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BOOK OF ABSTRACTS
and PROGRAM
of the Fifth International Conference:
INDUSTRIAL HERITAGE – CONSERVATION, CULTURAL
PROMOTION AND INTELLIGENT REUSE
23-24 September 2021, Bucharest, Romania

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**Welcoming Note from the Organizing and Scientific Committees 5th
International Conference: *Industrial Heritage: Conservation, Cultural
Promotion and Intelligent Reuse*, September 23-24, 2021, Bucharest**

Dear Colleagues,

On behalf of both Organizing and Scientific Committees of the International Conference: Industrial Heritage Conservation, Cultural Pomotion and Intelligent Reuse 2021, Bucharest (Romania), we are honored and delighted to welcome you for its fifth edition.

You are invited to attend a conference that aims to ensure a good framework to present the complex issue of industrial heritage (inventory, conservation, promotion, reuse), with the participation of specialists from different related fields. The objective of the conference is to highlight the current trends in the field of industrial heritage management. We shall focus the economic changes, the environmental problems related to industrial heritage, the conservation and adaptive reuse and promotion of industrial heritage. Our agenda is also focused to the analysis an promotion of the railway heritage which reflects our concern to highlight the campaign promoted by European Commission which declared *2021 European Year of Rail*, because it marks several important anniversaries for rail: the 20th anniversary of the first EU Railway Package, the 175th anniversary of the first ever rail link between two EU capitals (Paris-Brussels), as well as 40 years of TGV and 30 years of ICE.

Due to the COVID-19 pandemic, we had to postpone the 5th edition in 2020 and to organize the International Conference in a hybrid format in 2021 (mostly on line). This edition has facilitated the participation of more than 50 attendees from 14 countries, with the presentation of 41 abstracts that are included in this book into 6 scientific sessions dedicated to: 1) mining heritage: conservation, reuse and promotion; 2) conservation and management of industrial heritage (including industrial heritage under the protection of UNESCO); 3) industrial heritage and identity; 4) industrial tourism and adaptive reuse; 5) industrial heritage and urban development 6) cultural heritage: dynamics, management and impact on territorial planning.

As always, Professional Association of Romanian Geographers is honored and pleased to welcome its colleagues and inviting specialists sharing the precious research work aimed to contribute to the preservation, restoration, reuse and promotion of industrial heritage assets.

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Faculty of Geography, University of Bucharest

General Information

This book contains original working papers abstracts and original Workshop Cultural Heritage papers abstracts presented at the International Conference Industrial Heritage: Conservation, Cultural Promotion and Intelligent Reuse 2021.

Editors' note: The authors are fully responsible for the entire content of their paper abstracts.

Book of abstracts and conference program are available on websites:

<https://www.cicadit.ro/en/news.html>

<https://www.facebook.com/CentrulCICADIT/>

Previous publication of the Conference papers

Publication of the papers of the International Conference of Industrial Heritage at previous editions (2014 - 2018) in Annals of the Professional Association of Romanian Geographers (ISSN 2069-4881, e - ISSN 2602-1811), assessed and indexed by the following international databases: Ulrich, EBSCO, CiteFactor.

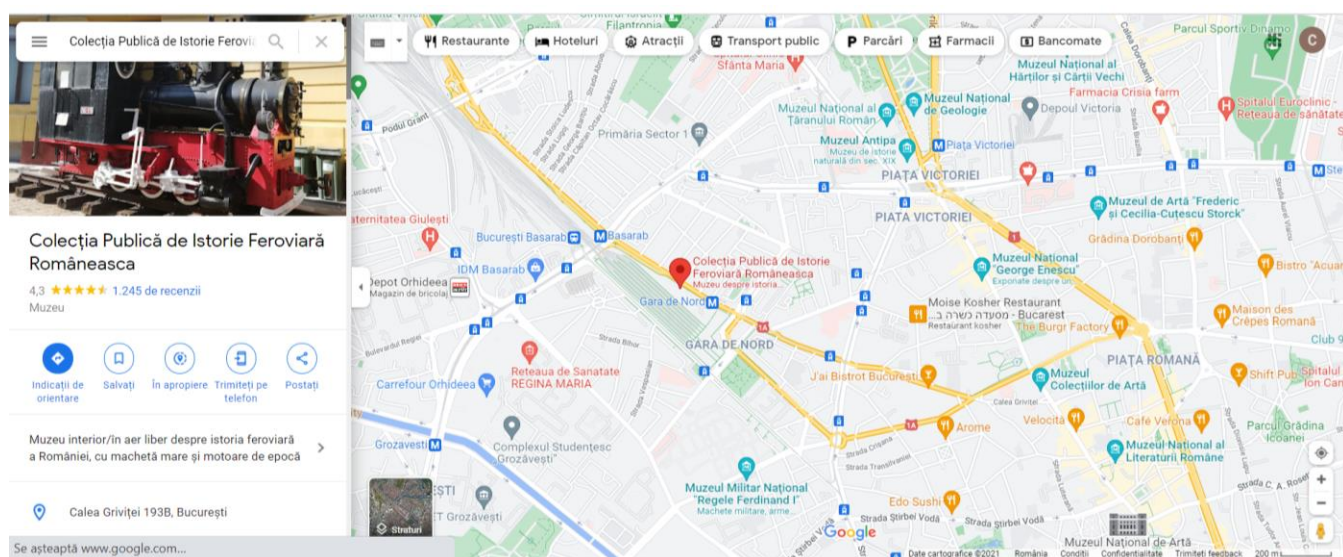
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Cover photo: Oravița railway station, Banat province, Romania. Author: Florentina-Cristina Merciu

CONFERENCE PROGRAM

23 September 2021

Virtual hall / Conference Room: PUBLIC COLLECTION OF ROMANIAN RAILWAY HISTORY (THE ROMANIAN RAILWAYS MUSEUM), 193 B Calea Griviței (near the North Railway Station), Bucharest.



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Google Meet links:

Industrial Heritage Sessions:
meet.google.com/nbq-geac-ycf

Cultural heritage Workshop:
meet.google.com/jhs-oqdm-gns

09:00 – 09:15 Conference opening

Dr. **Cristina MERCIU**, University of Bucharest, APGR

Dir. **Mircea DOROBANȚU**, CENAFER, Public Collection of Romanian Railway History (temporary name of Romanian Railways Museum)

09:15 – 09:50 Keynote speakers

09:15 – 09:35 Prof. arch. **Massimo PREITE** (The International Committee for the Conservation of the Industrial Heritage TICCIH, University of Padua) – *Industrial heritage in the UNESCO World Heritage List*

09:35 – 09:50 Prof. ing. **Cornel PĂUNESCU** (University of Bucharest, Honorary President of the Union of Romanian Surveyors) – *Modern technologies – a useful tool in preserving and promoting industrial heritage*

09:50 - 10:00 Coffee break

10:00 – 11:10 Session 1: Mining heritage: conservation, reuse and promotion

Chairs: Dr. Marta MILEUSNIĆ (University of Zagreb)

Dr. Florentina-Cristina MERCIU (University of Bucharest)

JUAN MANUEL CANO SANCHIZ (Institute for Cultural Heritage and History of Science & Technology. University of Science and Technology Beijing) - *The heritage value of mining sites. A critical approach grounded on materiality*

MARTA MILEUSNIĆ, ANA MARIČIĆ, MICHAELA HRUŠKOVA HASAN (University of Zagreb) - *Inventory and promotion of mining heritage in Croatia*

KRZYSZTOF HERNER (Coal Mining Museum in Zabrze) – *The Silesian post-industrial heritage in the digital transformation*

FLORENTINA-CRISTINA MERCIU (University of Bucharest) - *The mining heritage in Romania under the protection of UNESCO. Case study: Roșia Montană site*

Poster

GABRIELLA MACIOCCO (University of Florence) - *Recovery of former mining areas in Tuscany. The examples of the Mining National Park of the Metalliferous Hills*

11:10 – 11:20 Coffee break

11:20 – 12:30 Session 2: Conservation and management of industrial heritage

Chairs: Dr. Oana-Ramona ILOVAN (Babeş-Bolyai University, Faculty of Geography and Territorial Identities and Development Research Centre)

Dr. Vladan HRUŠKA (Jan Evangelista Purkyně University in Ústí nad Labem)

FABIO POLLICE, PATRIZIA MIGGIANO (University of Salento) - *Xanti-Yaca a proposal of documentary narration for the industrial heritage of the tobacco factories in Salento*

PAVEL RAŠKA, MARTIN DOLEJŠ, EVA KRÁLOVÁ, LENKA SLAVÍKOVÁ, VLADAN HRUŠKA (Jan Evangelista Purkyně University in Ústí nad Labem) - *When heritage meets the flood: constraint to regeneration of industrial heritage in active floodplains*

ELENA-CODINA DUȘOIU ("Ion Mincu" University of Architecture and Urban Planning) - *Industrial heritage as a tool for education (the experience of guiding projects for rehabilitation of industrial heritage at the IMUAU)*

INES GRIGORESCU, BIANCA MITRICĂ, CRISTINA DUMITRICĂ, MONICA DUMITRAȘCU, COSTIN DUMITRAȘCU (Institute of Geography, Romanian Academy) - *The adaptive (re)use of post-communist industrial sites in Bucharest. Between urban development and heritage conservation*

12:30 – 13:00 Lunch

13:00 - 14:25 Session 3: Industrial heritage and identity

Chairs: Dr. Elena-Codina DUȘOIU ("Ion Mincu" University of Architecture and Urban Planning)

Dr. Pavel RAŠKA (Jan Evangelista Purkyně University in Ústí nad Labem)

VLADAN HRUŠKA, PAVEL RAŠKA, EVA NEDOROSTOVÁ, ZDEŇKA SMUTNÁ, SILVIE RITA KUČEROVÁ, TOMÁŠ SÝKORA, PETR HLAVÁČEK, MICHAELA ŠTĚBETÁKOVÁ (Jan Evangelista Purkyně University in Ústí nad Labem) - *Media image of the industrial heritage in Czechia: on the way to change or stagnation?*

