URBAN REGENERATION. A CHANCE FOR SUSTAINABLE DEVELOPMENT OF ORADEA MUNICIPALITY

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Abstract: Urban regeneration is a widely experienced but little understood phenomenon. It is also a great solution to bring declined cities back to life. Nowadays, the number and state of the industrial sites in Oradea, is not known. The aim of this paper is to study the state of the industrial sites in Oradea and highlighting them. The methods that have been used were different, from collecting data from the National Archives, to studying the buildings on site.

Key words: urban regeneration, industrial buildings, strategies, inventory, Oradea

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INTRODUCTION

Urban regeneration is a new topic for the Oradea urban space, strongly marked by the forced industrialization process of the communist period, followed by a process of deindustrialisation after 1990, processes that marked the evolution of the urban environment.

The current scientific approach is centered on the analysis of the geographical area of Oradea from the point of view of the industrial areas, and the study is based on the identification and inventory of the areas where the former industrial platforms in Oradea operated.

Through its past, Oradea is one of the cities in which the study of urban regeneration is particularly interesting as a result of its economic development. After a period of forced industrial development, when, a large number of industrial areas, some of national importance, mainly based on the heavy industry (machine building, chemical, energy), energy consuming, major polluters have been implemented, built and developed, followed a period of decline (failed privatizations, bad management or own interests, as well as lack of performance), which led to their closure. Most of these spaces have been left in ruins, becoming heaps of ruins, generating environmental hazards and bordering areas.

By Government Decision no. 1296 of December 13, 1990, art. 1. state-owned enterprises are transformed into joint stock companies. The major concern of these companies was that they could not adapt to the rigors imposed by the market economy because of the giant dimensions at which the plants were designed and more because of the system in which they operated during the planned economy when they did not have to identify themselves, neither the market where they would sell their products nor buy the raw material. This has led, over time, to an acute

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shortage of culture in relation to the consumer as well as to the relationship with suppliers that are vital in the conditions in which the market operates according to the harsh rules of demand and supply of goods and services. As a result, many of these companies have gone bankrupt, others have reconfigureured their activity profile, or have used different asset-leasing methods as a form of subsistence for economically unviable businesses.

The term of urban regeneration in its current form was conceived in 1950 by American economist Miles Calean and refers to the renovation of the city's building, equipment and infrastructure as a result of its aging or adaptation to new uses and different activities. It is a complex phenomenon that can take many different paths and is related to other types of urban processes such as rehabilitation, rehabilitation or succession invasion (Cervera Pascual, 2013).

Many definitions of urban regeneration have emerged, but the next short selection shows a high degree of coherence between authors from different backgrounds, writing at different times in time:

- the process of urban regeneration is one in which the state or local community is trying to bring back investment, employment and consumption, and improving the quality of life in an urban area (Couch, 1990);
- according to Nae Mariana (2015) urban regeneration is one of the most relevant ways of revitalizing city centers;
- under the Sectoral Operational Program for Human Resources Development 2007 2013, urban areas can be revitalized with the effort of the municipality, owners and local officials, resulting in improved living standards;
- urban regeneration is also defined as an integrated vision and action, the result of which is to find the best development solutions, aiming at sustainable improvement in the economy, society and the environment (Roberts and Skyes, 2000).

In Romania, in 2015, the Ministry of Regional Development and Public Administration prepared a platform aimed at informing the public and private persons who wanted to carry out urban regeneration, defining it as a set of operations for transforming the urban space, coherent actions in areas such as economic, social, environmental, architectural, and urban development, aiming at increasing the quality of the urban environment and improving the living conditions of the population.

The studied area is the city of Oradea. Oradea, the city of Bihor County residence, through its geographical location, has been the subject of a strong industrialization process. The city of Oradea is seated at the opening of the Crişului Repede Valley, between the extensions of the Apuseni Mountains and the Banato-Crişana Plain. It is an area of morphological complementarity between the plain and the hill area, an area passing from the hilly relief (Western Hills, Oradea Hills) to the plain area and entrance to the Vad-Borod Depression. Most of Oradea is located between 110 m and 146 m altitudes. In the north and northeast it is situated in a hilly area between 140 and 283 m altitude (Borcea and Gorun, 1965; Herman et al., 2016a, b; Ilieş et al., 2013).

