# Regeneration in European post-socialist cities

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# Abstract

The aim of this paper is to analyse the problems of post-war Eastern European housing estates in order to set up their long-term stability and generate a better environment. Since the end of World War II, even though the theoretical recipes in architecture and urbanism were the same, two different kinds of modern city were developed across Europe. The differences between the socialist and capitalist economy were as deep as the spatial assets of the cities they produced. After the collapse of socialism, the processes of transformation in Eastern European societies have opened to global influences. Nowadays, the need to regenerate those degraded urban areas is becoming more widespread. To understand the issues related to those districts the paper will start by analysing paradigmatic case studies, in order to present an equivalent reading of Central Western and Eastern European

Keywords: public spaces, landscape, 1950–1960s settlements, post-socialist settlements, retrofit, urban, regeneration recycle, urban renewal.

#### 1 Introduction

The intention of the paper is to provide an overview of the criticism of the postwar Eastern European neighbourhoods [1] in order to set up their long-term stability and generate a better environment in cases that need to be updated.

The studies will describe different perspectives and define the possibilities and recommendations on how to proceed in their public space re-generation.

These neighbourhoods in Central and Eastern Europe represent a significant social phenomenon, seeking answers to the prospect of developing these areas represents one of the most important issues of spatial planning and urban management [2].



Since the end of World War II, Europe has undergone several phases of building and re-construction under the influence of different political systems and, connected to these systems, different ideas concerning the built-up environment and its production. Socialist countries and capitalist states, through architecture and urbanism, constructed the organisation of new social and economic environments and generated new forms of communities and cultural identities.

These specific spatial structures defined from the 1950–1960s to the early 1990s of the last century differs from those of a traditional city in many aspects. In fact, with modernism, the matrix of the compact city has been questioned and the public space in a design of routes and residential blocks that shaped the fabric of the city, generating new hierarchies and urban systems have been proposed. In the majority of cases public spaces represent approximately 2/3 of the total area.

The "Ville Contemporaine", designed by Le Corbusier, was intended to enable an efficient and effective management of road and traffic, with an abundance of green space and sunlight. According to the modernist ideas of progress, the new city would contain prefabricated and identical high-density dwellings, spread across a vast green area and be arranged in a Cartesian grid, in order to allow the city to function as a "living machine".

Moreover, The CIAM Congresses (Congrès Internationaux d'Architecture Moderne) gave the principles of "The Functional City" adopted in the rebuilding of Europe following World War II.

Although formal application to architecture and urbanism was the same, two different kinds of modern city were developed across Europe, at the base of that is the fact that the "Political, economic and social systems based on socialism and capitalism functioned so differently that their spatial products – the socialist and the capitalist city – were autonomous constructs" [3].

Since the fall of the Berlin Wall (1989), the countries in the former Russian Federation have been engaged in a complex transformation process, which has led to a market-oriented economy; from totalitarianism to democracy; from a socialist to a capitalist country: "the processes of transformation in Eastern European societies have opened up the region to global influences" [4].

Recent evidence suggests that this transition process has been painful and, in many aspects, is still not complete [5].

### 2 State of the art

Over the last two decades, post-war housing estates have been affected by changes in demography (population ageing) and social structures. In some regions, post-war housing estates represent places with a high concentration of social problems. Equally, in "richer" regions, such as East Germany, sociological surveys and real estate prices indicate the fact that the more successful and richer part of the population is leaving this typology of housing. However, this change goes on so slowly and inconspicuously that residents and politicians do not pay attention to it [6].

The rapid politico-economic changes are having a strong influence on urban space transformation. The Soviet planning strategy has been completely rejected



under the new neo-liberal policy and market economy, which nevertheless took time to emerge. Originally, the Soviet city system was planned as a closed system that did not take into account transport costs and climate conditions. It has now been transformed into an open one, where cities have to compete for resources both at national and international levels. The changed economy has led to a rapid degradation of the old industrial and mono-functional cities, which were built extensively during the Soviet industrial age [7].

The post-socialist neighbourhoods are a big portion of Eastern European peripheries; nowadays some of them have become even semi-central areas, with lots of weaknesses but also many opportunities.