TÂNIA GUERRA (Polytechnic Institute of Leiria & Centre for Tourism Research, Development and Innovation), MARIA PILAR MORENO PACHECO (University of Seville), ANTÓNIO SÉRGIO ARAÚJO DE ALMEIDA (Polytechnic Institute of Leiria, & Centre for Tourism Research, Development and Innovation), LILIANA C. VITORINO (Polytechnic Institute of Leiria) - *Creating value in industrial heritage tourism: from symbolism to reality*

PAUL MUTICĂ (Technical University of Cluj-Napoca, Faculty of Architecture and Urban Planning), OANA-RAMONA ILOVAN (Babeş-Bolyai University, Faculty of Geography and Territorial Identities and Development Research Centre) - *Place attachment based on industrial heritage. Territorial and people-centred approaches to development*

STEFANIA ŚRODA-MURAWSKA, KATARZYNA KUBIAK-WÓJCICKA, PAWEŁ SMOLIŃSKI (Nicolaus Copernicus University in Toruń) - *Small hydropower station as an industrial heritage of Kuyavia-Pomerania*

ANNA KARLA DE ALMEIDA SANTOS (Lab-U Laboratory of Urbanism, EPFL Swiss Federal Institute of Technology Lausanne, Switzerland) - *The waterfront as a strategic space for nexus and development: the creation of an industrial heritage cultural route for fostering of a new industrial culture*

13:00 – 14:15 Workshop - Cultural Heritage: dynamics, management and impact on territorial planning

Chairs: Dr. Iuliana VIJULIE (University of Bucharest, Faculty of Geography)

Dr. Mihaela PREDA (University of Bucharest, Faculty of Geography)

Co-chair: Dr. Alina MARECI (University of Bucharest, Faculty of Geography)

IULIANA VIJULIE, MIHAELA PREDA, ANA IRINA LEQUEUX-DINĂ, ROXANA CUCULICI, ALINA MARECI (University of Bucharest, Faculty of Geography) - *Developing tourism infrastructure vs preserving traditional architecture in Romania. Case Studies: Moieciu de Sus village (Braşov County) and Râmetea village (Alba County)*

MIHAELA PREDA, IULIANA VIJULIE, ANA IRINA LEQUEUX-DINCĂ, ALINA MARECI (University of Bucharest, Faculty of Geography) - *Ethnic identity of Szekely population in cultural itineraries*

GEORGE-LAURENȚIU MERCIU (University of Bucharest, Faculty of Geography), CORNEL PĂUNESCU (University of Bucharest, Faculty of Geology and Geophysics), FLORENTINA-CRISTINA MERCIU (University of Bucharest, Faculty of Geography), ALEXANDRU CIOACĂ (Cornel & Cornel Topoexim, Bucharest) - *Global Navigation Satellite System (GNSS) application for 3D modeling and promoting cultural heritage*

ROXANA CUCULICI, IULIANA VIJULIE, CONSTANTIN-RĂZVAN OPREA (University of Bucharest, Faculty of Geography), LAURENȚIU CIORNEI (The Biodiversity Center, Romanian Academy), MARIAN ENE, GABRIELA MANEA (University of Bucharest, Faculty of Geography) - *Preservation of cultural heritage in the context of the dynamics of the industrial landscape in the Jiu Valley. Case Study: Petrila city*

FILIP-EUGENIU IANCU, ALINA MARECI, MIHAELA PREDA (University of Bucharest, Faculty of Geography) - *Brăila's cultural heritage: a landscape of possibilities created by its ethnic mosaic*

Poster

ANA-MARIA VASILOIU, ANA VALERIA STOICAN (University of Bucharest, Faculty of Geography) - *Perception of the tourist attractiveness of the Cetățuia archeological site, Cluj-Napoca municipality (Romania)*

14:25 – 14:35 Coffee break

14:35 – 16:00 Session 4: Industrial heritage tourism and adaptive reuse

Chairs: Dr. Ines GRIGORESCU (Institute of Geography, Romanian Academy)

Dr. Bianca MITRICĂ (Institute of Geography, Romanian Academy)

ANA – IRINA LEQUEUX-DINCĂ (University of Bucharest), CLAUDIA POPESCU (Bucharest University of Economic Studies & Institute of Geography, Romanian Academy), MIHAELA PREDA, IULIANA VIJULIE, ALINA MARECI (University of Bucharest) - *The "Commons" and their implications for industrial heritage in Romania*

SIRIPEN YIAMJANYA (Tourism Management Program College of Hospitality Industry Management Suan Sunandha Rajabhat University) - *Telling the perceived industrial heritage phenomena and their interpretations with tourism effect: some cases of Lampang Province in the Northern region of Thailand*

STEFANIA ŚRODA-MURAWSKA, ELŻBIETA GRZELAK-KOSTULSKA, LESZEK S. DĄBROWSKI, JADWIGA BIEGAŃSKA (Nicolaus Copernicus University in Toruń, Poland) - *Industrial heritage and development of sustainable tourism in medium-sized Polish cities*

JADWIGA BIEGAŃSKA, ELŻBIETA GRZELAK-KOSTULSKA, LESZEK S. DĄBROWSKI, MICHAŁ KWIATKOWSKI, DONATA WYSOCKA (Nicolaus Copernicus University) - *Industrial heritage as a chance for a city*

CARMEN KERN (University of Graz, Austria) - *Promotion of industrial heritage and tourism as regional potential – a case study of the Styrian Iron Road region*

16:00 – 16:10 Coffee break

16:10 – 17:10 Session 5: Industrial heritage tourism and adaptive reuse

Chairs: Dr. Oana-Ramona ILOVAN (Babeş-Bolyai University, Faculty of Geography and Territorial Identities and Development Research Centre)

Dr. Florentina-Cristina MERCIU (University of Bucharest)

CARLOS JAVIER PARDO ABAD (Department of Geography, Universidad Nacional de Educación a Distancia), PAZ BENITO DEL POZO (Department of Geography and Geology, Universidad de León) - *Industrial heritage in Spain: current situation and possibilities of use as a tourist resource*

GRACIELA CISELLI, MARCELO HERNÁNDEZ (Universidad Nacional de la Patagonia San Juan Bosco) - *The oil and railway industrial heritage in Patagonia, Argentina. Its management as a cultural and tourist resource*

CAMELIA TEODORESCU, LILIANA DUMITRACHE, ALEXANDRA CIOCLU, ANDREI DUCMAN (University of Bucharest, Faculty of Geography) - *The art of managing the heritage of the car museum in Romania - the Romanian automobile museum of Campulung*

RADU SĂGEATĂ, BIANCA MITRICĂ, IRENA MOCANU (Institute of Geography, Romanian Academy) - *Deindustrialization, tertiarization and suburbanization in Central and Eastern Europe. Lessons from Bucharest City, Romania*

PARSA ARBAB (School of Urban Planning, College of Fine Arts, University of Tehran) - *Adaptive reuse of industrial heritage as historic-cultural places*

17:10 – 17:20 Coffee break

17:20 – 18:30 Session 6: Industrial heritage and urban development

Chairs: Dr. Camelia TEODORESCU (University of Bucharest, Faculty of Geography)
Dr. Radu SĂGEATĂ (Institute of Geography, Romanian Academy)

ADRIAN CIOANGHER ("Ion Mincu" University of Architecture and Urban Planning) - *The territory. From the resource of the development of the industrial activities, to the support of the industrial heritage*

FLORENTINA-CRISTINA MERCIU (University of Bucharest), MARTIN OLARU (West University of Timișoara), MIRCEA DOROBANȚU (National Centre for Railway Qualification and Training), CRISTIAN TĂLÂNGĂ, GEORGE-LAURENȚIU MERCIU (University of Bucharest) - *Railway heritage in Romanian Banat: historical, cultural and tourist values*

ANNE MARIE GACICHEVICI („Ion Mincu” University of Architecture and Urban Planning, Doctoral School of Architecture), CĂTĂLINA IOANA VĂRZARU (Giurgiu Town Hall) – *The promotion of the industrial heritage of the localities Alexandria and Giurgiu - public railway infrastructure*

TITUS BAZAC (University of Bucharest, Faculty of Geography, Doctoral School "Simion Mehedinți") - *Filaret railway station and Carol I Park - the fundamental factors of the capital's industrialization and urbanization*

ADINA NIȚU ("Ion Mincu " University of Architecture and Urban Planning, Doctoral School of Architecture) - *Industrial heritage and the immersivity. Technology's integration in the museum visiting experience*

Posters

MARTIN OLARU (West University of Timișoara) - *Limitations and challenges in conservation of the industrial heritage in a small Romanian town: Oravița*

RUXANDRA VAȘCOVICI („Ion Mincu” University of Architecture and Urban Planning, Doctoral School of Architecture) - *Abandoned industrial spaces and their use in emergency situations*

DUMITRU PUȘCAȘU (Mining Museum from Petroșani municipality, Romania) - *The evolution of the Mining Museum from Petroșani Municipality (Hunedoara County, Romania)*

ANA VALERIA STOICAN, ANA-MARIA VASILOIU (University of Bucharest, Faculty of Geography) - *Examples of good practices for the reuse of industrial buildings with historical and architectural value. Case study: municipality of Cluj-Napoca (Romania)*

18:30 – 18:45 Conference conclusions

Dr. **Cristina MERCIU**, University of Bucharest, APGR

Dir. **Mircea DOROBANȚU**, CENAFER, Public Collection of Romanian Railway History (temporary name of Romanian Railways Museum)

24 September 2021: Industrial heritage trip in Bucharest (Grivița Railway Workshops, the former Ford Ensemble, the former Cartea Românească Printing House, the former Filaret Electric Plant, visit of the National Technical Museum "Prof. Ing. Dimitrie Leonida"), former Filaret railway station, Carol Halls (part of Wolff factory), lunch at the Factory - Club Restaurant (arranged in the former Apollo socks factory).