METHODOLOGY

The study methods used in the present research belong to both geography and architecture and have assisted the use of qualitative and quantitative methods in the collection and interpretation of data and information on the field (Herman et al., 2016b, c; Ilieş et al., 2017). Sources of data and information used in the research are multiple and complex: the National Archives, the city's PUG, various laws, documents and reports released by local authorities, including PUDs and PUZs. This analysis was accompanied by the observation of concrete reality on the field. The latter played an important role in the study, as reality on the field becomes a very good witness of the evolution of these spaces. Between November 2015 and April 2018, using the participatory observation method, we studied and evaluated on site the evolution of the former industrial areas identified in the study.

RESULTS AND DISSCUSIONS

Following field observations and analyzes of documents on the economic development of this city, we have identified not less than 37 former industrial-major scale platforms (with a total estimated area of more than 300 ha) in different stages of destruction / left or partially carrying out economic activities, according to the object of activity. This study identified large industrial sites and those that had a major economic and historical value. No former craft cooperatives (Invalids Cooperatives, Igiena etc.), ex-warehouses of materials and materials (Basis 1 - 4, ICRA, CLF, etc.) or former decommissioned military units (Tank Units, etc.) were taken into account.

Thus, as a result of the study, from the point of view of the present state, the studied sites were divided into four categories, according to table 1, as follows: demolished (8); reconverted or rebuilt sites (13); in destruction, abandoned buildings, in a major degradation state (10); sites on which there are currently functional buildings, where various economic areas of activity are carried out (6).

The former industrial areas are an important point in the development of a city due to the extensive surfaces on which they are built (i.e. Înfrățirea Plant - 28 hectares, The spirts and yeast Factory - 3,2 hectares, CET II - 144 hectares, Alumina Plant - 70 hectares, The Brewery - 7,2 hectares, Sinteza - 17 hectares, The Milk Factory - 2,9 hectares, etc.). Due to their favorable position, they are the main subject of interest for real estate samsars who want to demolish them and build new buildings.

The field study found that preferred departments for landowners and building owners, to obtain direct, faster benefits from the regeneration process, are:

- building shopping centers (The Brewery);
- bussiness centers ("Alfa" Furniture Factory);
- new rezidential building (Înfrățirea Plant, Furniture Factory);
- large commercial spaces, belonging to retailers with recent large investments on the Romanian market (Înfrățirea Plant Kaufland, Penny, Furniture Factory-LIDL);
 - developing tourist (Milk Factory) or social (Oradea's Slaughterhouse) accomodation;
- it is worth mentioning the transformation of industrial spaces into functional urban spaces (Moara Răsărit Mill, "1 Mai" Fur Factory).

Demolished	Reconstructed	In degradation	Functional
Alumina Plant	Alfa Mobila S.A	Miorița S. A.	Plastor
Spirit and Yeast factory	Sinteza, Calea Borșului	Crișul and Arta	CET I
CET II	Milk Factory	"1 Mai" Fur Factory - Rovex	UAMT
Oil Factory	Înfrățirea Plant	Mechanical and Spare Parts Plant	Solidaritatea Shoe Factory
Emilia Mill	Furniture Factory	Avântul Cannery	State-owned polygraphic enterprise
Oradea Greenhouses	Brick Factory	The Asbestos Factory	Chair Factory
S.C Cominca S.R.L	Brewery	Electrometal	
Adria Mill	The Garment Company Oradinum	Sugar Factory	
	S.C Drum Nou	The Industrial Parts and Installations Plant	
	Moara Răsărit Mill	Sinteza Paint Factory, Calea Clujului	
	Metalica S.A		
	The Slaughterhouse		
	ChimProd		
	TOTAL: 37 stud	lied industrial platforms	
8	13	10	6

Table 1. Sites grouped according to their existing state

From the point of view of the emplacement, these sites have been grouped as such (table 2):

- located in the central area a number of 12 industrial sites have been identified in the area between C.F.R. Trainstation, Dacia street, Decebal, P-ţa 22 Decembrie, Bistriţei street, Seleuşului street, Averescu street, Olteniei street;
- located in the pericentral zone 2 this area is covered between Aleea Salca, Armatei Române street, Aluminei street, Dacia, Italiană street, Ștefan cel Mare street, Izvorului street, Calea Clujului, Grădinarilor street and Nufărului street, being identified 16 former industrial platforms;
 - sites in area 3 and 4 perimeter area where 9 sites were identified.

In Oradea, most of the industrial premises that have not been demolished have been abandoned, left in a major state of deterioration due to the indifference of both owners of industrial sites and local authorities. In the last century, especially during the communist period, there was a major expansion of the city from the urban point of view, the industrial areas, which at one point were in the city's outskirts, are currently located in the immediate vicinity of the city center being integrated in residential quarters.