Considering their functional character, these settlements were conceived in order to "organize the psyche of the masses" [8]. Socialist cities were planned under the socialist logic that formed a specific urban fabric and social structure.

The transformation from a centrally planned to market economy has occurred quite rapidly [2], and today, the organisation of inhabitants no longer considers standardization of the masses but pays attention to human needs. The need to regenerate these degraded urban areas is becoming more widespread and we have a great opportunity to rethink this void left by the modern city.

These urban voids, especially in Eastern countries, are often obsolete, without reference points or public spaces that offer qualified living. Beyond the serious technological problems and weaknesses shown by the buildings themselves, those areas miss many facilities for the inhabitants, as well as aggregation spaces.

To understand the issues related to those districts we propose to analyse paradigmatic case studies in order to have a parallel reading between Central European and East European cities.

#### 2.1 Western cities

# 2.1.1 Bijlmermeer, Amsterdam

Starting from the Western side of Central Europe, the case of Bijlmermeer has been selected, the high-rise district designed in 1965 in Amsterdam's southeast suburbs. The Bijlmermeer was presented as a modern, functional neighbourhood that separated living, work, recreation and transport.

The original design was characterised by large high-rise housing blocks with spacious apartments. Car traffic was elevated above the living area, multi-story garages minimized parking spaces, and with different roads for bikes and pedestrians. In this way, buildings were enclosed by large green spaces. In 1969, just after the completion of the first block in Bijlmermeer, heavy criticism on architecture as massive and monotone emerged. People did not wish to move in as expected, and the demand of the Dutch middleclass for housing indicated a preference for smaller scale housing projects and less uniform neighbourhoods. In the early 1970s when most of the flats were finished, buildings remained almost empty. As a result, due to the lower prices, the area started to attract a large number of immigrants (from Suriname, who were placed there by the Dutch government).

Until the 1980s, the housing units were complete with public facilities such as shops and metro transport. However, the car parks, the interior walkways and the



green public areas were generally felt to be unsafe, particularly at night, due to a high rate of crime and violence.

After years of hesitation, in 1992 the municipality of Amsterdam and the social housing corporations decided for a large-scale renovation operation of the Bijlmermeer area. This plan, combined the renewal of the physical environment, with the socio-economic context and with the renewal of the administration of the area [9]. This was a new, radical, most definitive and non-reversible measure in housing renewal: the demolition old housing stock and the provision of new replacement housing [10]. Bijlmermeer became the largest urban renewal estate in The Netherlands, and its renewal program aims to create more differentiation and improve the quality of life, through socio-economic enhancements, including work, education and training.

By 2009, a total of 7,000 dwellings had been demolished and 4,000 new dwellings had been constructed, and another 800 were under construction. A further 3000 were in the planning phase and two blocks (out of 16) have been renovated. Three kilometres of the elevated roads were lowered to street level; nine car parks were demolished; two new shopping centres were built; and several business units were created. Originally, more than 80 percent of the space was used as a public area. In the renovated areas, including the Bijlmer museum site, this amount has been maintained and improved, while in the newly developed areas this rate has been reduced to 40 percent. There are private gardens and car parking in front of the homes [10]. The main part of the program of reconstruction was planned to finish around the end of 2016.

### 2.1.2 Märkisches-Viertel, Berlin

In Märkisches-Viertel, Berlin, public campaigns led to the formation of an action group, including public officials and politicians, architects, planners and tenants' representatives to renovate and enhance the image of the estate.

The neighbourhood consists of a large housing estate of approximately 17,000 apartments (30,000 inhabitants), with chains of high-rises up to 12 floors built from 1964 to 1974 by the GESOBAU Gesellschaft für sozialen Wohnungsbau (Association for Social Apartment Construction), a company that takes care of the energetic modernization of flats). Located in former West Germany, until 1989, the east side of the district was on the borderline of the Berlin Wall.

The neighbourhood was the most conspicuous result of the West German welfare state's short season during which architecture and social policy were close [11], but in the late 1990s, the term "urban redevelopment" arose.

The significant apartment vacancy rates in the district and depopulation put the area in the same position as other Eastern Germany cities with "shrinking issues" (often solved with a demolition approach, for instance in the city of Leipzig), a problem that could not be solved only by the housing associations.