Abstracts

THE WATERFRONT AS A STRATEGIC SPACE FOR NEXUS AND DEVELOPMENT: THE CREATION OF AN INDUSTRIAL HERITAGE CULTURAL ROUTE FOR FOSTERING OF A NEW INDUSTRIAL CULTURE

Anna Karla de ALMEIDA SANTOS, Doctoral Assistant

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City, river and industry. The watchwords of this work reflect the challenges of safeguarding the industrial heritage of the island of São Luís do Maranhão in Brazil. The only city of French origin in Brazil, São Luís was founded in 1612 and has the largest architectural ensemble of colonial historical buildings in Latin America. Its city center is inscribed at the WHL since 1997. This work deals with sites of industrial archaeology that are located along the Bacanga River. The city created a livelihood through the river and through the dissipation in the industrial areas that permeate this heritage and that have been key in the urban-economic development of São Luís. However, the waterfront of São Luís is excluded from recognition as industrial heritage. The aim of this research was to create a project of valorization of the industrial heritage that through the analysis of the relationship between city, waterfront and industrial heritage, using water as a cohesive element for a process of recognition from the landscape and urban point of view of its industrial complex. As actions of this research, it was sought to a) rewrite the urban-economic history of the city of São Luís; b) correlate contemporary heritage methods for the valorization of the industrial heritage landscape; c) articulate an industrial heritage cultural route through 18 flagship projects of interest for the industrial history of the city, using the cultural routes for local development. The time frame chosen for the historical analysis ranges from the second half of the 19th century to the actuality, in order to address the history of economic development in São Luís and to identify the fil rouge of the potential industrial heritage centers of the territory. As results, the research sought to develop a new integrative management method between the urban and its memory routes.

Keywords: cultural route, industrial heritage, industrial landscape, waterfront, world heritage city

ADAPTIVE REUSE OF INDUSTRIAL HERITAGE AS HISTORIC-CULTURAL PLACES

Parsa ARBAB, Assistant Professor

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Over the past few decades, numerous old industrial sites in the cities have been abandoned through the economy's restructuring. Some were recognized as industrial heritage, including material and immaterial significances and values, which need to be transformed in a way that highlights their architecture, cultural, and economic usefulness and responds to new functions concerning needs and demands in the city. As the most complex heritage category, industrial heritage is an integral part of the social, cultural, and technological past. The adaptive transformation/reuse of industrial heritage constitutes a crucial cultural objective and consequently must be identified especially, simultaneously integrating preservation with conversion and conservation with refurbishment. The International Committee for the Conservation of Industrial Heritage (TICCIH), as an especial adviser to ICOMOS, and the European Federation of Associations of Industrial and Technical Heritage (EFAITH) aim to give importance to the industrial and technical heritage as part of world cultural heritage that should be conserved and developed. Accordingly, this paper explores developing a process for the adaptive reuse of industrial heritage in cities. The foundation of the suggested process is mainly based on the Burra Charter Process (BCP) of planning for and managing a place with cultural significance and the decision-making process of the Canadian Register of Historic Places (CRHP). Besides, it has been modified and detailed by reviewing other related research and experiences on the industrial heritage. Therefore, understand the characteristics and assess the significance as the initiation phase, study the feasibility, develop a policy, and prepare a proposed reuse plan as the planning phase, and implement the plan and monitor and review as the execution phase should be considered regarding the adaptive reuse of urban industrial heritage.

Keywords: Industrial Heritage, Historic-Cultural Place, Adaptive Reuse, Place-Making, Process

FILARET RAILWAY STATION AND CAROL I PARK - THE FUNDAMENTAL FACTORS OF THE CAPITAL'S INDUSTRIALIZATION AND URBANIZATION

Titus BAZAC, Ph.D. Candidate

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Bucharest, Romania

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The south of Bucharest (the territory south of Dâmbovița) has had a slower pace of development throughout history than the north (the territory north of Dâmbovița) and experienced an explosive development only in the second half of the nineteenth century. The purpose of this research is to demonstrate the impact produced by the appearance in the area of two basic objectives, Filaret Railway Station and Carol I Park, which represented the fundamental factors of the economic and urban development of the area. If the location of Filaret Station in the area determined the emergence of industry in the city, Carol Park was both an element of urbanization and a way to integrate the area into the city perimeter and also a boost to economic activity of the city through the character of exhibition park, without mentioning its multilateral form of promotion, cultural, educational and leisure. For these reasons, Filaret Station and Carol I Park must be enhanced through a sustainable reconversion that will highlight both their historical significance by preserving their specific identity and adapting to the requirements and pace of current urban development

INDUSTRIAL HERITAGE AS A CHANCE FOR A CITY

Jadwiga BIEGAŃSKA, Dr. hab. prof. NCU,

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The growing importance of urban tourism among other forms of tourism activity contributed to a significant change in the tourists' preferences and expectations. Therefore, cities have to rebuild their tourism development strategies. Cities are also undergoing permanent transformation related to their post-industrial stage of development. An important position in the process is occupied by urban functions that directly or indirectly determine the ways of spending leisure time and consumption. Such functions certainly include tourism, the development of which is usually related to the revitalization of urban space and culture. In addition, there should be considered the changing role of heritage. It creates an increasingly complex system of relationships and their understanding requires new approaches. Heritage sites can become generators of new social values, gaining importance in building social cohesion in the course of deeply conducted revitalization.

The study aims at paying attention to the various meanings of these sites by showing their multifaceted impact on the space and social surrounding. We considered the case study of the Modernity Center Mill of Knowledge (MCMK) in Toruń (Poland) (201.5 ths. Inhabitants). The MCMK performed industrial functions by the early 1990s. After a comprehensive revitalization in 2013, it has begun to perform a cultural, educational and exhibition functions. On the basis of questionnaire survey, we asked the questions about (1) the tourist function of the MCMK, (2) to what extent this new tourist destination can support the assumptions of sustainable tourism, mainly in the context of decreasing the excessive tourist traffic in the limited space of the Old Town (3) the impact of the site on the local community, including the visiting inhabitants of Toruń and the surrounding area, what is the nature of their relationship with the visited place?

THE HERITAGE VALUE OF MINING SITES. A CRITICAL APPROACH GROUNDED ON MATERIALITY

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and Technology Beijing, China

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Mining exploitations have frequently been territories of economic growth, technological development, social advance, and cultural interchanges. However, abandoned mining sites can also be perceived as dark places hit by pollution, ecological degradation, fatality, short life expectancy, social tension, and the economic crisis that follows closure. In spite of this dark inheritance, mining-related sites have succeeded in entering the UNESCO World Heritage List in every continent but Antarctica (the latest one, Roşia Montană in Romania in 2021), which undoubtedly reflects that mining is universal and its cultural and natural values are universally accepted. However, it is not possible to preserve every abandoned mining landscape, especially as cultural or heritage parks. Thus, the challenge is to determine the criteria to choose which ones deserve conservation as heritage.

This paper aims to contribute to such challenge by offering an alternative vision of the heritage values of mining landscapes that is grounded on their materiality and tries to go beyond the division between natural and cultural heritages. Our interpretation of mining heritage values is not exhaustive. Instead, we give prominence to the features that in general terms can define mining heritage, and to those characteristics that can be useful to the present. We bet on this approach because we understand that mining has been a major engine of technological and economic progress, but also of environmental degradation and human suffering. In front of this complexity and negative inheritance, we believe that mining heritage can help to heal some of the ecological and social wounds caused by mining operations in the past.

Keywords: mining heritage; heritage values; mining landscapes; mining culture.

THE TERRITORY. FROM THE RESOURCE OF THE DEVELOPMENT OF THE INDUSTRIAL ACTIVITIES, TO THE SUPPORT OF THE INDUSTRIAL HERITAGE

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When we talk about the industrial heritage, asking ourselves the question of it's protection and redevelopment is just. And yet a built heritage asset is not a singular object, but part of a broader context. This context may be limited to the protection area or may be extended to the territorial scale when discussing about former productive activities.

Why is this territorial approach needed? Because productive activities are based on an interdependent relationship with the territory. Thus, we cannot discuss exclusively the historical or architectural value of an item of industrial heritage, but we must consider the whole chain of processes that intervenes in the production flow. Otherwise all these processes would not be possible without the other components of the territory. We can refer here to material and human resources, to the elements of infrastructure and to the relationship with other productive activities that intervene in the production process.

In that regard, we should actually discuss about sets of elements of industrial heritage, because we must take into account the constructions and installations with aesthetic or historical value, as well as the other components that have contributed to the successful development of the activities.

Therefore we cannot discuss industrial heritage as a static compound, as we see it now after it has ceased its activity, but as a dynamic one, where flows, noise and movement were the particular elements.

Extrapolating this particularity to the scale of the territory, we should look at the former productive activities beyond the boundaries of the plots and identify the other components that ensured their specific dynamics.

We should also look at former productive activities as part of a complex system, the dynamics of which have been strongly supported by the various components of the territory.

Today, the territory, through its values, is the one that can contribute to the enhancement of the elements of industrial heritage.

THE OIL AND RAILWAY INDUSTRIAL HERITAGE IN PATAGONIA, ARGENTINA. ITS MANAGEMENT AS A CULTURAL AND TOURIST RESOURCE

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Comodoro Rivadavia, a port city located in Argentine Patagonia, was founded in 1901 for the export of agricultural production from the Patagonian plateau. In 1907 oil was discovered, modifying the territorial occupation mode, given that the oil companies, both state and private, created different distant towns from 3 to 27 kilometers outside the historic center. In 1963, changes in oil policies affected private companies that then decided to get rid of what was linked to social infrastructure (housing, cinemas, hospital, parks) and only keep industrial spaces instead. In the 1970s, these buildings became part of the city as neighborhoods.

At the beginning of the 21st century, a patrimonial movement began in the city from those very communities, those neighborhoods with an oil and rail industrial past, that began to claim the local government for the reuse of disused spaces linked to industry, as industrial heritage and cultural circuits.

In 2014, the municipality declared five neighborhoods - former oil towns linked by the railroad- as cultural heritage of the city of Comodoro Rivadavia, with the aim of inventorying their assets to preserve them and incorporate them into cultural tourist circuits. Thus began a collaborative work with researchers from the San Juan Bosco National University of Patagonia who proposed a collection of 5 books, one for each neighborhood.

The video shows the dynamics of the territorial occupation of the oil towns that today are heritage neighborhoods, the historicity of the assets and the industrial heritage tourism circuits that have been generated in recent years.

