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INDUSTRIJSKO NASLEĐE U FUNKCIJI OČUVANJA **IDENTITETA: PRIMER SMEDEREVA**

Aleksandra Đukić, adjukic@afrodita.rcub.bg.ac.rs, University of Belgrade, Faculty of Architecture Ana Špirić, a.spiric@yahoo.com, Institut za zaštitu intelektualne svojine Branislav Antonić, antonic83@gmail.com, University of Belgrade, Faculty of Architecture Milica Ristović, ristovic.milica0906@gmail.com, University of Belgrade, Faculty of Architecture Abstract:

Kulturno nasleđe je prepoznato kao nezamenljiv i neobnovljiv strateški resursza održivi razvoj grada i jačanje njegovog identiteta u funkciji njegove konkurentnosti na regionalnom i globalnom nivou. Industrijsko nasleđe je deo kulturnog pejzaža koji proizilazi iz interakcije društvenih grupa i prostora kojim grupe pripadaju i u odnosu na koje grade kolektivni identitet i kulturna značenja, kroz slojevit i kompleksan odnos. Društvene vrednosti industrijskog nasleđa suvažan deo identiteta građana, jer predstavljaju deo memorije o životu ljudi, o industrijskom progresu i ponosu lokalnog stanovništva. Studija slučaja će biti sprovedena u Smederevu, na lokacijama industrijskog nasleđa duž obale Dunava. Identifikovanje vrednosti i značaja indistrijskog nasleđa će biti istraženo anketiranjem građana Smedereva. Anketa se sastoji iz utvrđivanja elemenata imidža mesta, na osnovu pet elemenata Kevina Linča, kao i identifikacije emotivne povezanosti građana sa mestom, razumevanje njegovih simbola i značenja prema Relfu.

Keywords: industrijsko nasleđe, kulturno nasleđe, identitet, grad, Smederevo

THE ROLE OF INDUSTRIAL HERITAGE IN PRESERVING THE **IDENTITY OF A CITY: CASE STUDY SMEDEREVO** Abstract:

Cultural heritage is recognized as an irreplaceable and non-renewable strategic resource for the sustainable development of the city. It could serve as important trigger for strengthening identity and competitiveness of the city at the regional and global level. Industrial heritage is seen as a cultural landscape that stems from the interaction of social groups and the space they belong and in relation to which they build collective identity and cultural meanings, through a layered and complex relationship. Social values of industrial heritage are an important part of citizens' identity, because they represent a part of the memory of people's lives, about industrial progress and pride of the local citizens. The case study is conducted in Smederevo, at the area of industrial heritage along the Danube river bank. Identification of the value and significance of the Indistrial heritage will be investigated by a survey of citizens. The survey is based on the five Lynch's elements of the image of the city, as well as the identification of the emotional connection of citizens with the city, the understanding of its symbols and meanings. Keywords: industrial heritage, cultural heritage, identity, city, Smederevo

1. INTRODUCTION

Over the past few years, the protection of cultural heritage, as an irreplaceable and nonrenewable strategic resource, has become a central theme of the most important international documents and contemporary urban development strategies. Recognizing the importance of protecting cultural heritage for the development of cities is the result of understanding culture as a new resource on which future development is based, or as new paradigms of sustainable development. Thus, protection of cultural heritage, as a mechanism for preserving urban identity and increasing the competitiveness of cities in the global market, represents a significant potential for sustainable development of cities. The important part of cultural heritage in cities is industrial heritage which consists of the remains of industrial culture that are of historical, technological, social, architectural or scientific value [1: 1]. Besides the tangible values expressed through industrial technology and processes, engineering, architecture and town-planning, industrial heritage includes many intangible values embodied in the skills, memories and social life of workers and their communities [2: 1], such as technical know-how, the organization of work and workers, and the complex social and cultural legacy that shaped the life of communities and brought major organizational changes to entire societies and the world in general [2: 3]. Thus, being a part of the record of the lives of ordinary men and women, industrial heritage provides an important sense of identity [1: 1].