The Märkisches-Viertel was built in the 1960s as a showcase of modern urban planning, for the 21st century, the district was "getting old" and many private, public buildings and spaces have had to be updated to contemporary standards. Especially the green spaces, paths and parks needed to be retrofitted.

Recently Berlin has focused on the revitalization of sites with economic foundations and the re-development of large housing estates. It started to become involved in "Bund-Länder-Förderprogramm Stadtumbau West" a Federal Government support program for Urban Redevelopment in former West Germany.

Since 2008, a pilot project of the municipality of Berlin for energy-efficient renovation and integrated urban development has begun, thanks to cooperation with the activities of GESOBAU. Places and street spaces in the quarter are revalued, green and open spaces are re-designed for all the inhabitants.

Moreover, an active participation of the inhabitants started. The result has been a series of guidelines and requests: more security in parks and in the city centre, better care of parks and public squares, cleaner public facilities, re-activation and revitalization of the market square as an important institution in the district, good shopping facilities, the re-opening of the cinema Manhattan and of the numerous sports facilities and swimming pool; schools and churches on the square, more bike paths and special features regarding the variety of school and other educational programs.

Dwellers were invited to share with experts and discuss the projects and contribute to their attainment. The requests were summarized in many single programs in order to achieve the requests and make Märkisches a peaceful and friendly community living centre in the future. These can be synthesized:

- Ecological urbanism program: energy renovation of public buildings.
- Education and culture program: the strengthening and expansion of schools, cultural places and implementation of their function for a good neighbourhood. "Climate-friendly schools" should provide an important contribution to the pilot project of the energy-efficient renovation in urban redevelopment to optimize public buildings;
- Sports and exercise program: lots of optimally and attractively laid out sports areas for the general use (Active Sports Forum);
- Public spaces program: playgrounds; paths; green areas should be readily available and attractive for the neighbourhood.

"Urban Redevelopment West" was funded by up to 50 percent by the European Regional Development Fund (ERDF) and 17 percent by a Federal Agency and 33 percent by the State of Berlin.

The aim was to contribute to positive regional development and to create an attractive, vibrant, sustainable and liveable neighbourhood. Even though not all social problems have been solved, the results have brought about an increase in resident satisfaction and life opportunities [11].

#### 2.2 Eastern cities

In Eastern Europe, the debate on how to retrofit and update modern districts, built by the former socialist governments, began only a few years after the fall of the Berlin Wall in 1989. In contrast to the West's approach of demolition and reconstruction in a participated way, we find an "acupuncture" approach and/or attempts of densification inclined to cancel the signs of the past.



#### 2.2.1 Petržalka

In Bratislava, the debate on the future of Petržalka, a residential district located south of the Danube river and adjoining on the west the Austrian border, started early in the 1990s.

Petržalka's current appearance is still similar to the development which was created during the Soviet period, characterized by huge "panel" housing, probably one of the largest extensions of panel building areas at the time. Before Petržalka underwent its transformation, there was only a small village, with a completely different identity.

In 1967, an international competition was announced to collect proposals to build a large neighbourhood on the right bank of the River Danube. Eighty-four groups from 19 different countries entered the competition, it was a very important international event due to the number of projects and of countries involved [12].

At the time Petržalka had around 15,000 inhabitants living in more than 4,100 flats, on one- or two-floor family houses, without even basic hygienic equipment and with a deficient road, gas and public water supply network, and these problems prevailed even after connecting Petržalka to the city centre by a railway bridge.

The general aim of the competition was to explore a new and deeper knowledge of current tendencies in town planning and design, in order to generate a lively environment, also "considering the psychological standpoint, with full, uniform and long termed conditions for a fulfilling life on a high technical and cultural level" [12]. A very important and advanced town planning issue was to prevent the creation of a dormitory city and to provide in the neighbourhood new equipment for the whole Bratislava, making it become a city on the Danube, a district for more than 100 thousand inhabitants.

Petržalka neighbourhood is probably one the most interesting outcomes of the intensive construction phase of concrete-slabs housing estates which occurred in Bratislava over the 1960s and 1970s [12], as a result of the city's fast demographic development which was supported by the regime to host a majority of working class inhabitants in the city's population [13].

