

## ASPECTS OF INDUSTRIAL LANDSCAPE REHABILITATION

### ASPECTE ALE REABILITĂRII PEISAJULUI INDUSTRIAL

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**Abstract.** *Inside the cities the industrial zones are the most polluted areas. Therefore this situation can be a challenge for the researchers for experiments and proposals of sustainable urban transformations and rehabilitation, in order to enhance the quality of urban life and environment. The industrial heritage constitutes also a large field for the process of urban rehabilitation. Many kinds of proposals appeared, trying to create a new life for the old build areas of the Industrial Revolution. Through judicious landscape architectural projects, sustaining the rehabilitation of industrial sites, through multifunctional arrangements and equipments, we can transform these polluted and pollutant areas into magnetic sane and safe places, destroying pollution on a large urban scale. At international level there are some successful experiments which constitute a reference point to begin a very usefull landscape transformation process.*

**Rezumat.** *În interiorul orașelor cele mai poluate zone sunt cele cele industriale. Această situație poate constitui o provocare pentru cercetători, pentru a propune și experimenta modalități de reabilitare și transformare urbană durabilă, cu scopul de a îmbunătăți calitatea vieții și a mediului urban. Un larg câmp de activitate în domeniul reabilitării urbane îl oferă și zonele declarate monumente de patrimoniu industrial. Există o mare diversitate de propuneri care au apărut în încercarea de a da o nouă viață vechilor zone pe care s-au dezvoltat construcțiile Revoluției Industriale. Prin proiecte peisagistice judicioase, susținând reabilitarea zonelor industriale prin propuneri de amenajare și echipare multifuncțională, aceste zone poluate și poluante pot fi transformate în locuri magnetice sănătoase, capabile să distrugă poluarea la o largă scară urbană. La nivel internațional există câteva experimente de succes care constituie un punct de referință pentru începerea unor astfel de procese de benefică transformare peisagistică.*

The industrial heritage rehabilitation tries to create a future for the old build areas of the Industrial Revolution. The presence of the old industrial giants, or of many other kinds of industrial buildings, can arouse the melancholy of the past in our souls. But, there is also other kind of reaction versus the industrial relics. We must underline a very important aspect, almost subtle, existent in the collective consciousness: the industrial vestiges wear a “stigma”, very difficult to raze, waking sometimes painful memories and associations (image 1).

The polluting industrial evolution, with destructive consequences, gave to the word “industry” negative connotation: saying “industrial”, even “industrial heritage”, from the collective memory spring out spontaneous association with the

“pollution”. It is still difficult for many inhabitants, of our polluted cities, to accept the industrial revolution relics as precious treasure, which should be saved and respected. As consequence, industrial heritage should be also rehabilitated at the collective memory level, making possible to awake a positive echo in all collective consciousness for the work for protection and salvation of this kind of heritage.



**Image 1** - Negative memories about the industrial relics: pollution near the historical castle in Hunedoara.

Through judicious landscape architectural projects, sustaining the rehabilitation of industrial patrimonial sites, through multifunctional arrangements and equipments, we can transform the old polluted and pollutant areas into magnetic places, destroying pollution on a large urban scale. Curing gradually the collective memories through its interventions, the landscape architecture science can be very useful assuring a benefic change of attitude versus industrial heritage.

The interest in landscape architecture grew through time, nowadays having an important role in the policy of the environment protection. From the identification and preservation measures of the natural patrimony, which started at the beginning of XX century, it became these days a real “policy” of planning, settlement, salvation and protection of all kinds of heritage, one being the industrial heritage.

### **IMPROVING THE DRY AND TECHNICAL IMAGES OF THE OLD INDUSTRIAL ENVIRONMENT**

The idea of using natural elements in order to improve the industrial environment was promoted at the end of the XIX century. Having the vision of a polluted industrial future, many utopian researches appeared, proposing models of “safe and sane industrial cities”: with “a green belt” around the cities for absorption of noxes and for landscape arrangements; in the residential areas every house had the opportunity of individual gardens. We can mention “the garden

cities” of Ebenezer Howard, which ideas were materialized in Letchworth and in Welwyn. However, the success of the construction and of the integration of these new towns in the territory was very slow.

