

DEFINING LANDSCAPE STRATEGIES FOR EASTERN EUROPEAN HOUSING NEIGHBORHOODS

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ABSTRACT

With the collapse of socialism and opening to the globalization, Eastern Europe has turned to the new cycle of its economic and social development.

This phenomenon has provoked the new urban dynamics and changes in which so called “socialist” large housing neighborhoods have lost any kind of attraction for the private investments. The reduction of the capital and the lack of the more sustainable development strategies has triggered a process of urban degradation in the peripheral parts of the city composed of large monofunctional housing areas.

This research is aimed to explore the main characteristics of this environment, mostly built in the 50s and the 60s, to understand better the consequences of its recent urban changes.

The late 80s and the 90s are the crucial decades characterized by political and economic transitions: from a central planned economic system of socialism to the market economy of capitalism. This changing phenomenon, usually named “turbo capitalism”, has produced the specific landscape of post-socialist city.

Starting with the case-studies selection, mostly based on historical facts and on socio-economical state of art, the research will confront housing regeneration projects in Europe. The results of this identification will be the guidelines of intervention for the urban landscape retrofitting for Eastern European housing neighbourhoods based on best-practice comparison. And above all, the main aim of this general survey is to start design “know-how” cross-border transfer process.

This “post-socialist” environments should be redesigned combining the traditional public space concepts with the new landscape principles based on sustainability. Therefore, in conclusion will be proposed some regenerative scenarios, based on ecology strategies

and participation, in order to create the new paradigms that could (re)built and reinvent the modern eastern settlements through the implementation of landscape as a strategy that could improve the quality living standards of its inhabitants.

KEYWORDS: Urban Regeneration, Landscape, Open Spaces, Post-Socialist, Retrofitting, Public Spaces, Housing Neighbourhoods

THE POST-SOCIALIST CITY: OPENING TO GLOBAL INFLUENCES

Since the end of the Second World War, Europe has undergone various phases of construction and reconstruction under the influence of different political systems and, in connection with these regimes, different ways of conceiving the built environment have been developed.

On one side the socialist countries, and on the other the capitalist states, through architecture and urban planning they organized both built and social spaces generating new forms of community and cultural identities.

From the 50s to the 60s and till the early 90s of the last century, specific spatial structures were defined that differed from the traditional city in many aspects. In fact, with the advent of the modern movement, the compact city matrix has been questioned: urban systems capable of generating new hierarchies of open spaces in a project of paths and residential blocks formed by isolated buildings have been proposed. In most cases the open spaces represent about 2/3 of the total area. At the same time, modernist ideas have also influenced the construction methods, the new city would consist of identical prefabricated high-density dwellings, spread over a vast territory and arranged in a Cartesian grid in order to allow the city to function as a “living machine” (Mumford, 2000).

Sonia A. Hirt (2012), states that, although formal applications in architecture and urban planning were the same throughout Europe, two different types of modern cities were developed. This differentiation is given by the fact that “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” (Hirt, 2012).

In the socialist countries, the urban solutions are found in the Marxist ideas of executive power deriving from a planned economy. The socialist principles of organizing the housing have been inspired by ideas of reconstructing the social network, starting from the family relationships, towards a total women emancipation, consequently to a high request of new houses for the inhabitants; this was done through a strict control of urbanization from the government (Bater, 1983).



Figure 1: Petržalka Landscape, Bratislava 2016 (photo: Nicola Petaccia)

THE POST-SOCIALIST LANDSCAPE

Despite the lack of “public space” definition in the Eastern Bloc literature, the problem of what we mean by public spaces and demand by the planning practices, was widely observed by experts and scholars. There were concepts of recreation, community centres, administrative and public areas, green, green belt, zone of public service, material and spatial patterns of social organization, etc. regarding to the given term. Often, these definitions and their meanings were not considered aggregately (Kadyrov ,2013).

The concept of urban landscape can be viewed as a synonym. “It stresses, though, a more comprehensive and holistic view on the open spaces and points to the structuring of the city. Intrinsically the urban landscape contains urban open spaces. In both cases the landscape is planned, designed or shaped to convey human intention and it is affected by the social, physical and natural context in which it is embedded” (Web-1)

This landscape is currently in a state of crisis, this also because of the gradually fragmentation and privatization; worsening the fruition and environmental conditions; damaging the identifying characteristics; denying the systemic nature and it is being owned by all; leading to the abandonment and degradation (Giordano, 2015).