This paper deals with a problem of industrial heritage preservation within a contemporary development context. The adaptive reuse of industrial facilities and sites that have irrevocably lost their original purpose and their adaptation to new socioeconomic context, without jeopardizing cultural and historical values, is a method of sustainable protection of industrial heritage. The problem of preservation of industrial heritage probably arises from the lack of understanding the values that are mostly seen as tangible. Neglecting the intangible values of industrial heritage, or the meanings contained in the memory of life and work, is one of the fundamental problems of sustainable protection of heritage. Lack of understanding of the multitude intangible values that abandoned sites of industrial heritage possess and messages they carry leads to their decline and complete disappearance, resulting in distortion of collective identity, based on the industrial past of community, and personal identity of citizens in terms of a sense of belonging to a community. So, the main question that arises from this assumption is what to preserve, what are important values of industrial sites that are valuable to preserve, and why? On the other hand, this problem arises from the lack of appropriate planning tools for identifying and analyzing industrial heritage meanings that are valuable to preserve. Defining the meanings of industrial heritage as one of initial tasks of urban conservation is usually done by urban planners and city authorities, without taking into consideration aspects of meaning deriving from people's interaction with space. Integrating intangible values into the process of urban conservation involves re-examining the relationship between the individual and the social and cultural environment, as well as understanding meanings attributed to some elements of heritage based on experience, memory and associations. This points to the need for improving the planning process of industrial heritage conservation in phase of initial tasks setting thought substantive citizen participation.

The aim of this paper is to define social values of industrial heritage based on the interaction of social groups and the places of cultural heritage they belong and in relation to which they build collective identity and cultural meanings, which contribute to 301

decision making in the initial phase of planning conservation. Moreover, the aim is to draw attention to the importance of preserving meanings assigned to industrial heritage and need for involvement of experts and other public in the planning process of urban conservation. In the first part of the paper, theoretical framework for investigating place meanings and defining social values of heritage is presented. The second part deals with the area of industrial heritage along the Danube river bank in Smederevo. Identification of the values and significance of the industrial heritage is investigated by a survey of citizens. The aim was to identify all social and physical meanings assigned to elements of industrial heritage, seen through five Lynch's elements of the image of the city, as well as to understand affective attachment of citizens to industrial heritage and city.

2. THE IMPORTANCE OF PLACE ATTACHMENT IN INDUSTRIAL HERITAGE CONSERAVTION

In order to define social values of industrial heritage valuable to preserve and based on the interaction between the individual and the social and cultural environment, critical examination of the concept of place attachment from place attachment theory is of great importance. The theory of place attachment is based on the relationship between an individual and a group with a place, which is realized on the basis of social and symbolic meanings of the place whose roots are derived from phenomenological studies. In the literature there is terminological ambiguity of concept of place attachment, and the concept often refers to the similar terms such as: community attachment, sense of community, place dependence, sense of place and especially place identity. Still, the place attachment is most often defined on the basis of two subcategories of place identity and place dependence [3]. Place identity is described as the individual's incorporation of place into the larger concept of self [4], which means that place identity is substructure of self-identity. The definition of place dependence highlights the physical characteristics of a place as essential for attachment because it supports one's goals through amenities or resources [5]. Therefore, a place can be considered meaningful because it provides amenities for some activities or consists of emotional and symbolic values. Anyway, in many theoretical and empirical researches place attachment refers to the affective bonds people develop to specific place and that contribute to personal satisfaction, creativity, privacy, security, and serenity [6]. According to same authors, the main characteristic of this bond is the need to preserve closeness with place. Finally, place attachment is a symbolic relationship formed by people, attributing common cultural affective meanings to a certain place, which is the basis for an individual and collective understanding of the environment [7].

Based on the above, place attachment is useful concept in planning the adaptive reuse of industrial heritage which deals with struggle to balance urban development with conservation. The need for balance these two lies within the contradiction between the industrial heritage as a place of contemporary urban life and the industrial heritage as a place with the inherited social and cultural values important to the community. Once again this confirms that the value of industrial heritage does not lie purely in its physical structure, but also in the diverse socially constructed and intangible meanings attached to it. An urban intervention that does not respect the attachment of individuals and groups to places affects and changes the place meanings which eventually can be experienced positively or negatively by different members of community. In order to identify elements of industrial heritage and their meaning valuable to preserve it is important to understand all aspects of attachment to industrial heritage. So, a tripartite model of place 302