The construction was marked by limited financial resources and by the buildings being produced industrially, meaning the standardization of all the buildings. In the mid-1980s, the construction of the housing estate was over. However, the project was not realised in its entirety. The mass housing neighbourhood remained unfinished. The main north—south axis, the centre of the district and the planned facilities were missing.

This central axis has not been realised. It is an empty space without a traffic artery, without the planned metro or tram connections, without services and urban environment. It is used as a natural recreation area around an old meander of the Danube. People have occupied it spontaneously.

This area, has since the 1980s remained the object of a search for a permanent solution, which focuses on land use, development intensification and implementation tools. The concepts have moved through technocratic and commercial projects and are now oriented towards realizations that are more open to the inhabitants' wishes.

The paradox is that the new developments are still being made according to the centralized city Master Plan of Bratislava and follows the visions of those developers more than the visions for a city of the 21st century.

## 2.2.2 Novi Zagreb

In the mid-1960s, the city of Zagreb also needed new spaces for growth and in 1965 the plan for the expansion of the city across the river was completed.

From the Middle Ages onwards, Zagreb had only developed on the left bank of the river, away from the risk of flooding. However, following the urbanization process of the 20th century, the construction began on the south river bank. The first to be established south of the river was the Zagreb Fair, which is one of the city's oldest institutions. The fair became the primary instrument to reinforce Yugoslavia's international role, in the context of Cold War power relations, creating opportunities for the city.

The Zagreb Fair was the focal point for Marshal Tito's efforts to establish a global role for Yugoslavia through the "Non-Aligned Movement" of "block free" states [14].

The fair itself was used many times as an instrument of urbanization and modernization for the city. It was moved five times over a century to locations at the edge of the existing urban fabric. It functioned as a strategic "urban patch" to generate the city around it, making the economic and political weight of the fair increased with each move.

In 1957, Mayor Holjeva engineered the relocation of the fair to the south of the Sava River. This relocation of the fair to the south side of the Sava also opened new terrain for development and expansion of the city. The fair acts as a catalyst for a unique synthesis in Zagreb of the historical city and the innovations showcased at the fairgrounds. New forms of consumption, environmental design, new social spaces and stores. This enabled the municipality to launch the most significant urban project of the socialist period: the planning of "Novi Zagreb", New Zagreb, which was also expected to be the new emblematic cultural centre for the whole city [15].

Thanks to the political opening and economic growth of the country, Zagreb at the end of the sixties had become a European city with a high standard of living and economic prosperity. In this context, it is possible to observe how the ideas of a modernist city, supported by CIAM, slowly give way to the new theories backed by Team X. [16].

Under the direction of a committee of experts the project for Novi Zagreb (New Zagreb) was completed quickly. It involved the construction of a new city to house more than 250,000 inhabitants. Nowadays, it houses approximately 125,000 inhabitants. As with most of the neighbourhoods built at that time, the blocks of flats are made with prefabricated building technology.

The revitalization of Novi Zagreb began in early 2000. In this period, the socialist system came to an end and the transition period to liberal democracy started.

Although numerous projects, such as the Arena Zagreb in the Lanište neighbourhood in Novi Zagreb and the shopping and entertainment complex, are



either completed or still ongoing, an important part of the neighbourhoods in Novi Zagreb is not being cared for.

On the main axis, which connects the new city to the old town, "public functions" are missing, some of the old fair buildings have been destroyed, other pavilions are in decay (or spontaneous activities have started), the whole area is in dire need of regeneration. On those issues, for instance, the Co-operative Urban Planning Approaches (CUPA) project, along with partner cities, organized workshops to discuss specific urban planning problems of this area highlighting the need for improvement. Mainly due the real potential to make the area attractive with a minimum of effort, especially in the open spaces.

The creation of a green leisure and pleasure area by extending Bundek Park on the other side of the road, and creating a green connection to the River Sava could be made. Besides these projects, it would be logical to accompany the development of these green and informal spaces with more sports facilities.