This specific urban landscape gradually increased from the centre of the collective life to an urban void. After 1989, with the fall of the Berlin wall, the countries of the former Soviet Union were engaged in a complex transformation: from the planned economy to the free market, from totalitarian to democratic regimes, from the socialist country to the capitalist one.

The transition to democratic societies based on free markets in Central and Eastern Europe has therefore initiated a restructuring of the stagnant economies of the former socialist countries by opening these queens to global influences (Brade et al., 2006).

K. Stanilov (2007) pointed out that since the 1990s the some trends in the evolution of the cities of Central and Eastern Europe that have emerged have consolidated over time, others have been eclipsed as temporary episodes of the turbulent during early years of the transition period. This can be defined as a paradigmatic period of changes that have affected post-socialist cities, the main issues of urban transformation have been established by neoliberal reforms.



Figure 2: Parking and open space in Petržalka neighborhoods, Bratislava 2016 (photo: Nicola Petaccia)

Even today, the economic and social transition, in many respects, is not yet complete (Malle 2013) and looking for answers to the prospects for the development of the landscape and public spaces is one of the most important issues that Eastern European cities find to deal with (Andrusz et al., 1996). The eco-political changes in recent decades are having an impact on post-socialist residential neighbourhoods built in the post-war period with demographic changes (aging of the population), social problems, environmental issues and physical degradation of spaces (Petaccia, 2019).

Those spaces, which have been developed and modified over time, have suffered during the transition period and are still waiting to acquire new meaning.

If, until the fall of socialist governments, the maintenance of open spaces within residential neighbourhoods was managed by central administration, today their preservation depends on new phenomena, almost always coming from outside. At the same time the large scale of the new settlements contributes to favouring a landscape image with vast green areas, huge open spaces, wide streets, imagined as “perfect” public spaces for the new cities, which we cannot but still recognize as marginal urban spaces lacking a specific identity.

Paradigmatic can be defined the case of Petržalka neighbourhood in Bratislava. Here majority of the inhabitants negatively rate public spaces, playgrounds and fields. The only positively rated thing is dimension of public spaces.

From a survey on site, majority of recipients perceived the lack of social contacts, playgrounds and recreation areas as the greatest problem of the housing estate. The most positive things are greenery, peace and quiet.

The neighbourhoods remain without any renovations, the panel houses and the public spaces are in decline, the original inhabitants are moved out of the worst affected areas of Petržalka and new problematic, economically weak inhabitants will move in.

Some particular housing blocks are renewed, but the public space and the infrastructure remain without investments. The middle classes are leaving. Old people and economically weak inhabitants will remain. The new immigrants will be of low income and not identified with the place. The danger of decline of the whole estate is still relevant.

The public space and the active participation of the inhabitants in this scenario become a paradigm for rethinking the landscape. This improvement can only take place through the redesign of the built environment and infrastructures, through ecological interventions or participatory projects, able to involve the inhabitants within the regeneration process. In this sense, also public spaces become essential to activate processes of sustainability and urban regeneration, also from the point of view of strengthening biodiversity (Banerjee, 2001).

The dominant tendency, however, is pushed towards contraction rather than the expansion of the public sphere and the different processes of privatization increasingly displace new urbanizations from “socialist” thought.

LANDSCAPE STRATEGIES

In the hypotheses of the re-use of this “contemporary landscape” on one hand it becomes necessary the regeneration of the physical spaces and on the one hand become fundamental the “re-conquest” of the central role of the public uses of those spaces.

In this shared city scenario unused and residual spaces, which have now become marginal and obsolete, can be returned to citizens, who can regain it within a global landscape reform.

The public space in this case will become the space of the new community that acts both on a local scale and on the scale of the entire city, where recycling and reuse strategies can be adopted in a spatial, social and collective sense. A reflection therefore arises from the opportunity to rethink this landscape through a regeneration project: the human scale also returns to the fore in the design of open spaces, through an approach oriented to the quality of the places and the well-being of the inhabitants, rethought both through individual practices that through community practices.