attachment defined by Scannell and Gifford [8] is taken as most relevant for this research. According to this model, the place attachment is a multidimensional concept defined by human dimension, psychological process, and place. The place attachment can be achieved at the individual and group level, which is often intertwined. Another dimension of place attachment concerns the way that individuals or groups relates to a place, and the nature of the psychological interaction that occurs in the environments. Three psychological processes, based on which attachment is developed, are affect, cognition and behavior. The basis of the relationship between individuals and the environment is the emotion [9 in 10]. This relationship also includes cognitive elements such as: memories, beliefs, meaning and knowledge that people associate whit places [8]. As cognition, place attachment involves the construction of place meanings as well as cognitions that facilitate the closeness to place. The third aspect of process of place attachment is the behavioral level in which attachment is expressed through actions (e.g. proximity- maintaining behavior)[8]. And finally, the most important dimension of place attachment is place itself. The place can be examined at different geographical values, and has typically been divided into social and physical attachment [11].

This tripartite organization of place attachment has much in common with a concept of place defined by Relph, and they complement each other. According to Relph, place is center of action and intention [12] and is included into "the intentional structures of all human consciousness and experience" [12: 42]. The essence of place lies in experiencing it from inside, which greatly differs from experiencing it from outside [12]. All these definitions clearly show the importance and the role of people in defining the places and place attachment. This concept of place in a comprehensive way includes intangible values which are related to the experience of space as well as tangible, which are related to the specifics of the physical features of place that affect the experience [13]. There are three main components of place: the static physical setting, the activities and functional values, and the meanings or symbolic values [12], which are "irreducible one to the other, yet are inseparably interwoven in our experiences of places" [12: 47]. These three components are always interrelated in specific way affecting each other and forming dialectics that make specific identity of place. According to Relph [12], the first two of these elements can be easily appreciated, but component of significance and meaning is difficult to grasp. The meaning of place is not property of physical setting, objects and activities- rather it is a property of human intention and experience and is central to all human existence [12]. Precisely this component is the one that explains the way place attachment is developed and maintained.

In case of abounded and underused industrial heritage, physical component can be understood as industrial buildings and structures and natural environment each of which offers its own characteristic possibilities for experience. Many sites are important because of the specific layout and architectural design of certain structures and structures that represent important urban landmarks. Structures such as silos, chimneys, conveyor belts and traffic structure represent distinctive elements in the overall image of the city and the great perceptual and visual quality of the landscape. According to some authors, the industrial structures have no aesthetic values and represent a result of technology of process of production and conditions of efficiency and safety. On the other hand, many industrial buildings have significant architectural values. Activities and functions of industrial sites can be distinguished as being former or present. In other words, they can be analyzed in the context of activities of industry that is closed and current uses of facilities if there are any. As a result of the former industrial activity and industrial life in general, specific social relations are emerging from which the social significance of industrial heritage is further developed.

Finally, the meanings of abandoned industrial heritage stem from the experience of physical characteristics and previous activities, and thus create physical or social place attachment. Although the theory argues that physical characteristics are an integral part of the meaning of the place, the idea that the individual experience of place makes the basis of attachment more convincing [8]. Meaning of place is constructed through emotional interaction between humans and places [14], as well as through cognitive process, and thus affects the development of people's attachment to place. The meanings are culturally determined, since culture articulates the exchange of information, the mode of communication, interaction of people and environment, and determines the way people experience space [15]. Members of the same cultural groups experience more or less the same urban structures and activities and are taught to appreciate certain quality of the place [12]. Since they are formed as a result of intersubjective intentions and experience of the place, the meanings are not fixed categories and change in accordance with the change in the social, cultural, economic and political context. Places are continuously produced in interaction with the environment and, therefore, gain new meanings over time [16]. It is also important to consider that different social and cultural groups attribute different meanings to places of industrial heritage. Therefore, the relationship with industrial heritage changes over time and it is historically conditioned, which further leads to the conclusion that there is no unique identity of industrial heritage based on the historical development of industry and tradition.

The meaning of place stems from the direct experience of behavioral and empathic insiders who have an emotional and physical connection with the place, but also existential ones who have full association with the place [12]. Therefore, for defining meanings of industrial heritage it is important to consider the experience of the inhabitants of the cities in which the industrial heritage is located and where industrialization has left a deep trace on urban tissue, but also the workers whose existence depended on working in the industrial sector. Therefore, industrial heritage has individual and collective meanings which allow individuals and groups to feel attached to heritage. Both groups of meanings are important for the planning treatment of tangible and intangible traces of the industrial past in the process of urban conservation. In this way, the meanings of industrial heritage, as an intangible component, becomes an indicator of the importance of physical characteristics and activities for attachment to heritage. In other words, meanings are the field of representation of the relations of tangible and intangible values of industrial heritage.

