'Greenscape' from brownfields - from former industrial landscape to cultural landscape

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Introduction

Landscape planning and design is about creating beauty and value in the green areas. Even though they are degraded, abandoned or damaged, landscape is a presentation of the human activities and the ecosystem. In the case of the post-industrial landscapes we are dealing with heritage and contamination, value and disaster. Architecture is not just the process and the product of planning, designing and constructing buildings, it is about protection. Architecture, planning and landscape present a complex inter-relations between people, buildings, landscape and the environment. We truly believe in the teamwork of landscape designers and architects in order to create 'greenscapes'.

International and Hungarian examples of industrial restorations and revitalizations show that functional change holds great potential (Weilacher, 2009). After the transition, these areas can once again become an organic part of the cultural and economic life of the city, the local identity and the green surface system as well (Adorján, 2015).

In our researches we are investigate the possibilities of the successful renewal of the abandoned sites and buildings. The point where we met each other was theoretically and geographically Ozd, the former industrial city in Northern Hungary, Borsod-Abaúj-Zemplén county. While Piroska Varga was taking part in the presentation of their three-year-long work (Borsod 2050 project (Varga, 2013), Anna Adorjan was in the middle of a three year planning process of the Ózd Cultural Factory project.

Our researches are approaching the same topic from two sides, so we decided to join our project in order to examine the connection between the protection and rehabilitation of the architectural heritage and the success of the reuse of post-industrial landscapes.

Background

As the great manufacturing age ended in Europe in the 1960s and 70s, the buildings and sites of the industrial age emptied.

The existing building-stock and the industrial heritage are fading away right before our very eyes, with its irreplaceable values. The rehabilitation of brownfield areas are more than 20 years lagged behind the Western European countries, despite the fact that the area of the existing brownfields is more than 22.130 hectar just in the Northern Hungary.

Parallelly the used land, surrounding areas, mines and depos were left alone, with their contaminated soil, dangerous state and/or just unknown conditions.

Unfortunately the industrial heritage conservation in Hungary is uncertain nowadays (Váczi, 2011). In spite of the conferences, exhibitions, publications and impact studies, different thesis disciplines and doctoral treatise have been discussing the fate of industrial buildings for nearly twenty years now. The protected, but still not yet assessed industrial buildings' state are unaltered at best, but are rather characterized by destruction and degradation (Csontos, G., 2005).

We should care about it "Thinking about cultural heritage is thinking about the future, about the future of the past; it is not about freezing the past in the present day" (Bert, van Meggelen)

Fortunately good examples could be found for many different solution to protect them as they are (eg.: Peter Zink Mine Museum, Norway), or to invest some rehabilitation work and try to revitalize the area (eg.: Ruhrgebiet, Germany), even to turn them into new parks (eg.: Landschaftspark, Duisburg, Germany).

Goals and objectives

It is a general trend in Europe that the presentation of industrial history together with an initiation into the manufacturing process is the most attractive for tourists.

The remains of the former heavy industrial past and the natural and cultural historic values stand in great contrast with each other. The ill-judged landscape, dotted with out-of-use deteriorating industrial buildings and industrial sites waiting for rehabilitation are inseparable part of the past of the region, the identity of the local society and, in many cases represent significant architectural values.

— How can we decide which one could be used for what? Are all of them valuable enough to become local attractions (eg. expositions, industrial museums)?

- Are there any specific characteristic features which indicate the future usability for a specific function? How can we decide what to preserve/demolish?
- How can the functional change of the site and buildings increase the possibilities of the survival?

The research questions include the possible functions, the pertinence of the actual trends and the aspects of sustainability.

Our goals with this joint research are to pose the right questions for the future rehabilitations and lighten the importance of the long-term and multi-level thinking.

Method(s)

First of all our research started categorizing the realized projects in different aspects: function, location of the former industrial site, scale etc. We analyzed the chosen examples by using photographs, documents and in the case of Hungarian sites on-site experience.

The result of those statistics, the cultural function is the most typical use in the rehabilitation project in Hungary.

During our analysis we looked for examples if the European industrial buildings and plots could inspire architects in order to turn them green or redesign into a tourist attraction or a useful base of a new development.

The other important questions are if former industrial buildings are part of the new design and if these elements could be re-used in the post-industrial sites mentioned above.

Could a big development be the best solution or slow steps might be the key for long term and sustainable renewal?

Finally we try to show alternatives through the chosen examples for the various functions which can provide solutions for Hungarian sites in the future.

Results

The above mentioned results can be used for the evaluation of possibilities and success of a future rehabilitation. Below, a study of these tools is presented on the chosen examples.

- Smaller scale development with long-term goals could propose much valuable result. The smaller steps help to find the right way to the rehabilitation, strengthen the social acceptance of the development. The long-term thinking means more sustainable solutions, more endurance in the project.
- Various new functions could provide successful reuse, cultural function, museum, memorial park is not the one-and-only solution. Conversely a cultural function would not provide sustainable reuse in longer term.
- The preservation of the industrial heritage in the built environment increase the value and special character of the landscape.

Discussion

Does the smaller scale development achieve great result?