Participation-actions

As in the case of City Acupuncture, an international project that involve Macedonia, Serbia, Bosnia and Croatia (a project financed by the European Commission and active from 2011 to 2014) the “urban acupuncture” has been the ground of the requalification program, also through numerous field studies carried out mainly in the cities of Skopje, Belgrade, Sarajevo and Zagreb.

This intervention method, based on ‘small actions’ with great impact, began in the 1990s, on the basis of the Catalan experience of urban acupuncture, introduced for the first time by Manuel de Sola Morales in relation to the redevelopment of the public spaces of the pre-Olympic Barcelona (Cerviere, 2015).

Since the beginning of the 2000s many urban acupuncture projects, also considered as “pop-ups or micro-interventions”, have in fact begun to prosper also in the United States and Europe. Since urban acupuncture is a process of ‘co-creation’, which starts from the bottom, in some cases it has had the ability to strengthen very small local communities, becoming an opportunity for the co-production of public space, based on direct participation of the inhabitants.

Some of these projects are carried out in Novi Zagreb (Covic, 2019), where the aim of this actions is to improve life in the neighbourhood by small scale intervention. In this analysed case study

the Co-operative Urban Planning Approaches (CUPA) project, with partner cities, organized workshops to discuss specific urban planning problems of specific areas, highlighting the need of improvement, because of the real potential, especially in the open spaces, to make the areas attractive with a minimum of effort. In July 2013, the sixth workshop by the CUPA took place in Zagreb and was concentrated on the Zagreb Fair area (Web-2). The workshop concerned about the development and management to transform the Zagreb Fair into a modern Fair quarter. Therefore, participants were encouraged to identify different aspects of involving stakeholders and to suggest possible spatial proposals for the introduction of additional or new functions that could easily be combined with the fairground function.

Another interesting research project is “Urban Pocket: reclaiming the public in left-over open spaces”, (Web-3) a study based on the program launched by Urbego in 2015 in the Balkan cities, with the aim of developing a co-planning strategy for the recovery of public spaces in different cities of the world. In the program, Urbego operates simultaneously at different scales: at the local level, involving the communities of residents and helping them to take control of the neighbouring open spaces; at a global level, providing a platform to share and transfer knowledge and skills on the one hand, and acting as an intermediary between small international organizations and financiers on the other. Urban Pockets acts on a micro scale in places such as courtyards, neglected common areas, parking lots, or wherever the lack of resources or interests has produced unused open spaces. Rather than replicating a fixed set of spatial solutions, it provides a methodology for implementing “site specific” interventions, with experts active in helping local communities both in the design of spaces, and in the financing and management of their projects. An extensive micro-intervention program that not only offers an economically effective strategy for defining and maintaining open community spaces, but represents, thanks to its co-participatory approach, an effective way to deal with many problems of urban life, such as isolation or social exclusion. The first phase of the program saw Urbego interacting with partners and local communities in different cities of the Balkans, in the construction of the first community playground, so it continued the experiment in Tirana in 2015, involving numerous actors in the entire redevelopment process neighborhoods.

A similar approach can be found in “Play the City”, an association based in Amsterdam and Istanbul, which aims to accelerate processes of participation, regulate urban projects in administration and design,

resolve 'contentions' (where they are identified) and finally help connect to communities through their Metho City Gaming (Play the city, gaming method, (Web-4) Here the intent is to produce a new urban space through simulation games in which real and active actors, both public and private, participate.



Figure 3: commercial grafts at ground floor in the Novi Zagreb neighborhoods, Zagreb 2017 (photo: Nicola Petaccia)

The game, capable of simulating responses to complex urban and regional questions, becomes an important means of communication between the different actors, despite the different interests and programs. As evidence of the fact that this approach can become effective and produce collaborative methods also in Eastern countries, the experience made again in Tirana in 2012 can be considered significant.

Eco-actions

Beyond citizen re-appropriation aspects this scenario intends to address also the issue of the relationship between the city and the natural processes from a perspective of development and sustainable urban environment by proposing a new approach to the topic of open spaces and green spaces through the urban ecology. This has an impact on territories and legitimates the concept of design through a

green networks system juxtaposed to the city infrastructure (Ferriolo, 2002).

