska [7], Szewczyk [8] and Szuba [10]. The same factors were once used by the author of this article in the joint authorship with Joanna Serdyńska, Ph.D., in a study Attempt to Use AHP Method for Assessment of Optimal Direction of Modernisation, Restructuring and Restoration of Housing Estates (on the Basis of Housing Areas of the Town of Ruda Śląska). [5], [9]

4.1. Cultural factors

Rules of construction works in buildings and areas protected by the cultural heritage conservation are defined by the Act on Building Law (Section 39) [11]. Historical complexes (in particular those listed as World Cultural Heritage, such as: districts of Nikiszowiec and Giszowiec) have the ultimate and indisputable value. All kinds of alterations or

activities must be agreed with a competent Cultural Heritage Conservation Office.

The Paderewski Housing Estate does not fall into this category.

4.2. Factors related to traffic, transport and getting around

- classification of traffic in the housing estate:
 pedestrian ways, traffic access roads, bicycle lanes
 comfort and security of moving around
- parking zones: individual parking spaces and home garages, collective garages or parking lots on the outskirts of the housing estate area (present standard 1.5 parking spaces per flat)

In the area of the Paderewski Housing Estate the designed parking lots along main streets (Graniczna, Sikorskiego and Sowińskiego streets) satisfy the demand for parking space in less than 50%. Cars take over the green areas which according to initial plans were destined for leisure and recreation.

 accessibility of public transport – bus stops, tram stops, bus stations

Along Graniczna street (the main arterial street in the housing estate) there are 3 bus stops accessible within 5 minutes.

Motorway exit – the housing estate is in the immediate vicinity of motorway A-4.

4.3. Urban factors

- elimination of dead an anonymous nobody's spaces clear definition of spaces as zones of public, neighbour and private use
- designation and consolidation of new borders in the housing estate space and elimination of spaces



Figure 8.
Cars crowded between buildings (own photo)



Figure 9.
Due to lack of parking spaces, cars are parked on the lawns causing their destruction (own photo)



Figure 10. Renovated parking lot along one of the main roads on the housing estate outskirts (own photo)



Figure 11.
Paderewski Housing Estate (Osiedle im. Ignacego Paderewskiego): Polish Soldier Monument at the square (pomnik Żołnierza Polskiego) (own photo)



Figure 12. Polish Soldier Square (Plac Żołnierza Polskiego) (own photo)



Figure 13. View of the housing estate from the Valley of Three Ponds (Dolina Trzech Stawów) (own photo)



Figure 14.
Compacting the area with new enclaves:
"Bay" (Zatoka) (own photo)



Figure 15.
"Cyprus Estate" (Cyprysowe Osiedle)
(own photo)



Figure 16. "Recreation Valley" (Rekreacyjna Dolina) (own photo)

playing the isolation role only

- **street as public space**: in addition to its trafficrelated role the street should be a space which is attractive for users and provides:
- pedestrian traffic safety limited speed of traffic (diversified street width, road curvature, traffic impediments) and limitation of road traffic with the simultaneous support of pedestrian, bicycle and public transport
- attractive and diversified environment (service and recreation functions located along streets) – wide, well lit pavements with benches, café gardens and street art.
- promoting the importance of a public place space being the natural catalyst of contacts, where all residents can meet enjoying equal rights. The public place equipment should attract groups of users and open a wide spectrum of activities

The central square in the Paderewski Housing Estate is Polish Soldier Square (Plac Żołnierza Polskiego). The square is the venue of parades and laying wreaths on national holidays, but also the place of occasional celebrations or concerts. Usually the

square is the meeting point for youths, parents attending their babies, bikers, skaters and roller skaters. In winter the monument embankment turns into a tobogganists' hill. Two years ago the square underwent thorough refit including flooring, lighting, exchange of landscape architecture and planting of additional trees.

area compacting – "filling-up" corners and development of other areas can favourably isolate the housing estate from external nuisance, provide clear housing estate space division into smaller neighbourhood units, make public spaces more attractive and, in the end, improve its functional structure

The housing estates of "Bay" (Zatoka), "Cyprus Estate" (Cyprysowe Osiedle) and "Recreation Valle" (Rekreacyjna Dolina) and "Three Ponds" (Trzy Stawy), small residential enclaves in the Paderewski Housing Estate exemplify the new manner of compacting big housing estates. Fenced, provided with underground car parks or garages and private internal yards, the above-mentioned housing estates constitute quarters visibly separated from the rest of the Paderewski Housing Estate.



