Comprehensive Management of Industrial Heritage Sites as A Basis for Sustainable Regeneration

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Abstract

When discussing sustainable development, it is essential to equally consider all of its aspects: environmental, economic, and social. The experience in Slovenia shows that the third dimension, the social one, is often neglected, even though it is essential to integrated implementation of sustainable development.

Industrial heritage sites are highly complex structures, which are an important part of our social, spatial, cultural, and technological past. Their complexity is the main reason that they need to be tackled through a specific interdisciplinary approach to research and evaluation and, moreover, as this text points out, also through a specific heritage management approach, which has to start right after the production stops. Many negative consequences of the closure of production, e.g. loss of jobs, social problems, economic issues, affect both individuals and communities as a whole. So it is very important to approach the problem also from the social aspect and make sure that interested stakeholders including former employees are involved in heritage management. Such an approach would have various positive aspects; beside the fact that the industrial site in question would be recorded immediately after closure, the involvement would send an important message to others who are negatively affected with the closure, loss of jobs, and social distress. All of this would positively influence and accelerate the site's and community sustainable regeneration process. The proposed approach will be presented on the case study of the coal mining heritage in town Hrastnik in Slovenia.

Keywords: industrial heritage, heritage management, social sustainability, urban regeneration

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1. Introduction

1.1. Sustainable development and urban regeneration

Sustainable development, as defined in 1987 by the World Commission on Environment and Development in the report Our Common Future† [1], is the basis of conservation of resources (in all three dimensions: environmental, economic, and social), reuse of materials and built structures, as well as the areas that lost their original function. In recent projects and plans, sustainable revitalisation is, unfortunately, understood mainly through the economic and environmental dimension [2], even though researchers explore the possibilities of a more intensive inclusion of the social/cultural dimension of sustainability [3]. As suggested by C. Lanford in his study [4], this is probably due to the difficulty of quantifying and proving the effects of the social dimension of sustainability, particularly if compared to the economic one; however, the results of the environmental dimension are more quantifiable.

When speaking of regeneration of abandoned industrial sites, the social dimension is the one that is particularly relevant from several aspects, if not the most relevant one. The industrial restructuring processes are mainly accompanied by major economic and social problems of whole areas and distress of many individuals. These involve lengthy processes of insecurity, along with the risk of loss of economic and social security, while people feel left out and are usually alone in their experience‡[5].

Due to the difficult economic position of their owners, real estate and buildings remain their only property, which they want to liquidate as efficiently as possible. Therefore, they want to achieve the most favourable sale terms, without any interest in the future of these areas. All these problems are related to financial benefits and are solved before addressing the issue of heritage conservation, which is somewhat logical, even though the power of industrial tradition can be an important starting point of restructuring, which has proven efficient in many cases abroad and also in some Slovenian.

1.2. Complexity of industrial heritage and the issue of sustainable revitalisation

An important characteristic of industrial heritage sites, which makes the conservation process and sustainable revitalisation difficult, is the complexity of heritage. Sir Neil Cossons defined industrial heritage as the most complex heritage category, stating [6] that “Industrial heritage is, arguably, a unique cultural discourse; it brings challenges found nowhere else in the heritage sector and requires new answers.” Furthermore, he stresses: “It demands knowledge, great judgement and real understanding”. This relates to the understanding of material remains as an intangible aspect of industrial heritage, and thus of work values, which are quickly forgotten in the context of dealing with industrial heritage.

These are the characteristics that we must be aware of not only in the context of efficient heritage conservation, but also to make the social and sustainable revitalisation of the sites more efficient. With their knowledge, abilities, and work tradition, people, as human resources, are an important part of economic and, finally, environmental dimension of sustainability. The comprehensive understanding of the “formation of heritage” is even more important, as the production sites change from active economic operators into problems hindering development. This is, as a rule, the level when only demolitions and replacements through new programmes seem to have prospective, being connected with the past as little as possible. At this point, it is important to study the possibility of reusing the existing structures and knowledge potentials, which are, typically, an important capital of industrial areas, while they are neglected in the restructuring processes. These are important starting-points that allow for making sense of the existing situation in a new context. The remains of the past obtain a new, multi-dimensional

† “Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”
‡ The results of the survey by the Clinical Institute of Occupational, Traffic and Sports Medicine within the University Medical Centre Ljubljana, which was carried out among the Mura textile factory workers in 2012 and 2013, indicated that the restructuring process had harmful consequences for the workers and their health.
role, as a source of new economic stability, cultural identity, and personal self-confidence of everyone who, through their inclusion in the revitalisation process, were, directly or indirectly, provided with a new opportunity as a replacement of the job lost in a factory. This is an important social dimension of industrial heritage protection, which requires a more directed operation practically from the moment when the production at the site stops.