The ecological paradigm in an urban environment is transformed in a vision of open spaces, as part of a territory waiting for its renovation. As observed in the post-socialist neighbourhoods, the ecological processes are often interrupted by urban development.

An ecological approach aims to create a new network of healthy and attractive upgraded city environment, sustainable routes and spaces (Armour et al., 2014). This tactic is used to achieve several objectives: the ecology infrastructure secure a better quality of life and human well-being, for instance by providing a high quality environment in which to live and work, improve biodiversity by reconnecting isolated nature areas and guarantee a protection against climate change. Regarding eastern cities integrated approaches, it will also limit the space utilized becoming an efficient way of urban regeneration.

Again referring to the case mentioned above in Bratislava, the actual researches for renewal on the Petržalka site are concentrating on one hand to the larger scale development with a redesign of the main axes, and in the other hand are done mostly in the portion of the spatial structure, through the variability of forms of construction and perception of public spaces, looking for an effort for a clear definition of hierarchy of spaces and completion of mass housing structure.

On a territory scale, it is possible to observe an attention to the Danube river, and its surrounding landscape that include also part of Petržalka.

Over the centuries the river Danube near the area of Petržalka suffered from many modifications. In the XIX century Petržalka was an island surrounded by the channels and periodically flooded, causing damages to house and crops of the inhabitants. At the end of 1800 the local authorities decided to modify the course of the river, and then in the 1950s the channels were completely drained but a lot of flooding problems arose, due to the lack of channels which should have canalized the water into different directions. Therefore, local authorities are currently thinking to face this phenomenon by creating again a net of canalizations and waterways which could go across the area and link the riverfront of the old city to the water basin in the south of Petržalka. (Petaccia, 2010)

The outflow project has been carried out by the University of Technology of Bratislava together with the University of technology of Vienna in 2005. The project, named Bajoproject, had several different goals: renewing the relations between the neighbouring northern

boroughs of Bratislava across the Morava River with municipalities in Austria; enhancing cross-border mobility through the development of urban and transport infrastructure in the direction of Devínska Nová Ves – Marchegg– Gänserndorf.

The Interreg KOBRA 2010 project aimed to the same direction. This program is a part of a series of Implementation Labs called Cooperative Urban Planning Approaches (CUPA). Together with other partner cities, Bratislava organized a series of workshops to discuss specific urban planning problems. These workshops intend to provide participants with an opportunity to analyze these problems in a structured manner and to develop appropriate solutions. The methodology and structure to be used is derived from the INTERREG IIIc project MILUnet (Multifunctional and Intensive Land Use Network) (Web-5). The main idea is to restore former parts of Danube inland delta on the right bank of the river, in the border region to Austria and Hungary. According to the program outcome, this will become an opportunity to increase the urbanization of agricultural land, and to be effective against flood. This project gives to the whole city a great potential to develop on the waterfront.



Figure 4: Ecological potential and temporary sports facilities in Petržalka, Bratislava 2016. (photo: Nicola Petaccia)

In this study, the green network deals with the neighbourhoods' green systems of open spaces. The green system will act as "a complex network in which the green penetrates the urban fabric, as ecological regeneration tissue and improvement of sanitary and hygienic conditions of the urban ecosystem, helping the new urban design forms, organizing and activating connection between its parts. A green network that takes the form of an infrastructure that, like the other, performs specific functions plays an important role in the urban structure. Today,

the city communicates less with the river. The project wants to bring back the phenomenon of river arms, river island and wetlands back to the area on the right bank of the river Danube (Web-5). A continuous organic framework, that invest different scales from the geographical, the urban, until the settlements. In this network are considered the river courses, the forest, and the line of tree, organizing a wide range of morphology: From the wild landscapes that of formal gardens, the gardens to wooded areas to lakes and greenways” (Angrilli, 2002).