PRESERVATION OF CULTURAL HERITAGE IN THE CONTEXT OF THE DYNAMICS OF THE INDUSTRIAL LANDSCAPE IN THE JIU VALLEY. CASE STUDY: PETRILA CITY

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Since ancient times, the shape of the landscape has continuously changed, and people confuse nature with what in reality is shaped by culture. The industrialization process in Romania has produced many significant changes in the natural landscape by creating high densities in urban areas, urbanization of the natural and rural environment, loss of defining elements for cultural heritage. The purpose of this study is given by the necessity of highlighting the cultural heritage existing since Dacian times, preserved by the "momârlanii" from Jiu Valley. The objectives of the study took into account the evaluation of the cultural heritage, analysis of the dynamics of the industrial landscape in the area as the main factor of influence, perception of the inhabitants and tourists in the area regarding the degree of preservation of the cultural heritage and identifying sustainable solutions to preserve local traditions. The methodology included a series of spatio-temporal analyses for the landscape of Petrila over 100 years, field observations, application of social survey questionnaires, geo-statistical analysis. As a result of this study, the results obtained revealed major changes in the landscape of Petrila, fluctuations from the traditional countryside landscape to the industrial one generated by the opening of mining operations in the area, and in the last decades the identification of a post-industrial, semi-degraded landscape that requires sustained efforts for greening, reconstruction, and conversion. Our study also brings to the fore the people of the place "descendants of the free Dacians" as the "momârlanii" who live in the mountain villages around the city of Petrila are known, still keepers, of traditions and folk customs of inestimable value for the development of tourism in the area. For all these elements that make up the cultural heritage of this region, it is worth making efforts to preserve and rebuild so that this region regains its former cultural and historical values.

INDUSTRIAL HERITAGE AS A TOOL FOR EDUCATION
(THE EXPERIENCE OF GUIDING PROJECTS FOR REHABILITATION OF
INDUSTRIAL HERITAGE AT THE IMUAU)

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More than twenty years ago, our beloved teacher in the field of Architecture History, Sanda Voiculescu, pointed out one of the most stringent necessities of present patrimony: saving the remains of industry and transforming them into coherent resilient ensembles. For the year 2000 the subject was quite new and society was not familiarised at all with the concept of industrial archaeology. Also, good practice examples in the world were quite few (practically non-existent in Romania). In the last 20 years, the subject has turned into an extremely captivating one for architects, urbanists, engineers, geographers, historians, artists and even philosophers or writers, who fought for the maintenance of these sites, extremely attractive for real estate investors.

A multidisciplinary topic by definition, industrial archaeology had the merit to bring together lots of diverse professionals. People became conscious of the value of the huge heritage left by the industrial revolution and began searching solutions for saving it from abandonment. Terms like "conversion" were adapted as tools for architects and proved to be very useful.

This growing interest for industrial heritage produced a demand for specific education in the field, in theory and practice as well. This type of education became very specific, since it had to combine knowledge from distinct areas. In architecture, many students wanted to realize deeper studies that finally lead to complex studies such as diploma projects. This collection of studies may become in the end an encyclopaedia of solutions for industrial heritage, ordered in specific categories, to be used both theoretically and practically.

In the meantime, the whole society proved a growing interest for the special ambience of industrial spaces. That is why Bucharest and other Romanian cities created lots of cultural and leisure spaces in former factories. Industrial spaces have turned from the culture of abandonment to the latest fashion of the moment. The paper investigates how is it possible to correctly adapt this trend to the real necessities of industrial heritage and offers solutions, ideas and strategies.

THE PROMOTION OF THE INDUSTRIAL HERITAGE OF THE LOCALITIES ALEXANDRIA AND GIURGIU - PUBLIC RAILWAY INFRASTRUCTURE

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Tackling the current climate and environmental crisis is an opportunity to relaunch European economies in a sustainable way. This requires urgent and sustained action by all actors in our society to preserve the health, prosperity and well-being of people in Europe and around the world. In response to this challenge, the European Green Pact has set a high level of climate neutrality by 2050. It is also Europe's growth strategy, which aims to transform the EU into a just and prosperous society with efficient and competitive economic resources. The economic response to the Covid-19 pandemic provided a unique opportunity to accelerate the green transition, as stated in the Strategy.

Eco-mobility must be the new license for the development of the transport sector and must be based on an efficient and interconnected multimodal transport system for both passengers and freight, enhanced by an affordable high-speed rail network and infrastructure. recharging and refueling for zero-emission vehicles and the supply of renewable fuels, through cleaner and more active mobility in "greener" cities that contribute to the health and well-being of their citizens.

In this sense, the presentation of the symposium will focus on the comparative study of the railway infrastructure of two grade II municipalities, the way of rehabilitation of railway stations in Alexandria and Giurgiu, the possibilities of integrating these constructions - historical monuments, in tourist circuit, their promotion through digital technology and the establishment of sections for permanent or temporary exhibitions, with 3D digitized mobile cultural goods, museums that offer virtual tours and panoramic images, services that generate their possibility to be included on the list of cultural events.

THE ADAPTIVE (RE)USE OF POST-COMMUNIST INDUSTRIAL SITES IN BUCHAREST. BETWEEN URBAN DEVELOPMENT AND HERITAGE CONSERVATION

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During the post-communist period (after 1990), urban sprawl and changing the patterns of industry had been the main causes of spatial and structural changes in Romania. Recently, these changes have resulted in the reuse of post-industrial sites, mainly for residential or commercial uses, less to heritage. Bucharest is one of the best examples in Romania in terms of surface and number of industrial sites to be abandoned, relocated or subject to new specializations (e.g., services, creative industries). Thus, the key research questions of the paper are: (1) to identify, map and analyse the former communist industrial sites (2) to identify their current functions/use in order to (3) identify typologies and patterns of their adaptive (re)use and ultimately (4) to spot the role of heritage conservation in the implementation of adaptive reuse projects. The current analysis integrates spatial and statistical data to perform quantitative and qualitative interpretations of the structural and functional changes: significant spatial shrinkage, intensive fragmentation, functional diversification, tertiarization and change of patterns (from compact to mosaic-like outline). Between 1990 and 2020, over 50% loss of industrial sites have been recorded. Also, five main types of reshaping post-communist industrial sites have been identified (maintenance, conversion, replacement, abandonment, and demolition). The study results provide valuable information on the (re)use of former industrial sites, identifying their potential of being preserved as heritage sites, but also as areas prone to further urban development. The study results have a two-fold contribution to the planning and policy making driven by the two types of transformations identified: one urban development-oriented and one heritage-oriented. The first is more likely to contribute to controlling and limiting the continuous unplanned urban development and the second to support heritage conservation.

Keywords: post-communist industrial sites, adaptive reuse, urban development, heritage conservation, Bucharest

CREATING VALUE IN INDUSTRIAL HERITAGE TOURISM: FROM SYMBOLISM TO REALITY

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Place identity in tourism studies has been gaining attention among scholars as it is strongly linked to a community's culture, and it is an important element in cultural heritage tourism. It is also recognized that there are a variety of factors influencing resident's perceptions on heritage tourism. Consequently, local resident's feeling of place identity can be reflected in their attitudes towards tourism development.

Despite the many studies focusing on residents' attitudes towards tourism and its impacts, few have examined the relationship between place identity and community tourism perceptions. Therefore, the aim of this work is, applying a case study approach, to analyse if there is a causal link between place identity awareness and a consequent incorporation of the industrial tourist destination as such. Namely, to assess whether it occurs locally a double collective attitude of symbolic appropriation of the industrial reality and of the recognition and appreciation of the destination under study (São João da Madeira).

The study is based on a quantitative approach and a questionnaire survey was applied to São João da Madeira residents, a Portuguese industrial tourism municipality. Following this, a structural equation model was conducted to verify whereas resident's tourism perceptions are based upon their sense of place identity.

The results indicate, based on data from 389 residents, a positive and significant effect of place identity on the resident's attitude to positive impacts and it cannot be confirmed a relationship between place identity and resident's attitude towards negative impacts.

The results obtained can contribute with both theoretical and practical suggestions, highlighting the need to better understand resident's perceptions on tourism development and motivate tourism stakeholders to promote planning and development strategies involving the community and, as a result strengthening the identity of the place.

Keywords: Industrial heritage; place identity; resident perceptions; attitude towards tourism

THE SILESIAN POST-INDUSTRIAL HERITAGE IN THE DIGITAL TRANSFORMATION

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This paper aims to discuss the use of specialist 3D scanning equipment in the preservation and stocktaking of post-industrial heritage in Upper Silesia. The heritage of Upper Silesia is to a large extent the result of the development of industry and technology. There is the greatest number of historical industrial facilities in Poland. They form an integral part of the cultural heritage of the region, at the same time determining its nature. These are primarily facilities associated with the tradition of mining, metallurgy, power engineering, railway engineering, communication and water production. The Coal Mining Museum in Zabrze, the collections which consist mainly of facilities (tools, equipment) belonging to the sphere of technology and industry, is looking for technological solutions appropriate for the popularisation of post-industrial heritage. The mining galleries, which were once used for mining works and extracting output, have been deteriorating over the years, either due to their closure or as a result of many years of negligence and lack of sufficient funds to maintain the extensive engineering infrastructure. Scanning, digital stocktaking and the presentation of the scanning results on a specially prepared platform for displaying the collections is a rescue against their further degradation. As mentioned before, 3D scanning systems are relatively new measurement tools – mainly used by the industrial and construction sectors. One of their main attributes is the high quality reproduction of geometry of the scanned facility with sub-millimetre measurement possibilities. In addition, they enable the scanning of surface geometry with texture without the need to have contact with the facility. The result of scanning is, as in two-dimensional photography, a graphical representation of the scanned facility, and in addition the acquired data provides an extremely accurate record of its physical structure, in contrast to flat photography. It is also important that the location, the place of measurement is not a barrier for the scanner. It can operate equally well on the surface and underground.

MEDIA IMAGE OF THE INDUSTRIAL HERITAGE IN CZECHIA: ON THE WAY TO CHANGE OR STAGNATION?