2. Methodology

2.1. Integration of conservation and management as a key to sustainable revitalisation projects

Nowadays, conditions in heritage management increasingly change at all levels, i.e. from objectives, governance to management techniques. In the study on the changing role of heritage in the society, and in the manner of its management, as published by A. Phillis [7], the contemporary directions in heritage management can be summarised as follows: it is crucial to reach a consensus and to know how to adapt to the conditions; regarding managing skills he says that the new conditions require managing by multi-skilled individuals, which is contrary to the traditional system mastered by experts and scientists.

The Burra Charter [8] was used as a starting point for studying the management and methodological approach, which highlighted the “assessment of the significance of the place – based on the values attributed by all stakeholders (not only experts) and the use of a Statement of Significance – as a basis for developing conservation and management strategies,” as is best summarized in the manual Managing World Cultural Heritage MWCH [9], which provides a synthesis of the recent findings in the area of managing heritage sites.

The Burra Charter was first adopted based on the historic South Australian mining town of Burra; in the context of our study it is interesting to test its application for managing Slovenian mining sites in Hrastnik, which mostly lack a legal heritage protection status§, while, without doubt, these sites have cultural significance.

The key starting point of preparing the strategy for the coal-mining heritage of Hrastnik is the implementation of the Burra Charter Process (BCP), which allows for combining site management and heritage conservation, as the basis of efficient development-directed heritage site management. It originates in the values led approach** [9], which ensures the effective respect of the increasing complexity of the heritage. BCP is methodologically divided into three basic stages:

- understand significance,
- develop policy,
- and manage in accordance with policy.

Each stage is structured to allow for updating the information on heritage in the sense of considering new conditions in space, which require adaptations in management [8]. The key characteristic of the process is that all stakeholders and the local community can take part in all stages of the process, which is also relevant in preparing the study for Hrastnik.

2.2. Hrastnik

Hrastnik (about 9,300 inhabitants) is situated in central Slovenia. Together with the towns of Trbovlje and Zagorje it forms the so-called Zasavje Coal-Mining District, which developed in the mid-19th century. Mining was intensified by the construction of the Southern Railway, which connected Vienna and Trieste in 1857, and reached

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§ Many heritage sites are not inscribed due to work overload of professional services. Unfortunately, in Slovenia, the inscription on the Heritage Register under “industrial heritage” is not provided for either. The Ministry of Culture’s Register lacks such a register so units are typically inscribed as a “factory”, a “mine”, or a “secular heritage site”. This adversely affects the presentation of their heritage testimonial value, since it does not allow for a comprehensive relation treatment, e.g. of production, transport, operating, housing, and business structures, etc.

** The values-led approach is, in many ways, a response to the recognition of the increasing complexity of heritage. It evolved in various parts of the world, for instance in Canada and the USA, and became better known through the Burra Charter, first developed by ICOMOS Australia in 1979 and subsequently updated.
Hrastnik in 1849. The greatest economic boom and urban development of all three towns was during the socialist Yugoslavia (1945–1991). The closing of mines started after the restructuring of economy in the 1990s when Slovenia, after breaking away from Yugoslavia, faced transition into the market economy. The last operational mine in the area is in Hrastnik, which is now closing down its operations managed by the state company Rudnik Trbovlje-Hrastnik [10].

2.3 Implementation of the Burra Charter Process in the case of the Hrastnik coalmine

The heritage management process, as has been proposed for Hrastnik, starts with the first step – understanding of heritage site significance, proceed with the preparation of the plans for the management, and in the final stage enable the controlling of their implementation.

All interested stakeholders take part in the process, while the process itself is guided and managed by the municipality. The expert group for each site concerned is composed of owners, representatives of the local community, the civil society, and experts in the fields of heritage protection, spatial planning, and economy.

Given the industrial complexity of, in this case, mining heritage, seven typology groups of heritage places are proposed: colliery built structures, mining landscape, transport infrastructure, power systems, miners housing, administrative buildings, welfare buildings (directly relate to the mining company), which allow for a systematic processing and relation treatment of individual places of cultural heritage.

2.3.1 The first stage of the process: Understand significance

The understanding of significance requires, firstly, the collection of data for each heritage place considered. It is essential to implement interdisciplinary analytical research work [11]. All data have to be systematically arranged within the following groups of characteristics:

- History: a systematic summary of development characteristics from the lists of all sources; regular updating of information on an internet platform is proposed, which ensures access for all.
- Past use: description of activities in the study area, presentation of technological characteristics in the case of production-related use.
- Present use: description of the existing use in the place.
- Associations: all relevant spatial associations are described here, relating to other places, people, and events. They need to be systematically represented and a list of sources prepared (references, archives, interviews). Associations are highly important in determining the dimensions and connections of heritage in a wider context.
- Fabrics: in this segment the structure of materials is described (what are the buildings and structures made of, and how).
- Cultural significance: is a summary of the characteristics defining the significance of the place regarding its aesthetic, historic, scientific, social values††.