Old and new benches and dustbins (own

photos)

4.4. Architectural factors

· building development improvement

Elimination of architectural barriers -

condition before and after (own photos)

- extension of residential offer in the housing estate
 adjustment of existing flats to satisfy the needs of the elderly and persons working at home
- **elimination of architectural barriers** equal treatment of the needs of the physically disabled, providing the housing estate environment in areas dedicated to the elderly and physically disabled
- supplementary development of individualized forms
- high-quality landscape architecture: roofs over entrances, benches, fences, dustbins etc.
- lighting of passageways, squares, building entrances etc.

4.5. Functional factors

- use of local attractions: waterfronts, public buildings and student campuses as venues improving space attractiveness
- creation of multifunctional spaces replacement of space segregation and division into isolated residential, office, service, commercial, entertainment and recreational enclaves with a multifunctional space offering a rich variety of experiences in one place
- public facility objects in the housing estate: dedicated to education (schools, kindergartens, crèch-

es, housing estate youth clubs) sport, health and social care – building new objects or refurbishing the conditions of those already existing.

Gradual exchange of dustbins (own pho-

Numerous small shops and service stands on the ground floors of buildings in the whole of Paderewski Housing Estate (approximately 240 items)

• local marketplace – the place where social contacts are established naturally and where local economy and health-related activities are promoted (outdoor marketplace, indoor marketplace or the whole area of mixed commercial, service and office function)

The "magnificence" of the housing estate marketplace is a thing of the past. It used to be a busy area vibrating with life, willingly visited by many residents. The high offer and price-related competitiveness of shopping centres newly opened in the neighbourhood have made the marketplace fall into ruin. Presently the marketplace is undergoing liquidation.

4.6. Natural factors

- space for recreation:
- providing the attractiveness of recreational space throughout the year
- flexibility of recreational space arrangement; providing the recreational space with facilities for various social groups,

- clear identity and attractive appearance of recreational space
- home-gardening entrusting part of the housing estate building-side greenery for individual development and care e.g. to the elderly

The only truly nurtured greenery in the housing estate inter-block spaces

environmental improvement of recreational areas
 replacement of impervious surfaces with small-sized blocks



Figure 20.
Primary school (own photo)



Figure 21. Kindergarten and crèche (own photo)



Figure 22. Health Care Centre "Medis" (own photo)



Figure 23.
Small shops and service stands on buildings' ground floors (own photo)



Figure 24. Housing estate marketplace falling into ruin (own photo)



Figure 25. "Lidl" supermarket (own photo)

Before:



Figure 26. Old and new playgrounds (own photos)



Figure 27.
Neglected areas in front of buildings and building-side gardens (own photos)



Figure 28.
Replacement of surface with small-sized blocks (own photos)



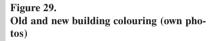




Figure 30.
Asbestos boards before removal and entrance after refit (own photos)



Figure 31.
Balconies before and after the exchange (own photos)

4.7. Technical factors

- improvement of technical and functional conditions of buildings and retail spaces
- refit of buildings/ retail spaces depending on their function, refit of trimming elements and utility systems
- major and current repairs of the individual elements of buildings/ retail spaces

The housing estate buildings are undergoing gradual thermoinsulation. The removal of asbestos boards from façades entails the necessity of exchanging balcony railings and window flashings

• improvement of technical infrastructure – utilities: sewage systems, water, gas and heating piping, electric wiring, telephone and internet cabling, lifts, etc.