	Site	Existing buildings on site	Total (Site and existing buildings)	%
Located in central area	2	10	12	32,44
Located in the pericentral area	3	13	16	43,25
Located at the perimeter	3	6	9	24,31
TOTAL	8	29	37	100

Table 2. Sites grouped according to their emplcement

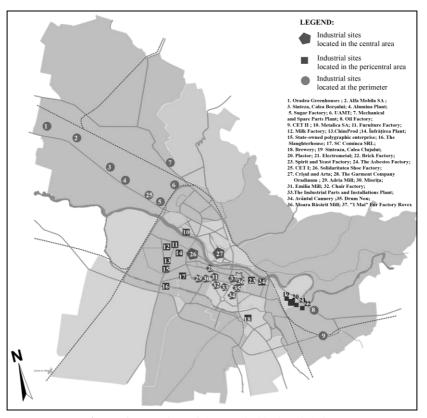


Figure 1. Location of the studied industrial sites

Total

The former industrial areas are an important point in the development of a city due to the extensive surfaces on which they are built (i.e. Înfrățirea Plant - 28 hectares, The spirts and yeast Factory - 3,2 hectares, CET II - 144 hectares, Alumina Plant - 70 hectares, The Brewery - 7,2 hectares, Sinteza - 17 hectares, The Milk Factory - 2,9 hectares, etc.). Due to their favorable position, they are the main subject of interest for real estate samsars who want to demolish them and build new buildings.

Historically and architecturaly-value speaking, we grouped these sites, primarily after the historical period in which they were built, namely:

- built at the end of the 19th century and the beginning of the 20th century, a period in which the city placed on Crişul Repede shores has its place of manifestation, architects of a remarkable value and architectural styles very close to Central and Western Europe: Moara Răsăritul Mill, 1857 (figure 2); Emilia Mill, 1884 unfortunately it was not figureured as a historical monument, now demolished (figure 3); The Brewery, Oradea, 1896; Adria Mill, 1890 (figure 4); "1 Mai" Fur Factory, buildings from 1870; Oil Factory, 1940; Solidaritatea Shoe Factory, Oradea, 1923 (National Archives; Hochhauser, 2010).
- buildings built after 1948, generally industrial halls with large openings and openings, not necessarily respecting a certain architectural style. They have generally been subject to real estate transactions after being bankrupt and subsequently demolished (Barna, 2015) (table 3).

	No. sites
Built at the end of the 19 th century-begining of the 20 th century	27
Built after 1948	10

Table 3. Sites grouped according to their historical period of construction



Figure 2. Moara Răsărit Mill Source: Hochhauser, 2010, p. 189



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Figure 3. Emilia Mill ¹



Figure 4. "Adria" Mill Sursa: Hochhauser, 2010, p. 189



Figure 5. The demolition of a building of Înfrațirea Plant, 2015

Photo source: personal archive

¹ http://arheologie-industriala.blogspot.ro/2014/02/oradea-sos-moara-emilia.html

For the reintegration of these former industrial platforms, integrated urban regeneration projects need to be carried out under the strict supervision of local authorities, as different landowners act independently depending on their own interests or do not have the necessary financial resources for the regeneration / conversion of the buildings or land. (Alumina Plant, Înfrățirea Plant (figure 5), Metalica, Sinteza, Spirit and Yeast Factory).

These former industrial sites should be reintegrated into the urban context of the city, both the local authorities and citiziens should show interest in this happening in the mere future. Unfortunately, the high costs of regenerating the sites, constructing laws, depolluting the soil (in some cases) and the lack of involment of local authorities have been a set back for the owners of the sites in order to redevelop (Herman et al., 2014a), demolishing the buildings or leaving them on the verge of destruction is a recurring reality in Oradea.

CONCLUSIONS

Former industrial platforms are a major cultural potential that has not yet been harnessed to its full potential. Unfortunately, however, the status of these areas is uncertain due to the lack of accurate information.

At present, there are a significant number of such sites in Oradea. After the study in the office - maps, history from the point of view of urban development of Oradea, and field study- the current situation of the industrial platforms, 37 sites being identified. Thus, the development of the areas where these sites are located, some being rebuilt (the Milk Factory, The Brewery, Înfrățirea Plant, etc.), some being abandoned and left in a state of major degradation (Avântul Cannery) from which a major number (a total of 28) are located in the central and pericentral area of the city.

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Submitted: April 27, 2018 Revised: May 15, 2018 Accepted and published online June 12, 2018