The great open spaces of the socialist city offer the opportunity to think and re-think the ecological functions according to specific application scenarios. Currently this landscape is often inadequate for water disposal infrastructure. For instance, can be introduced particular “rain gardens”, which are as slight depressions of the ground covered in green similar to the flowerbeds, are used to manage and control large amounts of rain water coming mainly from the roofs of buildings, from roadways and large paved areas.

The “storm water features” are infrastructures designed to integrate the environmental urban drain water with the public space design. It can assume several shapes and different purposes.

This kind of infrastructure is used to accumulate the overflow water, the water is canalized in order to reduce the floods; the accumulated water is then kept and absorb then the water is filtered to remove deposits through the infrastructures that eliminate the sedimentation; later the pollution is removed with the aid of herbal extraction properties to achieve the bio purification; the percolation and infiltration are used then to give the water back to the soil, restoring a high level of permeability. An “stormwater ecomanagement strategy” it is therefore given implementing and integrating as much as possible the design of open spaces with the ecological infrastructure. (Corfone, 2012).

Also, wetlands are an important source of diverse benefits for people, contributing provisioning, regulating, habitat, and cultural services. Critical regulating services include water-quality improvement, flood abatement and carbon management, while key habitat services are provided by wetland biodiversity (Clarkson et al., 2013). Wetlands are among the world’s most productive and valuable ecosystems. They provide a wide range of economic, social, environmental and cultural benefits – in recent times classified as ecosystem services (Costanza et al., 1997).

A best practice can be traced in Bucarest, Romania. Văcărești now considered one of Romania’s most varied ecosystems (Web-6) is

an incomplete portion of urban water infrastructure forgotten since 1989, currently has been retrieved by nature and fauna without any human interference. This district of Bucharest was built following the collectivist principles of the socialist party with massive and monumental architectures such as the Ministry of Justice and Supreme Court, additionally it was planned an artificial lake part of an impressive strategy of hydrological infrastructure between the city and the Danube river. Those plans haven't been completed and Văcărești become an empty lake, with high banks that hide it from the socialist neighbourhood and the city. Till recent times this area has been regretted, and a varied of vegetation and wildlife is established, recently the wetland has attracted public institutions and private investors for its extraordinary ecosystem.

Nowadays, after 27 years, the area has been transformed in "protected nature park", with the dam around the lake has a natural barrier from the city's interference. And the layer of mud at the bottom of the lake means that it is connected to one of Bucharest's five main aquifers, providing fresh water that you can actually drink. Currently, "It looks wild and vividly green, contrasting starkly with the surrounding city that is grey and mineral" (Web-6).

Most of urban environments could be identified with climate conditions that cause high levels of heat stress in the warmer periods of the year and vice versa. Therefore, in this situation the use of the exceptional green open spaces of the socialist city to moderate the climate might give an opportunity to expand its benefits to the entire city. Urban green, with its enriched and restored vegetation, is an essential element in urban climate planning (Potchte et al., 2013).

"Green areas in cities are capable of modifying all thermal parameters. Vegetation management – especially urban forestry – contributes significantly to the mitigation of the urban heat island via evapotranspiration" (Takács et al., 2016).

In a pretty similar way, the city of Lubiana has been embracing/introducing policies and documents to improve the resilience of urban ecosystems to the global warming and to the constantly increasing development.

Its main spatial effort are focused to the revitalisation and refurbishment of existing built areas, and safeguard of natural areas (Jazbinšek, 2014). The city's Urban Masterplan 83% of all future urban development is directed towards the regeneration of compromised areas and brown fields (Web-7).

In the last couple of years, the municipality has created 80 hectares of new parks on formerly abandoned areas such as overgrown riverbanks and vacant industrial areas in 2010 approximately 1400 ha has been declared as “special-purpose forest” (Web-8).

The city’s strategic plan is to purchase these areas (mostly private properties) and guarantee long term protection.

The main goal is to reduce the impact of urbanisation on global warming and in general on climate change. The spatial plan recommends the reduction of emissions of greenhouse gases emitted from buildings and produced by traffic, measures and actions for energy-saving building activities, and decrease of the heat island effect by protecting non-built-up areas along the main wind corridors.

