Revitalization of Degraded Urban Space of the Town in the Context of Biologically Active Space – the Architect's Points of View

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(Received in January, 2018; Accepted in April, 2018; Available Online from 8th of May, 2018)

Abstract

Greenery is an important element of urban content. Its importance was noticed and taken into account during the implementation of many urban revitalization projects around the world. The revitalization of degraded areas through the revival of their by greenery is not only consistent with the policy of sustainable development, but is a contribution to the revival of public space, thus raising its value on the socio-economic level.

Urban areas are degraded mainly due to the natural effect of industrial restructuring in all countries. Economic transformations have left the European countries with a heavy burden of degraded areas and with the weakened market capacity to 'recycle' them and use them for other purposes. Revitalization of these areas is important for local development, but also refers to social and environmental issues, especially in regions with high unemployment rates. This situation is a serious problem that affects the competitiveness of cities. Degraded areas have not only a negative impact on the image of a given space, but also become a good place for the development of negative social phenomena, in extreme cases even criminogenic. The balance of a complex, multi-layered system that is public space is shaken in such circumstances.

Through skillfully conducted comprehensive analyzes, architects acquire knowledge allowing them to propose a revitalization project that, by showing the values of a given place, is able to convince the investor to become interested in a given space and to heal the urban tissue.

Investors should be offered a solution that reconciles their requirements with the needs of the local community. The solution corresponds with the whole urban layout, smoothly cooperating with it and fits into the socio-historical-cultural context. New urban quality should be proposed as a response to the existing situation.

In the case of revitalization with greenery, a large part of the concepts presented by architects has a significant impact on changing the perception of a certain urban space, its character and quality of life of people living in the area. Most often in cases of post-industrial areas, they change their character significantly through the introduction of greenery and enter into a dialogue with the past of the place.

The very attempt to define, let alone create ideal living conditions, is not an easy task. Such a place should provide not only safe and comfortable living conditions, but also create a common space, allowing for the creation and strengthening of social ties, conducive to the emergence of a sense of local identity, but also friendly to outsiders. The city, which is revitalized with green areas, is able to approach the above-mentioned ideals due to the softening value of greenery and the possibility of creating zones affecting positively the well-being of people and the socialization of residents.

The following study contains examples of various attempts to heal degraded spaces, using the resources of green areas.

Key words: *transformation, revitalization of the degraded urban spaces, biologically active space.*

Introduction

The aim of the study is to create a picture of less known "good practice" for the future revitalization of the town's degraded urban spaces in the context of biologically active spaces. The source of this examples is unique, and shows the most characteristic, thoughtful and mature realizations in the scope of the discussed topic, constituting in the author's opinion the model responses to the presented problematic.

For the easy understanding of the research method, description has been attached by graphic material, whose job it is to bring shown assumptions.

In the final section there was drawn up a description of the architectural-urban solutions adopted and summary of the basic parameters of the presented objects.

Development completed the presentation of its conclusions.

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Methods of research

The main objective of the study is to give new thought-out and prosperous functions town in the context of biologically active space.

Presentation moves both functional aspects as well as the form and new function mixed out with construction. Connection of the three factors and makes them the symphony of the good solutions is the main goal of the study.

Study was to:

- creating a set of the good practices coherent interior of the degraded city spaces,
- attractive and revive both the development area and surrounding tissue,
- break with the old image of the area, while respect for existing surrounding,
- remind to the citizens about the aesthetic and cultural qualities of the new design space,
- continuation of the garden city ideas,
- to add the areas of the city's degraded spaces to the cultural zone, make full use of its attractiveness.

These activities are to make that a site will be attractive, to increase its value and importance in the scale of the city. This will also changes the quality of resident's lives.

Results

In a sense the legal aspect to the limitation of the revitalization of the activities is lack of money for their adaptation to the new features, and, perhaps above all, a lack of vision. The size and location of the objects are often limitation in the actions of future investors or developers. Trying to interested potential investors in the capabilities of this type areas and encourage them to similar initiatives arose from my participation some interesting suggestions for revitalizing objects in this category. Here is presented a short presentation of these studies.