3. INDUSTRIAL HERITAGE MEMORY IN FUNCTION OF URBAN CONSERVATION

Attachment to places that have suffered destruction and are destroyed and inaccessible is activated retrospectively through the process of losing and re-creating places based on memory [7]. The concept of memory is a prism through which the way of the past is understood and how social groups use ideas about the past with the goal of understanding personal identity in the present. Thus, the place attachment is based on the representation of the past which the environment contains [17 in 8]. In connection with this, attachment to industrial heritage sites is realized on the basis of the meaning of the legacy present in the memory. People use memory to create the meaning of the site and

connect with them, with memory representing a lively and active link between the past and the present [18].

Investigating the individual and collective memory in the context of preserving industrial heritage and urban conservation leads to thinking about the construction of memory, the impact of the social context on collective memory and its change, as well as the selection of elements of industrial past stored in collective memory. Attachment to industrial heritage can be analyzed through the degree, or intensity, and the quality or content of the collective memory, through which attachment is created.

The emotional aspect of attachment to industrial heritage refers to the intensity of memory, which varies based on personal emotions and experience of industrial heritage. In literature, positive experiences and emotions related to the industrial past are more often mentioned. Industrial heritage is understood as a symbol of progress and an important element of a stable social life and pride of the community. However, it is often neglected that there are opposing attitudes towards which industrial heritage is a symbol of social inequalities and class conflicts, and industrial activity is viewed through a prism of severe working conditions. In order to define the intensity of industrial heritage memory, it is important whether there are positive or negative emotional meanings attributed to heritage, or apathy identified, and the intensity value is less important. Also, in order to define the character of the attitude towards the industrial past it is important to determine whether these emotions are assigned to the period of active industrial production, stagnation or complete shutdown of industrial activity. Therefore, the intensity of the memory of industrial heritage is primarily the subject of qualitative research of place attachment, which deals with the question of what places mean, rather than the quantitative ones, which deal with the question of how much they mean. Anyway, the attachment to industrial heritage can be achieved on the basis of negative and positive emotions. The place attachment based on positive emotions gives a sense of belonging, while attachment based on negative experiences and emotions seems depressing and limiting [12]. Intensity of memory affects the positive or negative character of the overall image of industrial heritage, which is important for directing urban planning interventions in order to preserve and enhance the image, or to completely transform the negative image and create a new positive image of the site.

Cognitive and behavioral aspects of attachment to industrial heritage relate to the content of industrial heritage memory, which is analyzed on the basis of common physical and social meanings arising from the experience of physical and social component of industrial heritage. The physical component refers to aspects of the site and physical characteristics (e.g. industrial architecture, specific urban patterns, urban landmarks, etc.), while the social component refers to specific social relationships that have emerged as a product of industrial activities (labor heritage). The content of industrial heritage memory is a subject of qualitative research of place attachment, which deals with the question of what the places mean, and which elements of the places are assigned with meanings. Places are assigned with meanings through multi-sensory experience. The meanings are not just concepts, but also images, sensory-motor schemes, feelings, qualities and emotions that make the encounter with the world significant [19]. According to Stedman [20], the meaning of a place is a mediator between the physical characteristics of the place and the strength of the emotional connection with the place. Sixsmith [21] defines three experiential modes: personal (happiness, belonging, responsibility, etc.), physical (structure, services, architecture, work environment, etc.) and social (type of relationship, quality of relationship, friend and entertainment). Similarly, Gustafson [16] highlights that meanings attributed to places can be mapped 305

around and between the three poles of self, others and environment. The same author defines three dimensions of meanings: distinction, valuation, continuity and change.

