Conversion of industrial heritage as a vector of cultural regeneration

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Abstract

The purpose of this study is to highlight the diversity and richness of expression of the architecture of industrial buildings in Romania, emphasizing to an equal extent the cultural value. A series of case studies were selected from the point of view of architecture, of industrial profile, of the age: the next phase was carrying out a structural and typological analysis of the forms of industrial heritage across Romania. The results will consist in the proposal of culturally reusing of heritage buildings so as to emphasize their status as cultural resources and their symbolic value.

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1. Introduction

The industrial Revolution represented one of the most significant changes in the history of mankind (Andrei, 2010), important technological advances being registered in that period of time (Proctor, Cranstone, Mackenzie & Nola, 2011; Cranstone, 2011).

Industrial sites have traditionally constituted an important source of ecological problems (Conesa, Schulin & Nowack, 2008; Braghină, Peptenatu, Drăghici, Pintili & Schvab, 2011; Peptenatu, Pintili & Drăghici, 2011, Lopez Meza & Vidal Gutierrez, 2012; Jain, 2012; Ianoş, Peptenatu, Pintili & Drăghici, 2012). This perception associated with the need to protect the environment has been in the last decades the catalyst to the redevelopment and renaissance of the industrial areas. The reclamation and conservation of the industrial areas constitute, additionally, an important cultural objective, which is inherently sustainable in that it encourages the positive re-use of redundant buildings that are part of the industrial and commercial heritage (Loures, 2009).

Interest in preserving industrial abandoned sites, is not only scientifically but also economic (Langstraat, 2006) and heritage issue (Orange, 2008) for regions which are now severely affected by industrial restructuring process.

Investments in cultural heritage can generate positive effects for the local economy (Barabash, 2012), not only in terms of cultural consumption, but also in the form of increased employment and income (Bowitz & Ibenholt, 2007).

The use of the industrial heritage predominantly as an economic resource, disregarding its connections with the local memory and identity, should be avoided (Del Poz & Gonzales, 2012).

The purpose of this study is to highlight how culture can change the fate of an abandoned industrial building, and at the same time, generate economic productivity. There are, even in Romania, examples that can confirm this theory.

The reuse of industrial facilities – especially cultural reuse – may act as a genuine challenge meant to reflect the variety of the means to capitalize on industrial assets. Reuse has the role of putting a building to best use, economically speaking, as well as extending its existence. The challenges of cultural reuse of decommissioned industrial sites are meant to indicate that, beyond the desolate landscapes and buildings, there may arise manifold outlooks for capitalization. At the same time, instance of reuse are
meant to highlight the cultural and architectural qualities of the industrial buildings. The challenge, also, consists in the manner of refurbishment of a former industrial building, turning it into an eminently cultural space, no matter whether it would be an exhibition hall, or a space for various artistic manifestations (theater, fashion, concerts). The opportunities for reusing the industrial buildings must be identified in a manner that would highlight their architecture, their cultural and economic usefulness. In Romanian society, most of the time, the local administrations’ indifference blends with the interest in the material interest of developers find in abandoned industrial buildings, as most of the times developers tend to choose the option to demolish rather than conserve and refurbish the buildings. However, there are also positive examples when the Romanian industrial heritage was properly reused, taking into consideration the architectural specificity, the historical and cultural significance.

1. Methodology

Two types of case studies have been used during the study: the first includes several examples of good practice in the cultural reuse of the industrial heritage in Romania. The instances of good practice were selected using both the criterion of the variety of industrial heritage types, and the moment of their conversion; in this respect, there have been selected various conversions of the technical and industrial heritage assets that have taken place since the 1990s, marking the transition from the industrial phase to the post-industrial period in Romania.

The second set of examples is grouped into a set of suggestions, made by the authors of the study, on cultural reuse of the industrial heritage. The suggestions have been made after taking into consideration several criteria. When choosing a new function for a decommissioned industrial facility one must consider the unit’s characteristics (age, the current state of conservation, the nature of its past function) (Merciu, Merciu & Stoian, 2012 a). Of particular importance in the decision to suggest the cultural reuse was connected to the analysis of the building’s interior configuration and the degree of the building’s suitability to cultural transformation. The selection encompassed industrial buildings included on the cultural-heritage list and part of several categories of industrial heritage (a proto-industrial asset: the water-powered mill, a mining facility or an electricity-generation facility, etc.) whose reuse may take various forms (from museum space to industrial-culture centers, libraries, archives, etc.).