Location. ***General characteristics of the examples*****.** The projects described in this study come from Central and Western Europe. They are located randomly – Hungary, Italy, Denmark and the Netherlands in terms of geography, but they deal with problems well recognized in Europe. Each time describes a specific situation of postindustrial adaptation, degraded space for new functions in which the biologically active surface factor is a priority.

Natural conditions and unique richness of the post-industrial heritage and history of the town and the region, every time constitute a huge opportunity to the development of higher condition of citizens life in the city and surrounding area.

Attractiveness of the example's cities and the surrounding their areas for visitors is owed to objects of high class solutions and wealth of natural areas.

The concepts. ***Characteristics of the realizations.*** This chapter presents selected realizations of urban space management as a study of niche solutions implemented in architectural concepts. The short description describes the basic parameters of the objects, such as the time of creation, authorship, location and basic problems and design assumptions.

Parco Dora, Turin, Italy. Author: Latz & Partners.

In the post-industrial areas, a park was created as part of the revitalization program of the post-industrial areas of Turin (Fig. 1.). It is part of the axis known as "spina" (spine). Parco Dora refers to her industrial heritage by redefining the understanding of internal city landscapes. The park consists of five separate zones, three of which draw their names after the enterprises that once operated in this area: Vitali, Michelin and Valdocco. Examples of urban interiors after giving them new functions using greenery are presented below (Fig. 1–3.).

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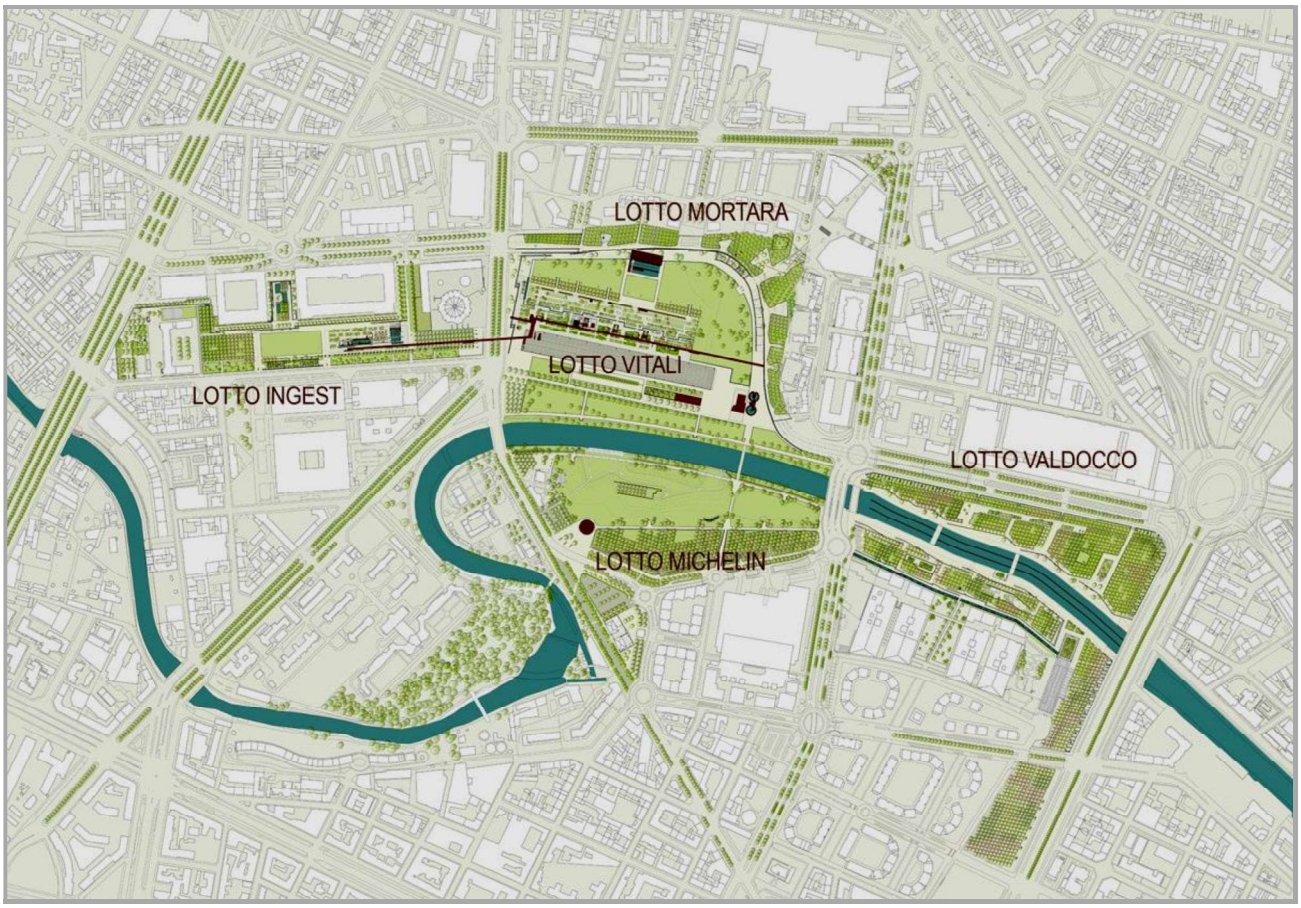