4.8. Social factors

- supporting the sense of having a place to call home and making residents feel jointly responsible for their residential environment sense of identification with the place of residence
- building up the sense of security preventing vandalism

It is important to make housing estate residents aware that the modernisation of housing resources is necessary and the costs of its implementation should be borne by the whole society and each resident individually. In bigger towns and cities it is possible to observe a more active approach. Big town/city residents to a greater extent tend to understand the necessity of participating in housing estate modernisation processes but only in relation to precisely defined and notably beneficial activities.

4.9. Economic factors

- costs of regeneration of a given area,
- costs of regenerated area maintenance investment cost-effectiveness

4.10. Legal factors

- · law regulations
- area/building protection forms
- land property structure
- planning documentation records

5. PADEREWSKI HOUSING ESTATE – SUMMARY

The major advantage of residing at the Paderewski Housing Estate is its location close to the city centre. The convenient transport network vicinity of educational, commercial and cultural establishments, as well as considerable greenery (particularly direct neighbourhood of the Valley of Three Ponds make



Figure 32. Valley of Three Ponds (Dolina Trzech Stawów): Sunday barbecue (own photo)



Figure 33.
Beach at one of the ponds (own photo)



Figure 34.
Anglers by the greatest pond (own photo)



Figure 35.
Silesian Library at Council of Europe Square (Plac Rady Europy) (own photo)



Figure 36.
University of Music at Damrota street (own photo)



Figure 37.

Regional Court at Francuska street (own photo)

the housing estate an attractive and resident-friendly residential area.

6. SUMMARY – ISSUES RELATED TO MAJORITY OF HOUSING ESTATES OF THE 70S AND 80S OF THE 20-TH CENTURY

Presently, the greatest challenge of housing estates built in the second half of the 20th century is the **lack** of sufficient number of parking spaces. Cars take over greenery areas turning them into car parks. Lawns destroyed by cars and makeshift-repaired roads full of holes complement the gloomy image of destruction.

Housing estate buildings erected in the 1970s undergo **thermal efficiency improvement** losing the harmful layers of long-fitted asbestos boards and obtaining a new and clear image significantly enhancing the final reception of the whole refit-related assumption. Increasingly common is getting rid of the housing estate's "no-man's land", parcelling it out and entrusting to individual users or local groups of neighbours – in order to involve residents in the care of building surroundings.

Most of large post-war housing estates have areas free from build-up within their borders, such as housing estate parks or reserve land for designed but not erected services and facility buildings. In the light of diminishing land reserves for residential development in big town/city centres such areas are becoming attractive lands for new investments. Relatively small and fenced residential complexes with a common internal green courtyard, underground garages and comfortable parking spaces are an increasingly common view. Such 24-hour monitored residential "ghettos" are popular with developers offering snobbish dwelling in a "fortified" castle. Carefully nurtured greenery, paths, nice benches, no cars parked in front of staircases (due to underground car parks) are unquestionably attractive. Cosy and well-kept interior is supposed to favour neighbour integration, stronger place-related identification and, as a result, trigger the mechanism of looking after the common space like after one's own. This phenomenon is harmless only apparently as the enclaves of prosperity contrast with often neglected and under-funded public areas of "parent" housing estates.

The programme, scale and direction of modernising, restructuring and regenerating housing estates should approach individually defined needs of an individual housing estate located in a specific area,

inhabited by specific residents having certain residential expectations and requirements. Such considerations should be made in order to avoid under- or overinvesting as well as to avoid situations when residents are made "happy" by solutions they do not accept.

Residents are quicker to accept activities markedly improving their residential conditions than those perceived as "neutral" by them such as aesthetics improvements or economic use of the space, e.g. through compacting. It is advisable to present financial advantages of new investments as they often may be used to finance repairs and developments, improve the service offer in the housing estate (which entails the growth of employment near the place of residence) or increase the parking space (underground car parks).

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