Since the meaning of the place, and therefore the memory, change over time, in accordance with the economic, political and social context, in analyzing industrial heritage meanings it is important to take into account all stages of the place - from active industrial production and phases of industrial activity stagnation. In addition, sites of abandoned industrial heritage have different meanings for different social and cultural groups. Thus, the meanings of industrial heritage are different for generations that were part of an industrial past and generations that only remember the story of it. It is also important to mention that attachment to industrial heritage is achieved either through a positive experience, (for example, as a symbol of social solidarity and equality), or a negative experience of a heritage (as a source of environmental pollution). Finally, defining the content of industrial heritage memory facilitates the treatment of tangible and intangible traces of the industrial past, and defining further guidelines for establishing a balance between the preservation and transformation of industrial heritage values in the process of adaptive reuse. The quantitative and qualitative structure of the collective memory of industrial heritage presented in this way is part of the social and cultural values of industrial heritage that has an important role in the strategies for sustainable urban conservation.

In the following text the results of the case study conducted in Smederevo, at locations of industrial heritage along the Danube bank will be presented. Intensity and content of industrial heritage memory is investigated by a survey of citizens of Smederevo. The main aim was to identify physical elements of industrial heritage which represent important part of the image of the city, their meanings and the character of emotional connection of citizens with the heritage and the city.

4. SURVEY RESULTS

The accompanied survey to the previous theory was conducted in Smederevo. This city is selected due to its bright industrial past, with the backbone in "Sartid" company, the oldest (est. 1913) and the most important steelworks in Serbia [23]. The decent part of pre-war industrial heritage is protected by the Regional Institute for Protection of Cultural Monuments "Smederevo".

The questionnaire was formed throughout six questions related to the type of memory people have about industrial heritage, feeling that those memories awaken in them, opinion of importance of those places nowadays, and most significant examples of industrial heritage in the city of Smederevo. The survey also included a few demographic variables as a gender, age, the period of life spent in Smederevo, and the possible employment in the industrial sector of Smederevo. The aim of those variables was to see the difference in observation of industrial heritage between those generations that were part of an industrial past and ones that only remember the story of it and abounded industrial objects.

Results of the survey were based on 100 completed questionnaires. Before presenting the structure of collected answers, it is important to give some information in brief regarding the structure of the survey respondents, formed on aforementioned demographic variables:

- Gender ratio in the survey is a little bit different than a general ratio for Smederevo 64% of respondents were women and 36% of them were men, and a general ratio is 50.7% to 49.3% in a favour of women;
- Age structure was based on three main statistical groups (<18, 18-65, and >65 years). The ratio between the respondent groups was 4%/82%/14%, respectively. Comparing to general age structure in Smederevo (18%/65%/17%, respectively), the situation is also a bit different, with lower representation of the youngest group. It is also important to say that 33% of respondents are between 15 and 30 year-old which is the statistical group of young people;
- Third variable was about years of life in Smederevo. In those answers there were two categorisations, the first one was based on the exact years of life in Smederevo, and it was separated in three groups (<10, 10-20, and >20 years). The ratio between the respondent groups was 4%/6%/90%, respectively. Second categorization was based on relation between ages and years spent in this city. Respondents were thereby separated in three groups; those who live in Smederevo the whole life, those who come in the city before they were 18 years old, and those who come older than that limit. The ratio is 69%/ 15%/16%, respectively.
- The last variable was the question about employment in the industrial sector of Smederevo, and only 24% of respondents have been employed in it, which is really surprising result, considering the significant economic impact that industry has had in the city of Smederevo.

The first question refers to the type of memory that people have about local industrial heritage and associations that they link to it (figure 1). There were 17 possible answers, and respondents had possibility to mark more than one answer, so average number of them was four to five. Respondents often marked opposite answers in sense of positive and negative feelings at the same time. One group of answers was related to the greatness of industrial past, prosperity, equality and security it provided, second one was related to severe working conditions and the bad side of industrial past, and the third one was related to bankruptcy, collapse of the industry and existing abounded objects during post-socialist transition, but also possibility of its restoration. The results show that 42% of respondent are associated of greatness of that industry in the past, but at the same time 40% of them see abounded, neglected and unused space, and mostly the possibility of its restoration and revitalization (38%). A lot of people also link industrial complexes to the bankruptcy (22%), collapse of the industry and economy (34%). Objects of industrial heritage mostly remind people of the time when the industry was strong and everything that those times brought with itself, but at the same time, condition in which those objects are nowadays constantly remind people of all circumstances which caused that. The second question refers to the feelings that memory of industrial past awaken in people (figure 2). The previous question already gave some indications about that, but the results of this one ones more shown that emotions are mixed. Respondents also had the opportunity to mark more answers, so average number of them was around three. People usually feel pride and melancholy about the industrial past (48%) and, at the same time, disappointment and regret about its collapse and the present-day condition of it (58%), which logically leads to nostalgia (34%) as mostly mentioned emotion.