Fig. 1. The general master plan of the revitalization Parco Dora, Turin (TURI, n.d.)

Fig. 2. The general view on the main line of the Lotto Vitali (photo by author)

Fig.3. The general view on the main line of the Lotto Ingest (photo by author)

Zsolnay Factory, Pécs, Hungary. A project by MCXVI Architects.

The presented form includes a slightly smaller scale object. The effect of revitalization was in this case an attempt to create a cultural district in the historic Zsolnay Factory in Pecs (Fig. 4.). This factory played an important role in the development and history of the city, which is why it is an important object in its identity. Historical buildings have been assigned various new functions, not only cultural-museum but also residential. The complex includes: a library and knowledge center of the South Donau region, exhibition venues, academic buildings and a "creative district". The historical context of the place plays the main role in the project (Fig. 5.).

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Fig. 4. The general master plan of the revitalization (The Rehabilitation…, 2011)

Fig. 5. The view of the University's courtyard (photo by author)

Strijp S, Eindhoven, Netherlands. Author: Carve Landscape Architecture Piet Oudolf.

Occupying 27 ha former "Philips" Factory complex in Eindhoven, it houses a lot of massive post-industrial buildings, it has been transformed into a living and working environment (Fig. 6.). A hallmark of the entire system and at the same time a tribute to the past is the pipeline system connecting buildings at a certain height, it was left and made a characteristic element (Fig. 7.). A wide communication route, diversified with greenery called leidingstadt (street of pipes), is under it, it serves as a landmark and meeting place (Fig. 8–9.).

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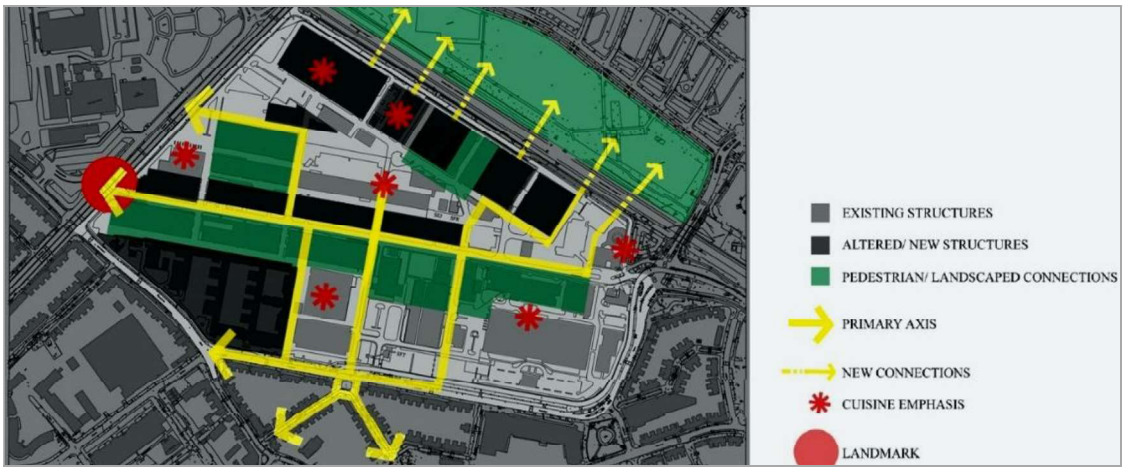