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Industrial heritage is frequently accentuated in development strategies of old industrial regions as an asset that may be subject to commodification and thus helping to support employment, improve the quality of public spaces and more generally to facilitate re-imaging of rather negatively perceived old industrial regions. However, incorporation of industrial heritage into the development endeavour of local or regional actors is based on a specific constellation of local formal and informal institutions which transform this endeavour into new development path in a given old industrial region. In our paper we present key findings from the media analysis of the perception of industrial heritage in Ústí nad Labem Region (Czechia). We have analysed almost 5,800 newspaper articles in order to assess the role of media in the construction of a new milieu which would be more favourable to the revitalisation of regional industrial heritage. We found out that articles focusing on the regional industry only seldom focus their attention on the future of industrial architecture. In case they do so, they accentuate the opinions and development plans of developers which usually aim to use old industrial buildings for the same (industrial) purposes or demolish them to make space for new types of production.

Keywords: industrial heritage, media, development, Ústí nad Labem, Czechia

BRĂILA'S CULTURAL HERITAGE: A LANDSCAPE OF POSSIBILITIES CREATED BY ITS ETHNIC MOSAIC

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The present paper has as study area the city of Brăila, located in the south-eastern development region of Romania. Having an extremely favorable geographical position on the left bank of the Danube, Brăila was known throughout its history as an important trade hub of the Principality of Wallachia. Thus, over the centuries, there have been many moments when various ethnic minorities (such as Greeks, Jews, Turks, Lipovans) have settled in the port of Brăila for purely commercial interests or to find a safe place. Ethnic minorities took shelter here for a short time in the beginning, and later, following the development of the port area, they discovered and thrived in an environment based on respect, equality, friendship and tolerance. Throughout centuries, this ethnic element that the city enjoys to this day began to be visible in the gastronomy, architecture and cultural life of Brăila, thus outlining a veritable and very dynamic cultural heritage. Their history, way of life, traditions, customs and celebrations have made the area unique as a tourist attraction. The main objective of the paper included analyzing the trademark elements that each minority left behind in terms of gastronomy, architecture, and cultural life. The methodology included: organizing interviews with representatives of each minority group aiming to validate the information obtained through literature review but also to obtain a personal perspective of multiple facets of the cultural heritage created by each ethnic group, identifying and mapping cultural heritage objectives related to ethnic minorities. The cultural heritage created by Brăila's ethnic groups is currently a great challenge for the city, while also being a great opportunity: if it will be better managed, it will be an important source of financial revenues for as long as possible.

PROMOTION OF INDUSTRIAL HERITAGE AND TOURISM AS REGIONAL POTENTIAL – A CASE STUDY OF THE STYRIAN IRON ROAD REGION

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In recent years, numerous studies have examined the relationship between tourism and industrial heritage – from the conservation of cultural heritage to its presentation and utilization as a tourist attraction. A number of peripheral regions promote industrial heritage, including tangible and intangible cultural assets, which can cover a wide range of offers in industrial heritage tourism. On the one hand, historical buildings, museums or galleries contribute their part, and on the other hand, tradition, performing arts or social practices are of importance. To preserve the past of a community, its activities and expressions, cultural heritage is attributed a use and value in the present. Thus, such traces and memories constitute a resource for the development of a society, for its identity and belonging.

Such promotion of cultural heritage can be a potential for regional development. This contribution aims to examine the concept with a focus on industrial heritage and its cultural assets, and to address their use and the potential impact on a local system. As case study is used the Styrian Iron Road, which is a European LEADER region in Austria – a quite rural and industrial region in Styria with the Erzberg as a landmark, a site where active mining still takes place.

In the region, the industrial heritage is preserved and promoted through tourism. Industrial heritage tourism there includes, among others, numerous museums as tangible cultural assets. The ‘customs of the miners and smelters of the Styrian Iron Road’ are part of the intangible UNESCO cultural heritage and are demonstrated by events such as the Barbara celebration with folklore and rituals. In the historic region, the preservation of industrial heritage also aims at social cohesion and inclusion, which should promote the development of resilience of the region.

THE *COMMONS* AND THEIR IMPLICATIONS FOR INDUSTRIAL HERITAGE IN ROMANIA

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The concept of *commons* preoccupied both economists and political scientists in the attempt to explain individual and collective ways of acting, often jeopardizing the so-called “common pool of resources” and their sustainability. Both global and regional concerns address nowadays a series of common resources ranging from natural (e.g. climate, water) to economic ones (e.g. energy, transport networks) and even to more abstract ones (e.g. health, human rights). Experiencing complex and profound political and societal changes after 1989, reflected by in-depth transformations of the ownership and administration systems, Romania brings into matter the tragedy of *commons*, revisited after having also witnessed a tragedy of *anticommons*. An illustrative example is the evolution of its industrial heritage in the post-communist decades, passing from public to private ownership while a severe deindustrialization process took the place of the previous centralization and industrialization policies. The present study *aims* to address the sustainability of this type of heritage in the present-day Romania focusing on the aspects of *commons*. The *research objectives* focused on assessing the types of industrial heritage and their post-communist evolution trends, with reference to the commons conceptual framework and by emphasizing illustrative examples. The paper uses a *desk study methodology*, data mining and analysis techniques to review and extract relevant information, statistics and images from academic, legislative and media on-line sources. The *main results and discussions* focus on the post-communist evolutionary trends of the complex and multifaceted industrial heritage in Romania. Both negative and positive examples of its transformations reflect bad or good practices in managing the intense relationship among a common pool of limited resources, a resilient tangible and intangible industrial heritage, human and economic factors. The study may inspire both academic research and urban planning or landscape management policies aiming to achieve a sustainable integrated local and regional development.

**RECOVERY OF FORMER MINING AREAS IN TUSCANY.
THE EXAMPLES OF THE MINING NATIONAL PARK OF THE
METALLIFEROUS HILLS.**

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The National Mining Park of the Grosseto Metalliferous Hills (Tuscany), with a total area of 25,000 hectares, covers the territory of 8 municipalities and includes 34 abandoned mining sites. The strategic aim of the Masterplan has very few precedents, insofar as the conceptual project is geared not so much towards the conservation of a few isolated remains, but to the development and promotion of a large-scale area, with a history of mining and metal-working spanning many centuries. Thus, conservation is extended to an assortment of many different sites (extraction and smelting sites, quarries, transportation and storage facilities, slag heaps etc.). Accordingly, the goal of heritage conservation has been attained on a scale requiring conservation projects in the landscape: some of the most important projects for the recovery and conversion of the existing mining heritage are presented.

THE MINING HERITAGE IN ROMANIA UNDER THE PROTECTION OF UNESCO. CASE STUDY: ROȘIA MONTANĂ SITE

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Roșia Montană is a complex mining site due to its historical, cultural, technological and architectural importance, values that justified its inscription on the UNESCO World Heritage List in July 2021. 1890 years since the documentary attestation of Roșia Montană locality, reveals a long continuity of habitation marked by the mining activity practiced since the pre-Roman period. The complexity of the mining site results from the variety of elements that compose it: the oldest exploitations, made before the Roman conquest, known as "fire and water" (technique of crushing the rock by thermal shock); the underground exploitations made in the Roman period in the form of trapezoidal galleries (with a length of 15 km), well preserved until now. The exploitations from the periods of Hungarian and later Habsburg occupation, respectively, were practiced underground; a wooden track railway was created to transport the ore from the underground to the surface, as a good example of early mining technology. During this period, surface exploitations were also made using "șteampuri" (gold grinding machines, which used the force of water in the Cărnic massif and on the Roșia / Red Valley). For the permanent operation of the gold grinding machines, the water supply at normal flows was ensured by creating ponds. The operations in gold ore quarry, which began during the communist period, continued until 2006.

To the elements of mining patrimony are added archeological sites from the Roman period (the Roman settlement Alburnus Maior located in the Orlea area; the Roman cemeteries from the "Hop-Găuri" area) and the built fund.

In Roșia Montană there are 42 buildings classified as historical monuments (3 churches, 37 houses and a train station), to which is added the historical center of the locality. Some buildings are of urban influence (built in the XVIII-XIX centuries).

The varied number of elements of underground and surface cultural heritage reflects both the complexity of the local culture and its uniqueness.

RAILWAY HERITAGE FROM ROMANIAN BANAT: HISTORICAL, CULTURAL AND TOURIST VALUES

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The railway patrimony represents a special category of the industrial patrimony whose development is related to the industrial revolution, shaping itself as a logistics and transport system, with a progressive modernization that was stimulated by the need to ensure a fast and environmentally friendly form of transport for goods and people.

Its long evolution and typology of its elements (stations, railways lines, tunnels, viaducts) group a diversity of resources with multiple values (historical, technological, architectural, cultural). As a subtype of industrial heritage, the railway patrimony has undergone a process of underutilization, which has been followed by an adaptive reuse due to the attractiveness of cultural resources that are part of it and the need to preserve elements of technological value.

This study aims to analyze the railway heritage in the area of Romanian Banat, which is among the national territories in which the industry has experienced an early development. The analysis of the railway patrimony elements was made by referring to positive examples of its reuse. At the same time, there are a series of losses of railway patrimony that were generated either by the reduction of industrial activities or by political factors. The highlighting of the railway heritage elements, which no longer exist at present, was done through picture postcards.

Recently, picture postcards are being used more and more often as a research and documentation tool to reconstruct important details about the elements that formed the basis of the development of the territories as well as the symbolic elements for the culture and history of the territories.

The old picture postcards considered to be the most suggestive were ordered chronologically and selected to highlight the evolution of railway heritage in Banat province.

GLOBAL NAVIGATION SATELLITE SYSTEM (GNSS) APPLICATION FOR 3D MODELING AND PROMOTING CULTURAL HERITAGE

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The need to preserve and valorise the cultural built heritage, determined a series of complex approaches at international level. Thus, advanced researches were developed for the elaboration of active measures of preservation of the cultural heritage (i.e. the non-invasive technologies). The aim of this study is to create the 3D model of an educational institution of national importance, the “Carol 1” Central University Library in Bucharest, located in the central area of capital city. This educational institution is the oldest university library in Bucharest, located in the Palace of the “Carol 1” Universitary Foundation, the headquarters of the Royal Foundations. The library was built on the site purchased by King Carol I and was designed by French architect Paul Gottereau. The construction of the building was completed in 1893 and in the next two years the settlement named, Carol I University Foundation was equipped and arranged.