Figure 1. The column chart on the question "Which associations you link industrial heritage in Smederevo with, i.e. which meanings do you attribute to it?"



Figure 2. The column chart on the question "What kind of feelings does the memory of industrial past of Smederevo, awaken in you?"

The third, fourth and fifth question referred to the opinion about importance of industrial heritage (figure 3). Almost all respondents (91%) think that industrial heritage has cultural and historical values, also 94% of them marked that it represents significant element of the image of the city. A little bit smaller, but also big percent of respondents (84%) think that industrial heritage of Smederevo has the regional and national importance.



Figure 3. The pie charts on the third, fourth and fifth question

The sixth question was about the place of industrial heritage in Smederevo which a respondent considers as especially important, and the reason for that (figure 4 and 5). People mostly selected one to three structures/complexes, and most of them (74%) favoured the complex of Old Steelworks, especially those who marked only one of them. Respondents mostly mentioned the importance that this factory had before the new one was built (which still have a big economic impact), big size of complex itself, but also historical values, because the construction was started even before the WWI. Next mostly mentioned object is the Silo (18%), as a structure on the Danube riverbank and on the main pedestrian promenade, but also with great architectural values. The third one were Wine Callers (14%), as a structure at the entrance in the central zone of Smederevo from Belgrade, very significant for branding the city in the terms of viticulture, by also with great architectural values. Fourth and fifth most frequent answers were "Monopoly" building and (old) salt warehouse (14%), because of their position close to the Danube ("Monopoly") and on its very riverbank ("Warehouse").



Figure 4. and 5. The pie charts on the question "What place of industrial heritage in Smederevo you considered as especially important and why 309

5. CONCLUSION

Industrial heritage is seen as a cultural landscape that stems from the interaction of social groups and the space they belong and in relation to which they build collective identity and cultural meanings, through a layered and complex relationship. Social values of industrial heritage are an important part of citizens' identity, because they represent a part of the memory of people's lives, about industrial progress and pride of the local citizens. With understanding industrial heritage as a complex concept that arises from the interaction between tangible and intangible values at the beginning of the 21st century, the concept of place attachment became more important in the context of urban conservation. Planning interventions that do not respect the existing urban structure and social character of a community can contribute to the loss of meaning of specific place. Losing significant urban places can jeopardize the attachment of members of the community to places and result in creating a sense of loss and alienation [22].

One of the challenges of urban conservation is defining the way in which social communities attach emotions and meanings to places, or intensity and content of place attachment. Identifying the dominant meanings and symbolic values, on the basis of which attachment to industrial heritage is achieved, is important for defining planning interventions aimed at preserving valuable tangible and intangible traces of the industrial past in the process of urban conservation. Place attachment has the power to induce the community to actively participate in development processes if those processes aim to strengthen local identity.

Starting from this theoretical framework, intensity and content of industrial heritage memory as social values are identified in this paper.

Throughout the survey, the multi-layer observation of industrial heritage can be recognized. This is especially true in the case of the largest and oldest (old steelworks) and centrally-located examples (old silo). First two questions, where respondents can mark several answers, show different, even opposite emotions and associations among them. In the city of Smederevo, a lot of abandoned industrial structures (brownfields) are part of the city central zone, so people have very strong relation to them. These structures of the city industrial past mostly remind them about the period when industry was strong and Smederevo was known for it. Therefore, the respondents feel pride; at contrary, really small number of respondents mentioned pollution, ecological issue or sever working conditions, as typical problems linked with heavy industry. Also it can be recognized that the current condition of industrial structures reminds people to harsh times during the 1990s and early 2000s, which consequently led to collapse of this industry, but also the city economy in general. Hence people link industrial heritage with their own destiny, because, in their opinion, these structures are spatial reflections of it. Then, their current condition causes also anger and regret among respondents, since many of them observe these facilities more as a cultural heritage than the reflection of the economical collapse and bankruptcy. This is related not only to the possibilities to revitalize their function nowadays, but also to the way of the presentation of heritage and collective identity through their reuse as brownfield sites.

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