A summary of cultural significance is prepared at the end of this segment as a Statement of Significance, which stresses the heritage values as the basis for implementing the conservation and management process.

2.3.2 The second stage of the process: Develop policy

This is part of the process establishing the methodological basis for efficient management implementation. Importantly, at this stage all factors and issues are defined in detail; they are the key for policy development and management plan preparation, as a result of this segment. The second stage is divided into three stages as follows.

†† They are written in alphabetical order, not regarding their importance!
2.3.2.1 Identify all factors and issues

In this segment, it is necessary to include the Statement of Significance that was produced in the previous stage; to present information about the owner of the area concerned; to identify the physical, material condition of structures, conservation, level of authenticity; to identify owners’ needs – defining the owners’ requirements and needs in relation to the area; to describe the potentials of a place under “opportunities”; to describe, under “constraints”, the limitations affecting identification of use and management of the place by heritage; to compile a list of all stakeholders’ interests for the place.

2.3.2.2 Develop policy

When all factors and issues are identified the policy development starts. This is the most important part of coordination, i.e. when all conditions are studied, and the parameters for preparing the management plan are agreed upon; they are developed in three groups: recommended uses - recommendations for the use and the rules for implementing these uses; conservation measures and interpretation - at this stage preservation activities for the whole heritage site, e.g. restoration works, maintenance together with interpretations plans, must be presented; finally, tourist potentials must be defined. In accordance with the development direction of the municipality, for each historic place the potential for use in tourism, direct activities, and possibilities and restrictions regarding tourist use are defined.

2.3.2.3 Prepare a management plan

Preparation of management plan is undertaken in three steps that should be coordinated and prepared in parallel. It is necessary to provide a system of prioritised content in the place concerned, which must be coordinated among all stakeholders; the execution schedule of the envisaged activities must be defined. It is important to consider all stages of work on the project, i.e. from data and information acquisition to monitoring. Deadlines should be set to monitor the success of implementing the plan. The new step is a review of resources of programme implementation, and the dynamics in obtaining funding, which is essential for the execution. This is also the phase when the managers responsible for managing the sites need to be determined; these can be legal or natural persons (depending on the owner).

2.3.3 The third stage of the process: Manage in accordance with policy

The essential part of a successful process is its efficient management, which adapts to the new requirements and needs, without putting the heritage at risk in any way, and without reducing its testimonial value. An important accompanying activity of all stages is monitoring of the process and results. This will be particularly important when dealing with the first cases of industrial sites, as this will help us direct the activities in the individual places and optimise the methodology in the Slovenian context.

3. Results and Discussions

To achieve efficient conservation and successful inclusion of mining heritage into new development strategies, it is necessary to design a system of heritage management, which will include all the interested parties and enable coordination of their interests from the beginning. At the same time, it has to be clearly stress the primary role – heritage conservation.

The described process requires a precise definition of the whole management process and, above all, the provision of all necessary information on heritage, which must be available from the beginning to all stakeholders. In the case of Hrastnik an internet platform will be developed, which will allow for coordination and transparency.

Changes in the key fields of the traditional approach to heritage protection are needed for its implementation. As summarised in MCWH [9], various studies have shown that to implement such an approach it is necessary to
implement changes in the field of legal protection, institutional frameworks, and implementation of sources – and particularly a combination thereof. Nonetheless, this can only occur by employing top-down and bottom-up approaches, where the local authorities must play a crucial role, as was shown in Hrastnik.

Under the existing conditions of restructuring, the municipality has all the keys to success, particularly because the Rudnik Trbovlje - Hrastnik coalmine company in Hrastnik is state-owned, while a part of the public funds intended for the production closing could be allocated to new development programmes. The Municipality of Hrastnik will make use of these for opening new opportunities, based on the coal mining heritage tradition.

4. Conclusions

The approach presented here is inclusive and comprehensive. It is indeed based on the experience from a different cultural background, however, exactly because of this it allows for innovation surpassing traditional European conservation approaches, based on art historical paradigm; it includes a wide level of objectification and allows for on-going harmonisation and inclusion of all stakeholders, which is essential.

The theoretically developed approach is still in the initial stage of practical realisation and it is believed that many further adjustments will be needed for its optimisation – this will be, along with taking part in the implementation, one of the key research challenges of the future.

References