The versatile GNSS RTK Leica GS18I sensor, a dual frequency receiver, was used to make the measurements to obtain the 3D model of the “Carol 1” Central University Library in Bucharest. A field campaign was conducted in November 2020 to measure the points of interest. The versatile sensor was used with a measuring staff, held upright or tilted, due to the Inertial Measurement Unit (IMU) sensor integrated to measure the building footprint. In addition, in order to be able to measure inaccessible points with topographic accuracy, capture and measurement from images were used.

The results of this study reflect the usefulness of non-invasive technology for documenting, 3D modeling and promotion of a 126 years-old historical monument.

Keywords: architectural value, terrestrial photogrammetry, information visualisation, 3D model

INVENTORY AND PROMOTION OF MINING HERITAGE IN CROATIA

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Historic mining sites represent a mining heritage that can be classified as a subset of industrial heritage. The promotion of mining heritage is particularly important nowadays, as the EU economy depends on mineral resources, while the public perception of mining as an environmentally harmful industry affects the wide acceptance and approval of mining activities. Therefore, the ongoing European wider society learning project "MineHeritage" aims to inform the wider society about the importance of raw materials for the development of European society. As part of the project, a Croatian team investigated all important historical mining sites of ores and industrial minerals and filled the European database of ancient mining sites with all relevant data. From this database, four Croatian sites that are particularly valuable not only as industrial (mining) heritage, but also as cultural, historical and natural (geological) heritage have been selected for promotion. For each site, a 16-page brochure and a short educational video were prepared.

The sulfur mine in Radoboj, which was in operation in the 19th century, is no longer available for restoration. However, thanks to the local community, the Radboa Museum has been opened, where, among other things, the world-famous Radboj machine for purification of sulfur can be seen. The copper and iron mine in Rude has a long history, dating from Middle Ages (probably even from Roman times) to the 20th century. The local community made great efforts and opened a part of the mine to visitors. Now the mine is even officially protected as a cultural heritage site. The gray pyritized bauxite mine Minjera near Sovinjak is the first bauxite mine in the world. It was mined more than 400 years ago until the second half of the 19th century. Sulphuric acid, alum, vitriol and Berlin blue were produced. Descriptions and schemes from archives show that the factory was very modern and advanced at that time. Intensive silver mining, metallurgy and minting in Trogovska gora was introduced by the noble family Zrinski in Middle Ages during the constant treat of Ottoman Empire. Today, only the fortress and a blast furnace are preserved and represent an already protected heritage. The mining sites of Radoboj, Rude, Sovinjak and Trogvaska gora are valuable examples of industrial heritage that raise awareness of the importance of mining and raw materials and offer great opportunities for tourism, education and popularization of science and technology.

Acknowledgment

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Keywords: mining heritage, inventory, promotion, Croatia

**PLACE ATTACHMENT BASED ON INDUSTRIAL HERITAGE.
TERRITORIAL AND PEOPLE-CENTRED APPROACHES TO DEVELOPMENT**

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The impact of open borders following the 2007 accession of Romania to the European Union, corroborated with the abandonment of planned communist economy, focused primarily on extraction and heavy industry, weighed heavily on many small mono-industrial settlements that were suddenly faced with huge unemployment, massive emigration of the younger generation and overall lack of support from the central authorities. Yet this meant that for the remaining population that did not want to or could not resettle, a more sustainable solution would have to be invented. This research focuses on the stories of two small yet unique settlements in Romania, the town of Petrila and the village of Roşia Montană, former mining settlements, currently deemed disadvantaged, which try to reinvent themselves for a sustainable future. Our research question asks about the relevance of their industrial heritage for development in connection to inhabitants' place attachment. However, the process of finding alternative development paths has not been easy and is still an on-going turmoil as it happened without government aid or even despite some efforts to hinder it for different reasons. Methodology focuses on the stories of the people, relying on personal accounts and documentaries like *Roşia Montană, A town on the brink*, and *Planeta Petrila*. We use discourse analysis to assess place attachment and bottom-up initiatives. These settlements have been heavily represented in the media - a second information source that presents an outside view. Our findings show that place attachment is very strong with many of the locals and it is strongly related to industrial heritage and the past. Both industrial heritage and inhabitants' place attachment based on it constitute crucial resources for any future strategy that considers territorial and people-centred approaches to development, within a paradigm of sustainability and inclusiveness.

INDUSTRIAL HERITAGE AND THE IMMERSIVITY. TECHNOLOGY'S INTEGRATION IN THE MUSEUM VISITING EXPERIENCE

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Having in mind that the purpose of the modern museum is to collect, protect, interpret, conserve, and exhibit heritage elements with cultural, scientific but also educational role, we note that in the current context, maintaining the balance between conserving heritage elements, promoting them and aligning with contemporary realities becomes necessary in all museum environments.

Aiming to increase the knowledge diffusion, the museum is now in a position to update and calibrate itself to the contemporary context of the user, creating new methods of interaction, and visiting experience, making the information attractive and especially intuitive.

The ubiquity of the digital environment, the continuous online presence and the almost instinctive connection with gadgets, make reality be experienced through a filter of screens. The ability to attract attention becomes the most valuable resource of the digital age, so that for a better transmission of information the need for a subjective and emotional interaction is outlined, which will attract the public without appealing necessarily to intellectual curiosity, but rather to its instincts, facilitating the immersion in a context relevant to the correct perception of information.

By exploring the key factors that help shape and mold perception and by improving their use, a new dimension is opened, a dimension that can be explored in order to improve the information transfer through immersive technologies.

LIMITATIONS AND CHALLENGES IN CONSERVATION OF THE INDUSTRIAL HERITAGE IN A SMALL ROMANIAN TOWN: ORAVIȚA

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Oravița represented an important industrial center, being the town that coordinated the mining activity on the territory of the Romanian Banat during the Austrian domination. Along with the mining activity, which developed in the rural localities around Oravița (gold and copper mines), there was also a brewery in the town, one of the oldest in Romania. A treasury was also created on the administrative territory of Oravița. Due to its industrial function, the town also played an important role from administrative point of view (Oravița was the county seat of Caraș County).

The favorable location of the town, at the foot of the Caraș Mountains, contributed to the construction of secondary residential spaces (villas) used by the official representatives of the steel industry (developed in Resita municipality) during the Austrian domination who preferred to enjoy the mountain landscape during the summer period.

During the communist regime, industrial activity was maintained, but the town lost its administrative importance. After 1990, industrial activity in the town was reduced, and some industrial units were abandoned.

The purpose of this study is to inventory the elements of industrial heritage on the territory of Oravița and to analyze their state of conservation.

Weak involvement in the conservation of industrial heritage has led to some industrial buildings being ruined today (eg brewery and former treasury). The houses of industrial officials are in good condition. The cellars of the brewery, classified as a historical monument, are well preserved, but being located on a private property, the access to them is limited. At present, in a historical monument building, the museum of treasury has been arranged with some exhibits preserved from the period when it was active.

INDUSTRIAL HERITAGE IN SPAIN: CURRENT SITUATION AND POSSIBILITIES OF USE AS A TOURIST RESOURCE

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Unused industrial sites recovered for tourism in Spain have become one of the most visible aspects of tourist trends for several decades. Their basically local dimension has managed to boost the economy in the areas hit in the past by deindustrialization, unemployment, and environmental damage. Industrial heritage tourism is based on innovative aid projects that tend to merge the local or regional authorities' and the local population's participation with sustainable resource management models.

This communication presented at this International Conference on Industrial Heritage is part of a personal scientific trajectory of both authors and their current participation in a project on vulnerability, resilience, and strategies for the reuse of heritage in deindustrialized spaces.

The global vision offered of industrial heritage in Spain has a clearly geographical interpretive character, in line with the so-called "territorial culture". Industrialization's legacy is interpreted as a basic element of any landscape and as a unique, practically unrepeatable social product, due to the specific and occasional combination of very distinct aspects. We consider that the tourist use of industrial elements has to do with the preservation of local communities' identity, a consideration that, within the most recent epistemological context of geographical science, allows us to assert that local issues matter just as much as global issues, though without contrasting but instead interrelating the two spatial scales.

In our communication, we have selected the most representative elements of industrial heritage in Spain, both for their architectural or technical characteristics and for the uniqueness of the geographic areas which they are to be found.

MODERN TECHNOLOGIES - A USEFUL TOOL IN PRESERVING AND PROMOTING INDUSTRIAL HERITAGE

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In the recent years, digital technologies have played an increasingly important role in the long-term documentation and conservation of cultural heritage, including industrial heritage. As the process of conserving elements of cultural heritage becomes increasingly difficult and complex, it can be done more easily with the support of interdisciplinary knowledge in areas such as topography, information technology, chemistry, and physics. For example, topography, which has a permanent technological support, in a rapid and extensive development, is extremely useful in the process of monitoring and conservation of industrial heritage assets.

In recent years, there has been a continuous progress in the field of 3D scanning technique (recording resolution, processing power, brightness of projected objects). These are considered important elements in the analysis and decision-making process of digital preservation and physical restoration. It is also estimated that advanced algorithms will be created that will allow faster processing, at the same time, of more data stored in a digital archive. 3D scanning technologies cover a wide range of objects, from the smallest structures to very large objects and buildings.

Digital applications used in the field of cultural heritage, especially those aimed at analytical tasks, have high requirements for the quality and processing of data, as well as the visualization of the results.

The need to use modern technologies in the conservation and promotion of industrial heritage results from the fact that it is a subcategory of cultural heritage due to its values (historical, architectural, technological, and cultural).

The particular characteristics of buildings and industrial heritage sites, such as their age and very large size, impose a number of difficulties in the process of preserving them. Modern technology offers various solutions to meet the challenges related to the conservation of industrial heritage. Thus, in recent years, an increasing number of studies have focused on the use of modern technology, both for the conservation and promotion of industrial heritage.

Keywords: non-invasive technologies, historical monuments, volumes, virtual promotion

XANTI-YACA

**A PROPOSAL OF DOCUMENTARY NARRATION FOR THE INDUSTRIAL
HERITAGE OF THE TOBACCO FACTORIES IN SALENTO**

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This contribution is part of the debate on visual methodologies for social research with particular reference to geographical research conducted with audiovisual products. To this end, an experimental, self-produced short-documentary was produced, which bears witness to the state of the (now disused) tobacco processing factories in Salento, a region of southern Italy in Puglia.