Many times the potential site were chosen because some civil initiation / event (artist movement). International examples such as the initiation in the Zollverein coal mine in the 90-s, was followed by many actions. One good example is the Cotton Factory peephole project by Camlin Ionsdale, to introduce to the public the isolated problem and site.

The first step of the rehabilitation can be some small community development (Váczi, 2006) cultural, environmental protection or social etc.

In that meaning the small interventions can attract attention.

The other example for small steps are interim and temporary utilisation, Their tools help bridging the functional gaps found in the prolonged transformation of a city area, adapting in the same time to the tough economic situation. In the case of Tempelhof former airport in Berlin, the temporary use as green area, park and allotment garden managed to keep the territory for themselves even against the powerful market players. (Adorján A., Fáczányi Zs., Sipos A, 2015)

Long term thinking is the key for renewals?

The scale of the industrial areas, the cost of rehabilitation of the landscape in many cases are over than the capacity of, cities, and even capacity of the development of the country. It is necessary to involve private capital. The rehabilitation scheduled rate and better adjusted to the real budget.

In the case of the 22@Barcelona project, the slow movement and involvement is the key for the renewal of the "European Manchester".

Step by step for big progress? Does it works?

The central question of a project of heritage rehabilitation should be how to match the compound with the given group of functions. The existing buildings can be grouped in the following way:

- without any intrinsic or technical value to be dismantled
- with technical value to be decided case by case
- buildings with intrinsic value that from the heritage

Sites and buildings can be renewed successfully with different functions, based on the previous grouping. As we mentioned before, the development and the rehabilitation of such a place exceeds the capacity of a municipality, county.

In the case of the Emscher Park (IBA) 120 projects, organized by the state of North Rhine-Westphalia, the Federal Government and local authorities, did not only give economic, social and cultural impetus, but especially considered the Ruhr District's lack of nature and open spaces. (landschaftspark.de)

The step-by-step intervention makes the possibility of a sustainable realization, which help for the underdeveloped region in the long term maintenance of the project.

Are various functions greater possibilities?

Optimally different functions form great combination in a renewal project. None of the post-industrial sites are homogenic, on the contrary, there are significant differences in between a former office building and a raw material landfill. To find the temporary or long term solution, many aspects should be taking in account. (Weilacher, U., 2009.)

The different new uses could be linked with a thematic route, which would also serve as an additional function. In the following examples a thematic route shows around the visitors on the former industrial site, and it's provide an additional value the project.

The most common example is the European Route of Industrial Heritage, is a network of the most important industrial heritage sites in Europe. The aim of the project is to create interest for the common European Heritage of the Industrialisation and its remains. The route leads through 13 countries thus far (in 2014).

In regional scale - especially in Hungary - the most known examples are the wine routes, for discover the most important and hidden corners of wine regions (Olaszrizling tanösvény - Csopak-Paloznak). One not too successful attempt is the "Bányász kalauz" (Miner guide) in Pécs.

Is the industrial heritage a great landscape element?

If we analyze Western European and North American examples of revitalization projects of brownfields or former industrial sites (such as The Steel Yard - Providence, High line park- New York, Les Fonderies Jardin public – Nantes), we can declare, that most of existing landscape elements are artificial, due to the former use of the areas (Adorján, A. (2015).

Our previous research confirmed that preserved, reinterpreted and transitioned elements contributed to the new function of post-industrial sites significantly, while retaining the historic value of the area. The international examples show that pre-existing elements were regarded as valuable, in the non-financial meaning.



Figure 1. Fúvógépház, Ózd, industrial heritage building in the former steel industry (Anna Adorján 2013)

Conclusion

Despite of remarkable international examples, there is no observable, significant progress in renewal of post-industrial landscape and industrial heritage in Hungary.

The main issue in Hungarian industrial heritage preservation is lack of open discussions about industrial heritage and preservation, isolation of professionals and the civil society. Consequently we miss an extensively consulted comprehensive strategy about rehabilitation and protection possibilities at the Hungarian industrial heritage sites.

In our opinion the first and most urgent step should be to define professional principles by creating a survey, recording, evaluating and documentation of industrial heritage and landscape. We suggest to create an open source database which could be developed together with professionals, civil organizations, etc. Creating this database could help us to get a continuous upto-date overview of quantities and important values we have in these areas.

We also miss, unified historic preservation practices and standards to ensure transparency and quality. There is no general data collection of industrial heritage, even though a lot of local researches are available (e.g. in Budapest), and remarkable searches based on them (Hutter D., Szilágyi K. (2014). The local ones could be the basis of the future renewal strategy.

A pilot project based on the Inter Save model from Denmark was implemented in 2003 in town Ózd, but unfortunately it failed. On the other hand, some years later the rehabilitation of Zsolnay Factory in Pécs became a real success and now a new project is being established in Ózd (called Manda - Hungarian National Digital Archive). This ambitious project utilizing local abandoned industrial places could help us to develop useful "how to know" heritage rehabilitation tool kit.

This would provide the successful renewal of the former industrial sites, how to transform the former industrial landscape to cultural landscape or 'Greenscape'.

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