Opposite the fair, on the other side of the main axis, two important generators for urban renewal have started: the American College of Management and Technology (RIT) partnered with the Rochester Institute of Technology, established a new Modern Art Museum in 1997. They follow the original propose of the district by increasing the cultural offerings in this part of the city.

This year, the city of Zagreb has proposed sites along the Sava River, for the "European competition" [17]: the expected result is a representation of possible scenarios of public use of derelict spaces by implementing new activities, accessible to the public, while avoiding aggressive and permanent interventions in space.

# 3 Conclusions

This research sought to answer how to update those 1960s Post-Socialist neighbourhoods according to a method and sustainability principles, by rethinking human settlements. As formulated by the Athens Charter, the concept of eastern housing estates was characterized by an ideal of healthy living among greenery, the separation of manufacturing, residential and transport functions, as well as the desire for the most effective realization for the construction process [18].

After the collapse of socialism and the decline of the formerly centrally controlled regulatory mechanisms, the cities of Eastern Europe were faced with a radical change in their development. The eastern region entered a transition period marked by increasing differences among the newly established independent states. The western part has gradually stabilized, but the central and eastern parts are stagnating and even retrogressing economically [19].

After years "The process of transformation in Eastern European societies has opened up the region to global influences" [4].

Since the beginning of this process, we have noticed how eastern countries are inclined to lose part of their identity, in particular, historical memories and material remnants of their communist-socialist regimes, and remain difficult to address and incorporate into the new democratic present [20]. The focus has shifted to the new historical period.



The regeneration processes, currently underway, are responsible for the loss of the neighbourhoods' identity; we assist moreover to an "acupuncture" approach and/or on attempts of densification.

At this point, the question arises: how do we activate policies of regeneration in the post-socialist cities? What models should we follow?

Furthermore, ought we to apply the Western cities' experiences or do we have the opportunity to build new models?

This research proposes to identify a regeneration model specific for neighbourhoods that have been inherited from a socialist past, with a particular focus on the themes, open space and green areas for the public.

Some points on the methodology are described below:

- 1. The activation of processes to encourage residents' participation in the regeneration processes of the public spaces of socialist residential neighbourhoods (socialist housing estates). Through direct participation in the planning and creation of the public spaces, residents will strengthen their feeling of belonging in the neighbourhood, building together with this new image a new identity, which may be similar or alternative to that of the original project.
- 2. The activation of ecological functions when transforming green areas. Most of the open areas and green spaces found in these large residential areas have scarce ecological value and a low biodiversity level. These spaces should be given a high ecological level by interventions with the aim of improving the water cycle; strengthening with reforestation policies, the capacity to absorb CO<sub>2</sub>; improving its microclimatic performance and increasing biodiversity.
- 3. *The creation of social gardens for residents.* The abundance of open spaces belonging to the public poses problems of management and effective use. The frequently observed practice of spontaneous occupation of public land in these lower income neighbourhoods that were conceived on the principles of rationalism, suggest the advisability of setting aside portions of this open space for the formation of gardens where residents can create gardens and produce their own food. This choice, aside from reducing management costs of the public spaces, creates a new sense of community.
- 4. The incentivizing of new commercial activities and services on the ground floors of the buildings that face the main open spaces with potential to be central to the neighbourhood. The animation of public spaces is a fundamental requirement for quality of life in residential areas. In many public venues in socialist cities it has been noted that the superabundance of publicly owned spaces and their low rate of use has brought about an impoverishment of social life. Support programs in the start-up phase for commercial activities in the proximity of spaces with potential as spaces for socializing could for example be lower tax rates, as in the case of the interventions promoted by the EU in the programs Urban and Urban II.
- 5. Hierarchize the system of open spaces and of their crossing points. The design of the system of open spaces in large residential neighbourhoods was fundamentally non-hierarchical creating a space that was substantially



undifferentiated. The absence of spatial hierarchy is considered one of the reasons for the failure of the socialist residential neighbourhood model, so introducing hierarchisation criteria and the improved structuring of the open spaces that would follow, could lead to a significant improvement in the way the inhabitants appropriate their space.

Starting with these points, the research will develop a set of guidelines to build and reinvent public spaces, as a main quality of life generator that can become a new paradigm for contemporary Eastern European districts determined on implementing green strategies.

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