Tobacco processing in this area represented a significant segment of the regional – and national – production identity, and at the same time a social and working reality that has its roots in pre-unification decades.

Its history is intertwined with events linked to agriculture and industry, to life in the countryside and in the city, and to the varied world of work (labourers, warehouse workers and cigar-makers), which was certainly characterised by a preponderance of women.

In the Apulian capital, the tabacchine were the protagonists, moreover, of the first strikes for the conquest of internal commissions and for the protection of health, as well as of epochal union battles in the 1950s and 1960s for democracy, for the defence of women's rights and for the recognition of occupational diseases.

Over time, therefore, the former tobacco factories took on an autonomous physiognomy, a symbol of a society in transformation, and still today they bear witness to a historical and social cross-section that deserves attention and targeted and incisive actions of enhancement.

Over time, following the closure and abandonment of these buildings, there have been various attempts at redevelopment that have not, however, led to a coherent and strategic vision and action capable of transforming these examples of industrial archaeology into attractive resources for the territory.

The documentation project presented here is therefore part of a programme of rediscovery and enhancement conducted through visual narration through which to create opportunities for the recovery and updating of a shared memory by the community.

ETHNIC IDENTITY OF SZEKELY POPULATION IN CULTURAL ITINERARIES

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The ethnic identity is an important component of the Romanian space since historical times. Szekely population, located in Transilvania, display distinct characteristics that contribute to the existence of a cultural landscape often determining tourist itineraries. The elements of ethnic identity refer particularly, to the wooden Székely gates, folk costumes, the native language and ancient writing, as well as to rituals and symbols associated with various holidays. In this context, *the aim* of the study is to highlight the existing traditional ethnographic heritage with real implications for cultural tourism as well as to assess its coverage area and demonstrate the manner in which the elements of Szekely identity attract heritage tourists in the area.

The objectives of the study consist in identifying the main areas of distribution for the identity characteristics of the Székely population in Transylvania; the significance of their traditional symbols (motifs, colours, sculptures, paintings) and the extent to which these elements are currently promoted at national and international level. *The research methodology* comprised direct observations, GIS techniques and the usage of the inquiry method (semi-structured interview). *The results of the study* emphasized a considerable diminution of the representation area of the traditional Székely customs as a direct result of the manner in which the population changed their views on the traditional lifestyle; the presence of a Romanian symbolism coexisting with exclusively local representations of motifs and colours; the possibility of inserting Székely identity elements as added cultural values into marketing strategies for an already attractive tourism area.

INDUSTRIAL HERITAGE IN THE UNESCO WORLD HERITAGE LIST

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Industrial heritage has increased its presence on the World Heritage List.

This increased visibility is also the result of the long-standing collaboration between TICCIH and ICOMOS. During the presentation, the most significant stages of this collaboration will be illustrated.

Massimo Preite, former Professor of Urban Planning at the Department of Architecture of the University of Florence, currently teaches Industrial Heritage: Knowledge and Project at the Erasmus Mundus master's course on Techniques, Patrimoines, Territoires de l'Industrie: Histoire, Valorisation, Didactique (TPTI) at the universities of Evora (Portugal), Paris (France) and Padua (Italy).

As industrial heritage expert, he is Board member of The International Committee for the Conservation of the Industrial Heritage (TICCIH), Board member of European Route of Industrial Heritage (ERIH), and Board member of the Associazione Italiana per il Patrimonio Archeologico Industriale (AIPAI). He has carried out an intensive research activity on the conservation and rehabilitation of the industrial heritage in Italy and Europe. He led numerous projects for the redevelopment of mining and industrial sites: the Masterplan of the National Technological and Archaeological Park of the Colline Metallifere, the feasibility study for the Iron and Steel-Working Park in Piombino and the economic and management feasibility plans for other Italian mining parks. On behalf of ICOMOS, he was asked to evaluate numerous industrial heritage nominations to the UNESCO World Heritage List.

THE EVOLUTION OF THE MINING MUSEUM FROM PETROȘANI MUNICIPALITY (HUNEDOARA COUNTY, ROMANIA)

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The Mining Museum from Petrosani municipality is located in a historical monument building. This museum unit with a unique profile in the area and one of the few museums with a profile focused on the extractive industry in the country, was established in 1961.

The municipality of Petroșani represents the most important center of the coal industry in the homonymous basin.

The first headquarters of the museum was on Ion Creangă Street, no. 1, in a house located on the surface of the current Central Park. Between 1961-1966 the activity took place in this building, which had more of a storage role, the exhibition space being very small. In 1966 the museum's collections are brought to its current headquarters. The museum arrangement in the new location was also made outdoors (coal carts are exhibited in the museum yard).

Museum arrangement in the building and outdoors. From 1965-67, the building began to function as the "Museum of Mining", hosting collection featuring pieces attesting to the history of mining in the Jiu Valley: original documents, photocopies, sketches, devices, mining equipment, badges, the evolution of mining technology in the Jiu Valley represented by tools and machines along with various devices.

In August 2018, extensive rehabilitation works started, which completely changed the appearance of the cultural institution. The rearrangement works were completed in 2020. As a result of these works the spaces in the basement and attic of the building were rehabilitated, which led to the increase of the exhibition space and gave the possibility to set up two new sections: the folklore, which highlights the folklore heritage of the area and the one dedicated to mountain tourism.

WHEN HERITAGE MEETS THE FLOOD: CONSTRAINT TO REGENERATION OF INDUSTRIAL HERITAGE IN ACTIVE FLOODPLAINS

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Built industrial heritage contributes to local identities in many old industrial regions, where it also represents both an asset and barrier for new developmental pathways to cope with environmental, social and economic challenges. Regeneration of built industrial heritage (BIH) can be hampered by various factors, however. Among the specific and under-researched constraints is the location of BIH in active floodplains. In this respect, the long term and complex land use conflicts may emerge as results of clashing (inter-)national policies that concurrently aim at renewal of built environment and on flood risk mitigation. In this paper, we first conceptualize the local land use conflicts as the results of fragmented policies and value incommensurability related to developmental priorities. After then, we continue to present the Czech case study that, for the first time, analyse the share and types of the BIH brownfield sites in respect to their location outside and within the active floodplains. Using the qualitative approach, we then present the examples of BIH brownfield sites within the active floodplain to narrate the current conflicts, their roots and future challenges for BIH regeneration in locations that suffered and are potentially exposed to major flood events. Based on the results, we argue that fragmented policies, institutional setting and local evolutionary pathways created another kind of ‘wicked’ planning problem, for which to manage, new governance schemes must be sought.

DEINDUSTRIALIZATION, TERTIARIZATION AND SUBURBANIZATION IN CENTRAL AND EASTERN EUROPE.

LESSONS FROM BUCHAREST CITY, ROMANIA

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This paper intends to delve deeply into the current understanding of the ways in which the transition from a central-based economy to an economy relying on free competition, has led to changes in the big urban centres, bringing about a change in the relationships with the suburban areas. The authors take into account the high population density, the lack of space and the elevated price of terrains inside the big cities, hence urban functions migrate beyond the administrative boundaries, thus favouring the process of suburbanization. Within this context, commercial forces are shifted, migrating from the centre to the urban peripheries, or even outside them. This research is based on a comprehensive process of participative investigation (2007-2019) in Bucharest, Romania's capital city. The research relies on field investigation, statistical and quantitative analyses and bibliographical sources. The conclusions rely primarily on the idea that political changes cannot be separated from economic, cultural and environmental ones, highlighting globalizing flows and the development of big cities. Industrial activities, strongly developed within a central-based economy, have significantly declined, partly compensated for by the development of the tertiary sector and of commercial services, in particular, leading to a functional reconversion of the urban peripheries and of suburban areas. The conclusions suggest that it is very important to be highly careful towards the dilemmas and provocations ensuing from uncontrolled urban growth, therefore several measures of urban planning should be taken with a view to achieving a better co-operation between urban stakeholders and those from the metropolitan areas so as to attain some common objectives in infrastructure in order to reach an integrated regional development.

INDUSTRIAL HERITAGE AND DEVELOPMENT OF SUSTAINABLE TOURISM IN MEDIUM-SIZED POLISH CITIES

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In the context of medium-sized cities, the opportunities of developing tourism based on industrial heritage should be considered on a different scale and in a different meaning than in the case of the discourse conducted in the context of the largest cities. The perspective of gaining a competitive advantage based on industrial heritage in a medium-sized city is considered mainly on a local scale. However, in exceptionally favorable conditions, it is possible to allocate such objects that can distinguish a small or medium-sized city on a global scale. These are not resources that can be compared with those of the largest cities. Nevertheless, in the perspective of medium-sized cities, industrial heritage can become an important tourist asset. This study aimed to identify opportunities of using industrial heritage for the development of sustainable tourism in medium-sized cities in Poland. It uses desk research, computer-assisted telephone interviewing (CATI), and case study to assess the possibilities of using industrial heritage in the tourism sector with a special focus on the cultural sector. The study identifies examples of the use of industrial heritage in medium-sized cities in Poland, such as the conversion of former brewery buildings erected in 1908 for the Municipal Cultural Centre in Ostrowiec Świętokrzyski or the adaptation of an old power plant building in Ostrów Mazowiecka for a center performing exhibition functions and disseminating historical materials. The obtained data were analyzed in the context of sustainable tourism development in medium-sized Polish cities based on cultural heritage. The importance of industrial heritage in creating the city's uniqueness, resulting from the local specificity, was determined, which is extremely important in a world in which consecutive large cities are becoming more and more similar.

SMALL HYDROPOWER STATION AS AN INDUSTRIAL HERITAGE OF KUYAVIA-POMERANIA

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From the beginning of civilization, a significant relationship between man and water was noticeable. For centuries, apart from the apparent source of food and vital ingredients, water was a factor conducive to the further development of civilization. It was used, among others, as a means of transport and a driving force in mills and manufactories. Innovative ways of using it determined the level of socio-economic development of a given region. As a result of the industrial revolution, how water is used has changed dramatically. However, the remains of hydro-technical structures can be found in landscapes, for example in Poland.