Fig.6. The plan of the revitalization – analysis (Eindhoven Strijp-S, 2006)

Fig.7. The master plan of the revitalization (Triangle Strijp S, 2012)

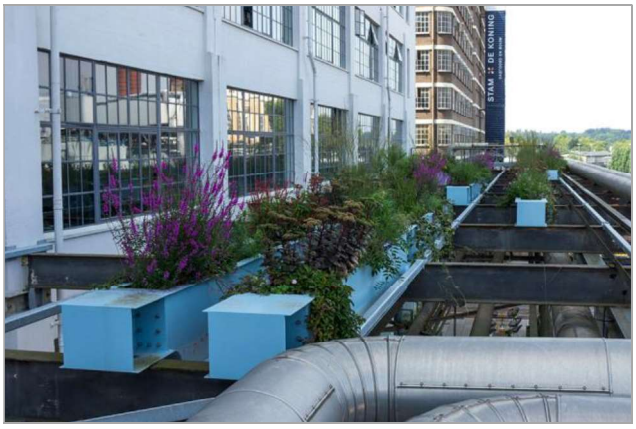

Fig. 8–9. The general view (photo by author)

Park Superkilen, Copenhagen, Denmark.

Realized in 2012, the design of the studios TOPOTEK 1, BIG Bjarke Ingels Group, and Superflex responds to the needs of the Norrebro district, part of the central Copenhagen. It is

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inhabited by people from various spheres and nationalities. In the place of the current park there were old railway tracks. This area was in a state of degradation. Residents gathered there for socializing, picnics, and spending free time outdoors. The area was forgotten by the city authorities, so illegal trade developed there, and crime grew, and the diversity of residents' origins created conflicts due to different cultures and traditions (Fig. 10.).

Fig. 10. The general view of the conception (Superkilen..., 2012)

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The revitalization of the area was aimed at the reconciliation of diverse residents, rebuilding urban fabric, integration, revitalization and creating decent conditions for a pleasant meeting place for people. Through these assumptions on the site of the old railway tracks, squares were created: red and black and a green park (Fig. 11–13.).

Fig. 11. The general view of the realization – RED PARK (photo by author)

Fig. 12. The general view of the realization – BLACK PARK (photo by author)

Fig. 13. The general view of the realization – BLACK PARK (photo by author)

Before joining the project, architects consulted the residents. They made a questionnaire about them concerning the new development of the area on their estate. Over 100 symbols were used for the equipment, which refer to the diversity of the inhabitants' cultures. Swings, benches, slides, small architecture, trees for planting, imported from various countries. This testified to the cultural diversity of the inhabitants.

Conclusions

Presented realizations give new value to the post-industrial zones development.

As shown in the functional diagrams, whole complexes create a common cell with the nature. During the design phase it was possible to design forms, which cannot exist without the surrounding contexts and use of the biologically active surface. As depicted it Fig. 1–5, it was separated to different functions, but each one is dependent on the other.

Its main purpose is to add spatial values by introducing new forms and functions staying in connection to the nature, which over time can become a symbolic place. The proposed infrastructure will also contribute to increase the number of visitors to this biologically and cultural active surfaces. Multi-functional part of these examples has been adapted so it's possible at any time alter their functions and adapt to the needs of customers – especially green zones.

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Greenery is one of the basic factors in the composition of cities, its presence in urban landscapes such as parks, gardens, planting along communication routes, roof gardens and the like is essential and is an important indicator of sustainable development. An issue of great importance with regard to urban greenery is the ability to maintain the balance between architectural and urban investments and currently disappearing green areas.

The exit from many crisis situations in relation to degraded areas may be the introduction of large-scale revitalization processes that take into account both cultural and material values, but also the role of green areas – then the assumptions of a sustainable development policy are met.

The keynote of the presented in these work examples was to break with awareness to use greenery as one and only tool and introduce the solution. Putting land into the hands of greenery, the idea is to create complex of the buildings staying in compliance with the nature laws and throwing new light on objects with this function in new European reality.

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