2. Results

Several case studies have been selected so as to highlight the evolution from the industrial phase to the period of conversion of the decommissioned industrial assets. At the same time, several case studies have been selected where there are suggestions of cultural reuse whose implementation lies under the sign of the available financial means and the interventions of political and administrative nature at the level of local administration. Although these are merely suggestions, if they could be implemented, they might ensure a continuity in the transformation of the industrial enterprises into functional cultural objectives.

2.1. Models of good practice of cultural conversions of the Romanian industrial heritage

2.1.1. The steam-locomotive museum in the city of Sibiu

Is the second steam locomotive “plain air” museum which was inaugurated in 1994 in Romania. The steam-locomotive museum in Sibiu is included among the examples of reuse of a certain type of industrial heritage that, from the technical point of view and of the need for spatial disposition requires particular conditions.

Romania has a long tradition as far as railway patrimony is concerned. Early in the 19th century the Reșița industrial complex branched off into construction of steam locomotives, manufacturing some of the first locomotives of that type in south-eastern Europe.

The museum was created inside a train yard that serves the Sibiu railway station and it includes various types of steam locomotives (35 exhibits) valuable from the technical point of view. The museum hosts steam locomotives made at the Resita factory, in Germany and Austria, at the Mávag factory in Budapest, by Belgian company La Croyere, etc. At the same time, the importance of the museum arrangement results from the collection of an important number of locomotives from several storage facilities across Romania in an adequate space, which also allows for the display of the exhibits meant to indicate the evolution of locomotive production at national and international level. Nowadays, there are numerous train yards across Romania with one or two locomotives whose technological value can not be fully emphasized and capitalized. It would be necessary to relocate them in groups inside the extant museums as well as museums that could be created later on (the suggestion has been advanced to create a new railway museum in Drobeta Turnu-Severin city).

2.1.2. The water museum in Floresti commune (Cluj county)
The Water Museum was inaugurated in 1992, marking the 100th anniversary of the creation of the Cluj Water and Sewerage Works, at the initiative of the County Water Company. The museum was created inside the building of the first underground-water pump house, which had entered service in 1898. The museum and the outer premises display numerous items related to the activity of the waterworks (ducts, pumps, pipes, tools and machines) and archive material (maps, technical plans, photographs). It is the first and only Water Museum in Romania.

2.1.3. The salt mining museum in the city of Targu Ocna

The development of industrial tourism in the Targu Ocna city involves visiting level 9 of the same salt mine, which also is used as support for the balnear treatment. At the moment, the respective level is no longer used for industrial operations, as salt resources have run out. In time, visiting the salt mine as a premise of mining operations brought about the furnishing of cultural assets inside (the Salt museum and St. Varvara church) which enhanced the salt mine’s attractiveness (Unguras, Merciu & Stoica, 2009). The importance of industrial tourism for the Targu Ocna salt mine is reflected by the harnessing of the industrial cultural heritage generated by salt exploitation. The salt museum allows for a veridical distribution of information on the industrial heritage of the salt mine and at the same time it is a very good opportunity of direct acquaintance and involvement in the local mining culture for tourists. In addition to historical, archeological and other sorts of documents (administrative archives, photographs), there are collections of mineral samples and documents concerning the salt mine’s geological structure.

2.2. Proposals for cultural re-use of industrial and technical heritage assets in Romania

2.2.1. Jurasek’s watermill (Resita municipality): cultural promotion center for milling-industrial heritage

Jurasek’s watermill is a monument included on the list of the cultural heritage of the town of Resita, located in Western Romania, in the historical province of the Banat. The building dates back from 16th century and it is built in stone. Although it is an ancient building, it is in a relatively good state of conservation. The Jurasek watermill stands apart from regular watermills because of its size (a building with a ground floor, two upper floors and a basement).