Nowadays we are facing a noticeable need of human settlements rehabilitation. But, in this domain, we should not confine ourselves only to spaces and materials, but our field of researches must comprise also the human feelings, outlooks and subtle necessities. Even after their rehabilitation, the aspect of the historical industrial spaces, their architectural and urbanistic layouts remain generally dry, possibly giving visual, physical and psychological shocks. It is important to rehabilitate these areas without turning them into arid museums and avoiding their mortification. These things remain ones of the big cultural problems of modern architecture: “less aesthetics, more ethics”. It is a common error restoring areas without reintegrating them into a real urban life. This reintegration could be realised either by providing them with suitable urban functions, not artificially functional and by rehabilitating from the environmental point of view, using the landscape architectural proposals. The aim is to turn to the best account the space of the industrial heritage: to re-think and redesigned these spaces as living places, as safety areas for larger users groups. The landscape architecture can offer judicious ways to give back the historical charm of the industrial heritage, to educate the inhabitants and to offer a useful, joyful, healthful and cultural manner of spending their free time in the rehabilitated industrial places. That means also find such a manner to give it back the lively, personal and picturesque touch that it once have, but also to ensure the safety to move, to stay and to enjoy. Using the virtues of landscape architecture elements – earth, water, vegetation, furnitures - for the rehabilitation of the historical industrial spaces, we can create multifunctional spaces that will attract all kind of people. The potential of these reanimated places will educate people and will restore all citizen identity, whatever can be their degree of dependence, will restore their feeling of self-respect and also their responsibility towards this heritage and its aspects. The mixing of the population, with and without special needs, the mixing of the ages, will create an atmosphere to bring back the tolerance, the inner–peace, the unmediated inter-communication, bringing the end of these sites isolation.

In order to enjoy, stay and socialize, stimulating different groups to use the facilities of these rehabilitated industrial spaces, the proposals of the landscape architecture will endow the areas with adequate urban equipments and will create multifunctional, sustainable landscape arrangements, restoring the deteriorated urban life of the sites. Using earth, water and vegetation, using the power of the blue sky contemplation, we can obtain important effects of relaxation, restfulness, or dynamism, we can concretize the respect for “the essential joy” trough a real contact with Mother Nature. We can transform some of the spaces into garden plots, providing close contact between some leisure spaces and the circulation in the rehabilitated spaces. Works of creative and applied art can be distributed

through the green spaces for contemplation and as a visual therapy. Such availability of space tries to stimulate all the users to move about and enjoy.

## **PROPOSALS OF THE LANDSCAPE ARCHITECTURE**

The proposals of landscape architecture are various, using the virtues of all morphological landscape elements, creating a harmonious integration in the urban landscape of the old industrial degraded sites. The factories can be transformed using green spaces. Plants will grow, embracing the structure skeleton, which served as a basis for the design of new interior functions in the old factories. But in the new ones can also change the dry and polluted industrial environment, giving a new life through the landscape arrangements. The build space will form an organic whole, coming closer to nature than the dry industrial world (image 2).



**Image 2 - The vegetation cover the old factories structures giving a new life and a new image.**

Not only the factories, but also any other kinds of industrial sites can be transformed. As an example, the area of Arsenale, heart of the old ships industry of Venetia was degraded in time and nowadays there are many “dead” spaces beyond or between ruined walls (image 3).



**Image 3 – Arsenale zone Venetia: dry spaces and degraded walls**

All these places need a new life, a new image, a new function. Step by step, these needs created beyond some walls a new world, through the virtues of the natural elements. Only using a few build elements, water and vegetation, we can change the image of the old degraded spaces, creating a real visual therapy. As a result, a new kind of exterior space will appear, acquiring magnetism and generating unmediated social contacts (image 4).



Image 4 - **Behind the degraded walls:  
the therapeutic effect of water arrangements and vegetation**

Another good example, proving the potential of the natural elements which can transform any kind of degraded old structure, is the Bastille- Gare de Reuilly old railway viaduct rehabilitation in Paris/France. Being in the middle of a big city, the rehabilitation aim was to give a new life to 1.4 kilometers of old elevated railway line and its supporting arched structure.

The ideal solution was to transform the upper area into a promenade linear garden. The down spaces of the arches were used for small shops and business.



**Image 5 – Landscape rehabilitation of Bastille/Gare de Reuilly viaduct:  
a parisian promenade linear garden**

The magnetism of green garden transformed the linear promenade into a very popular public space. The trees have been planted on the axes of existing columns and the promenade offers surprising urban views for the visitors. An industrial historic structure became a new, exciting element in the modern city grace to the virtues of landscape architecture (image 5).

## **CONCLUSIONS**

In order to replace negative memories about polluted industrial areas with new joyful memories, the landscape architecture offer in the industrial heritage rehabilitation is to create for larger users groups, adults and children, an escape from the pollution of city life.

Transforming the industrial relics into new healthy and good-looking places, into favourable places for human communication, for different human activities, an escape of anonymity and isolation will be possible, the zone magnetism will grow also, attracting new visitors.

The new images will persuade and educate the inhabitants into enjoy the rehabilitated spaces, into stimulating their creativity and inspiration, into feeling self-respect and also responsibility towards these old industrial aspects of the city.

A strength penetration into the conscience of the inhabitants will be created trough the contact with the elements of Mother Nature. These proposals will contribute to the quality of life in many ways and will bring benefits on multiple levels: urban, economic-utilitarian, sanogen, social, cultural, forming-instructive, scientific, recreational, decorative-aesthetic.

As a result, it will be possible to awake a positive echo in the collective consciousness for the work for protection and salvation of industrial heritage.

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