The spatial plan proposes the reduction of emissions of greenhouse gases from buildings and traffic, initiatives for energy-saving building activities, and reduction of the heat island effect by preserving non-built-up areas in prevailing wind corridors, conservation of green wedges and sustainable management of urban forests. As a source of cool air during the summer period and as a carbon dioxide absorbing sink, forests have a strong impact on the urban climate.

Due to the multipurpose use of green areas within an urban environment, such as sport, climatic and ecological benefits, the notion of multi-functionality becomes an important consideration in the process of planning and managing of the city.

We have to add also that Ljubljana’s Environmental Protection Program 2014–2020 (Jazbinšek, 2014) takes in consideration also the biodiversity as one of the primary planning concepts involving preservation and improvement of the existing conditions of biodiversity. Therefore, the main strategic objective of the municipality has been to establish an interconnected network of high-quality common spaces integrated respecting the cultural heritage, natural resources, and the built environment in general.

TOWARD THE NEW URBAN QUALITIES

Without appropriate hints for new housing spatial regeneration policies, no concept of sustainable development can be successful in ex-socialist cities/territories around Europe. In this regard, housing neighbourhood or housing project, in general, is one of the rarely discussed aspects of sustainability. Maybe this might be better clarified if we take into consideration that in housing research economic and social aspects have taken priority over spatial and environmental aspects.

Housing has to become the focal element of sustainable development, not only due to the fact that it is the major expansion of the urban area but also because through decades it has firmly structured the main urban areas in the former socialist countries.

The suburban socialist housing neighbourhoods are still considered among the most successful models of socialist planning, where the extension of urban green spaces and the design of public spaces act as a binder and characterizing element of these areas. Today this post-socialist space of the socialist city is an inherent part of urban heritage, it's not abandoned, and it's not left, it's simply vacant "green space", waiting there to be reprogrammed and reused with some other purposes.

In the last decade, due to the global crisis, ecological and financial, the architectural, and in particular, urban design paradigm has shifted from construction to the regeneration and the strategic focus has been given mostly to the small-scale projects and to the landscape as an ecological whole. This, historically exceptional situation, has awakened socio-political consciousness which has brought design and planning closer to the inhabitants and to the "everyday" problems.

Specifically, in the case of socialist cities, this ongoing process of the restructuring of the built environment with the underlying processes and forces of design paradigm changes, have produced some very interesting and specific, even paradoxical phenomena of urban and architectural retrofitting.

Previously discussed projects show how the regeneration of public spaces through the participatory processes can promote the spread of a new urban quality. In the vast open spaces of the post-socialist city, the new 'model' based on the recycling of public space can be considered as paradigm for the transformation of the urban environmental, and of the socio-economical life quality. In fact, in these places the landscape seems to be the perfect terrain on which to "experiment" the new regeneration hypotheses, thought of as both long-term and short-term strategies.

These processes, as mentioned above, include not only the regeneration of degraded or disused open spaces but also the design and construction of new public places, such as community gardens or urban farming, even in deteriorated or interstitial places, built with or without the consent of the authorities. This leads to the assertion that in the post-socialist cities the time factor has played and continues to play an important role, based on long- and short-term actions, in relation to the physical, social and infrastructural deterioration of the settlements.

Also, the idea of addressing green infrastructure into a more influential role of the city is a good opportunity to affect the structure and design of the new urban environment. Due to their capability to provide considerable new opportunities, these green ecology elements might have also important strategic relevance: triggering the process of green and circular economy, changing the quality of life, safeguarding biodiversity.

Foremost as spatial structure, green infrastructure is able to afford also benefits from nature to people, aiming to improve precious ecological production of clean air or water. These newly regenerated eco-structures, with its ecosystems, can reduce disaster risks, enhance water purification and air quality, and at the same time, they can provide the space for recreation and for climate change mitigation.

All, here discussed, good practices in the Eastern European countries show that there might be some new energies to create the new urban opportunities, and to go beyond the present impasse and find new design-tools for socially and economical sustainable urban development. To improve and to assure long term sustainability then even the recent lessons of irregularities, deviations and flexibility of urban planning should be transposed and integrated into strategies that will infuse new vitality in development of the post-socialist city and its environment. However, a great deal of political decisiveness of both municipality and citizens themselves is needed to put these ideas into operation.

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