If one takes into consideration the presence of a significant number of watermills (100) in the rural area surrounding Resita city, the former watermill might be converted into a center for the research and promotion of the milling-industry heritage. On the other hand, it would mean doing work to conserve the ancient watermill, thus ensuring the extension of the existence of the former industrial building, by means of its conversion into a building hosting archives and materials on the proto-industrial heritage, furnishing it with a video projector, a hall for audio and video presentation, a room for archives of the milling-industrial heritage from the Banat province. At the same time, the cultural promotion center might serve as a form of development for the research in this particular field, if one takes into consideration the high number of watermills in the Banat province.

2.2.2. Anina mine (Banat Province)- an eco-museum

The Anina city (located in the Banat province) was a landmark in coal exploitation in Romania, when the first coal mines opened in the south-western parts of the country, close to 200 years ago, as a result of the initiative of the Austrian Imperial Court. The discovery of the pitcoa deposits laid the foundation for the development of heavy industrial activity: steel, shale distillation, brick production, coke and ammonia factories, alongside the construction of an outstanding rail transport infrastructure and workers’ settlements. The Anina mine was closed down in 2006. In order to culturally capitalize on the mining heritage assets (mine shaft number 1, the elevator housing, the engine housing, the double steam-powered extraction machine, the heating plant) the Anina mine should be converted into an ecomuseum.

2.2.3. The Filaret power plant (Bucharest city)- an exhibition hall of Technical Museum Dimitrie Leonida

Dating from the late 19th century, the Filaret power plant has a particular architecture, as it was entirely built from red brick. The Filaret power plant is included on the list of the cultural heritage of the town of Bucharest. The first power plant in Bucharest might have the same evolution as the Giovanni Montemartini thermo power plant in Rome. The plant is currently improperly used as a garage for the Electrica Serv. S.A. Taking into account the position of the plant close to the “Dimitrie Leonida” Technical Museum, it might be converted into a museum exhibition hall, even more so as there are numerous exhibits that have been stored into the museum yard and they can not be displayed for visitors because of the shortage of space needed to display them inside the museum building. At the same time, the plant covers a sizeable surface, a situation that recommends it as a space suited for the display of the various pieces of technical equipment under the administration of the Technical Museum. The factory is in a poor state of conservation and it requires an important investment in consolidation. The building’s elongated shape (a length of 120 m), ease its transformation into a museum facility. The building’s large yard might also be used as a space for the display equipment or industrial machines that could also be protected against the action of the weather factors. From the point of view of the building’s previous destination and its esthetic design, the building is best suited to use as a compartment of the technical museum, and it might also host a range of machines previously used in the generation of electricity.
3. Discussions

Romania has an extremely rich and diverse industrial heritage (Merciu et al., 2012 a) which could indicate a special dimension of the national culture.

In Romania, capitalization of the technical and industrial heritage assets is becoming increasingly complicated as a result of the difficulty of the administration of the property of industrial enterprises, which as a result of the privatization process launched in the 1990s, were taken over by certain investors that oppose the actions taken towards their conservation and cultural capitalization. Because economic interests are paramount, numerous economic enterprises, particularly those that stand out because of their cultural value or their age, may become “attractive” for investors, because they are located in prime locations inside a given city and/or they cover vast tracts of land (Cercleux & Merciu, 2010). These factors are genuine motivations that drive investors to seek a new, profitable use for the industrial buildings. The problem does not lie in changing the initial destination of the buildings, but respecting the historical value, the economic viability of the new destination and matching the opportunity of conversion with the needs of the local population. Usually, in most cases the step to reuse the ancient industrial buildings is a controversial topic, as a result of the determination of the fairness of the conversion decisions, determination analyzed from various points of view (cultural, economical, historical, ethical). Quality conversion of the industrial heritage must become an alternative to its destruction.

It is difficult to imagine that an industrial building of significant age, with a special architecture, may be rather demolished or converted into a warehouse. Oldness and architecture are elements that recommend the industrial facilities labeled as historical monuments to become functional cultural attractions. Cultural re-use may take various forms, even in the case of decommissioned industrial buildings. Their mere cataloging as desolate constructions is unjustified. We are witnesses to a transformation that has also brought about positive effects. Since the 1990s, certain industrial assets have been properly reused, in a manner fitting their status as historical monuments. This situation draws attention to the understanding of the process of conservation, which needs to be continued by the process of capitalization.