The study focuses on the issue of the use of small hydropower plants (SHP) in the context of the cultural heritage of the Kuyavia-Pomerania region (Poland). Hydroelectric power plants occurring in large numbers in Kuyavia and Pomerania are facilities built in the 19th and 20th centuries. After years of intensive operation, along with the abandonment of activities aimed at maintaining their efficiency, the condition of these facilities deteriorated significantly.

The research analyses the potential of SHP as an element of cultural heritage through the prism of existing data, historical data, cartographic studies, photographs, press materials, and based on field inquiries. The aim of the study is to identify the current SHP function in Kujawy and Pomerania.

Should SHP be considered as the industrial, cultural heritage of the region? Does SHP have the potential to become part of local identity? How do local communities perceive these hydro-technical structures?

Keywords: small hydropower station, industrial cultural heritage, heritage preservation, revitalization, technical heritage, heritage tourism

**EXAMPLES OF GOOD PRACTICES FOR THE REUSE OF INDUSTRIAL
BUILDINGS WITH HISTORICAL AND ARCHITECTURAL VALUE. CASE STUDY:
MUNICIPALITY OF CLUJ-NAPOCA (ROMANIA)**

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Cluj-Napoca is one of the most important cities at national level, an important role in its economic development being associated with industry. After 1990, against of the background of deindustrialization and the accelerated dynamics of services, various industrial buildings were abandoned in Municipality of Cluj-Napoca. However, within the municipality there are several examples of good practice on the reuse of industrial buildings. This study is focused on the analysis of urban regeneration projects aimed at reusing several industrial buildings in Cluj-Napoca.

Four examples were selected, being represented by cultural projects that contributed, one the one hand to the conservation of industrial buildings, and on the other hand to the revitalization of the cultural life of the city. One of the most important examples is the former Brush Factory which was reuse as an urban culture hub, having several functions, such as exhibition space, openings, theater and dance performances, creative workshops or events for children. Tehnofrig was a company that produced equipment for the food industry and refrigeration equipment in Cluj-Napoca. Tehnofrig was arranged for exhibition spaces, workshops, galleries, being currently called the Center of Interest.

Another example of conversion is a former brandy factory reused as the hub for social innovation in which there are organized cultural events (debates, exhibitions, concerts, book launches, dance performances and theater).

The Firemen's Tower, formerly called "The Locksmith's Tower", was built in 1574 within the second medieval enclosure for the defense of the city. In 2011, the Firemen's Tower passed into the administration of the municipality, and it was introduced recently in a restoration process. The tower will be arranged as a center of urban culture.

The efforts of the organizations that support art in Cluj-Napoca, materialized in the implementation of cultural projects, have ensured the preservation of old industrial buildings and the change of their perception among the general public as vibrant cultural spaces.

THE ART OF MANAGING THE HERITAGE OF THE CAR MUSEUM IN ROMANIA - THE ROMANIAN AUTOMOBILE MUSEUM OF CAMPULUNG

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Making a connection between the history of an economic field and its economic, social and cultural effects has been a permanent concern. This was done materially through museums. For this purpose, the Romanian Automobile Museum from Campulung was created. The automotive industry in Romania deserves such a museum because it has a history whose importance has been felt in economic and social development. The purpose of this study is to highlight the effects generated by the interest of the romanian population for the the local car industry and on the other hand, the interest of foreign visitors for the car industry in Romania. All this in the context of local cultural policy.

The study used empirical methods, such as questionnaire, which was applied in 2019 on a number of 546 romanian respondents and 87 foreign respondents. Data analysis and processing was performed with the SPSS program. The results of the study followed the age group structure of visitors (adults and children), involvement of the local administration and other institutions in the promotion and maintenance of the romanian car museum, as well as local communities or various NGOs.

Keywords: local culture, automotive heritage, conservation, management, cultural policy

PERCEPTION OF THE TOURIST ATTRACTIVENESS OF THE CETĂȚUIA ARCHEOLOGICAL SITE, CLUJ-NAPOCA MUNICIPALITY (ROMANIA)

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The Cetățuia archeological site was built at the end of the 17th century as a fortification in a strategic point of the city to be used by the Austrian army. Thus, on Cetățuia Hill was built an earth fortress with bastions and stone gates. This Vauban-type fortification was built according to the plan of the Italian military engineer Giovanni Morando Visconti.

At the same time, Cetățuia also had the role of surveillance point over the city. Over time, the Cetățuia lost its defensive function, being classified as archaeological site due to its historical value. During the communist period, arrangements were made for tourist capitalization of the archeological site.

Cetățuia Hill is considered, due to the perspective it offers over the city, the most popular panoramic point in Cluj-Napoca. It is noticed that the tourist attractiveness of the Cetățuia archaeological site is determined by the multiple valences it encompasses (historical, scientific, aesthetic), which draws attention to the fact that it cannot be perceived only as a viewpoint.

The purpose of this paper is to analyze the visitors' perception regarding the tourist attractiveness of the Cetățuia archeological site. For this purpose, an online questionnaire was applied to 145 tourists during March 01 - April 30, 2021. The questionnaire includes open-ended questions, which aim at motivating tourists to visit the site, the expectations they have after visiting it, as well as the impact it has had on them. An example of a closed-ended question is the number of visits made (76% of tourists visited the site once).

The most used words by the respondents to describe the Cetățuia are: interesting, attractive, enigmatic, relaxing, old, cultural, unique, splendid, etc. The results of the applied questionnaire reflect the fact that the degree of attractiveness and popularity of the site is quite high.

ABANDONED INDUSTRIAL SPACES AND THEIR USE IN EMERGENCY SITUATIONS

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The SARS-CoV-2 pandemic revealed the spatial and functional shortcomings of the built present, a present in which architecture can contribute to improving the future. Assuming that emergencies are, above all, a spatial issue, industrial heritage buildings can become inspirational multifunctional spaces, playing an active part in managing human emergencies at the regional level. Through easy accessibility at urban level, by means of an advantageous distribution within a generous plot or through the sheer size of the interior space, industrial architectural heritage can provide a real solution to the numerous spatial and functional problems generated by emergencies. With the help of transdisciplinary concepts, strategies for functional organization and management of industrial heritage spaces in cases of human emergency can be advanced. Thus, it reveals a territory not yet mapped in the Romanian environment, which seeks a management method of the design and intervention process at the level of social sustainability of industrial heritage buildings. More than anything, there is a need for space - an easily adaptable, flexible and well-proportioned space that can integrate the innovative systems and technologies required for a real human emergency; a space whose need does not generate the eradication of destructured or vulnerable areas. Such a space is already assumed and respected by the collective mind as part of the community. It is all about the industrial heritage buildings which, through their typology, can constitute an answer to the spatial, medical, hygienic, sanitary and affective problems related to the human emergencies.

DEVELOPING TOURISM INFRASTRUCTURE VS PRESERVING TRADITIONAL ARCHITECTURE IN ROMANIA. CASE STUDIES: MOIECIU DE SUS VILLAGE (BRAȘOV COUNTY) AND RÂMETEA VILLAGE (ALBA COUNTY)

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Many rural areas in Romania displaying tourism resources witnessed important transformations of their architecture after 1990 in the absence of long term sustainable development strategies. In most cases the expansion of tourism infrastructure in Romanian villages was chaotic and disregarded local architectural styles. Accordingly, the aim of this paper was to assess tourism growth and preservation of traditional architecture in the two villages representing our case studies. The research objectives were to identify both the elements of traditional architecture and the modern imported ones; to evaluate tourists perception regarding the preservation of traditional houses; to make some recommendations in order to include the conservation of traditional architecture within the sustainable planning policies of rural areas. The case study method including field observation, social survey and GIS techniques was used as the most appropriate method according to the aim of this study. The main results outlined transformations of the *brănean* architecture within Moieciu de Sus village against the preservation of traditional housing in Râmetea village. Traditional *brănean* houses are placed in the backyard of households, as villas were built in front of them, respecting almost nothing of the local architecture. In the village of Râmetea no insertions of modern tourist constructions were identified as some of the old dwellings were transformed into boardinghouses and were rehabilitated in the traditional style. Approximately 80% of tourists interviewed in Moieciu de Sus appreciated the local traditional architectural elements, while the rest were not disturbed by the modern buildings. In the village of Râmetea, tourists were delighted and totally attracted by the preservation of the authentic architecture of the place. In conclusion, in Moieciu de Sus it is necessary to apply a much stricter local legislation for rural planning, while Râmetea can be an example of good practice in terms of preserving traditional architecture.

**TELLING THE PERCEIVED INDUSTRIAL HERITAGE PHENOMENA AND
THEIR INTERPRETATIONS WITH TOURISM EFFECT: SOME CASES OF
LAMPANG PROVINCE IN THE NORTHERN REGION OF THAILAND**

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This article aims at presenting important industrial heritage of a small town, Lampang Province in the Northern Region of Thailand, drawing an attention to the tourism atmospheres induced by the use of the industrial heritage image, and pointing out potential of using the industrial heritage for tourism. The town is significant as the national mining source and the electricity power plant, home for industrial craft productions, as well as representing the northern region's logistic and trade center in the past with the national railway network being reached; and thus, the region's railway hub. The physical extensive fieldworks contributed to a typology of the town's industrial heritage. Utilizing in-depth interviews and focus group discussions to collect the data with key informants, organizations and local communities, and personal observation during the three-years course as a local resident, the results portrayed interesting phenomena or movements associated with the industrial heritage being in-between conscious; these included the tourism in the mining heritage context; the railway tourism as the industrial heritage promotion; the cultural embodiments through arts at the old precincts where the industrial nostalgia was felt; the bridge phenomenon; and the industrial craft heritage tourism. The study demonstrates how and under what circumstance these phenomena have arrived and developed. To some extent, the article marks a significance of these heritage assets for future reuse themes for tourism in a more integrative orientation that are in harmony with the local identity. A map illustrating the thematic industrial heritage resources and a practical paradigm for future application in the context of the studied town were also proposed. The suggested alternative approaches could be adaptively applied as to help promote cultural values of the industrial heritage per se.