There was a noticeable diversification of technical museums in the past few years, represented by museums resulted from the conservation, which needs to be continued by the process of capitalization. Conversion of decommissioned industrial facilities, and, respectively, from the ‘in situ’ conservation of industrial heritage assets. The creation of new technical museums by means of the conversion of industrial sites into cultural tourist attractions is a superior form of capitalizing on formerly industrial regions whose economy is on a decline. In addition, at the national level there are other projects concerning the transformation of industrial facilities into technical museums (Merciu et al., 2012 b).

The industrial heritage is part of a country’s culture and it reflects the degree of civilization reached at a certain point in time. The suggestions for the conversion of industrial heritage assets mentioned in the study are meant to indicate the variety forms of re-use, analyzing the suitability of the buildings, depending on their own characteristics (architecture, size, interior division in compartments, location). Performativity endows both buildings and the public space with life, as well as changing them in a most dramatic manner (Bărbuică, 2012).

Although cultural re-use is not the single option, but it is the best alternative when we refer to an industrial building classified as a historical monument. There is the misconception that cultural reuse will generate lower profit than another form of reuse, and most of the time this course is ruled out. In a time period when the threat of the losing of cultural objectives becomes increasingly felt among the members of society, it is necessary to take actions to end the neglect of heritage assets and damaging actions directed towards them.

The location of industrial facilities is an element that may be put to best use in the course of reusing them, especially those located close to the central areas of towns. Even if their location is not central, a converted industrial building can attract both the local population and tourists, by means of the cultural services it can offer. In this situation, they can serve as the most attractive feature of a particular borough, the industrial building being easy to notice by means of the new form it takes and the elements they are promoted by. Promotion is one of the elements of overwhelming importance in “launching” industrial heritage assets on the cultural market. The conversion of an industrial building, no matter its cultural conversion, will remain unnoticed, in the absence of large-scale publicity campaigns, various cultural and social events hosted by the respective building, whether they consist in book launchings, music record launchings, concerts, literary soirees, or permanent cultural activities hosted by industrial buildings: museum, library, archive, etc.

Conclusions

The care for the conservation and optimal capitalization of the cultural resources indicates a given society’s degree of interest and appreciation of its own culture.

The creation of new technical museums in Romania by means of the conversion of industrial sites into cultural tourist attractions is a superior form of capitalizing on formerly industrial regions whose economy is on a decline. The longer the time period when a city had a dominant industry, the more that industry becomes a symbol, and the more it identifies with the city’s cultural image. The imprint left by the industrial activity on the urban fabric is hard to erase even after the end of the industrial activity.
It is necessary to continue the process of conversion of abandoned industrial facilities in Romania so as to ensure the extension of the buildings’ existence (especially those classified as historical buildings), serving as an alternative to the destruction of the industrial heritage. On the other hand, conversion must involve an economic issue, to generate a profit.

Urban regeneration is also meant to avoid the deterioration of industrial buildings and to launch measures to convert them into cultural spaces, with the main goal of displaying technical and industrial patrimony assets.

Focusing on two types of examples of the reuse of the industrial heritage (the good-practice examples and the authors’ suggestions) consisted in emphasizing the actions taken in Romania concerning the involvement of civil society members in the action to conserve and capitalize on the industrial heritage and, at the same time, to indicate the need for the continuation of those actions. The conservation and capitalization of the industrial heritage ought to be launched at the same time as measures to include new industrial buildings on the national cultural heritage list, so as to ensure they are better protected. We are in a stage when the Romanian industrial heritage is no longer hidden in the shadows, but it manages to convey – by way of the people who study it and protect it – its defining features, its manifold significances: oldness, cultural, technological, architectural and esthetic value. All of these are supplemented by its suitability to being reused by means of the efforts and intelligence of the specialists and the civil society members who no longer remain indifferent to the problems the Romanian cultural heritage currently faces.

There are numerous forms of capitalizing on the industrial heritage, and cultural valorization is only one option, most frequently suited for use in the case of industrial buildings classified as historical monuments.

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References