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ИНДУСТРИЈСКО НАСЉЕЂЕ  
КАО ПОТЕНЦИЈАЛ ЗА  
ОБНОВУ  
ПОСТИНДУСТРИЈСКИХ  
ОБЛАСТИ У АУСТРИЈИ

INDUSTRIAL HERITAGE AS  
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## INDUSTRIAL HERITAGE AS A POTENTIAL FOR REDEVELOPMENT OF POST-INDUSTRIAL AREAS IN AUSTRIA

**Abstract:** The paper aims at examining the current policy and practice on rehabilitation of former industrial areas in Austria, with special focus on industrial heritage and its social and economic potentials. Often neglected, industrial places are today valuable sites with alternative aesthetics and after-use concepts such as living, cultural events, leisure or greening urban areas. The assumption is that regeneration of industrial areas needs the inclusion of local groups, in order to preserve the place identity and to initiate a beneficial re-use of the heritage site. Consequently the authors pay special attention to the planning processes and the positive effects of civil and creative development initiatives. The used methodology is based on qualitative and quantitative methods, including case studies, qualitative interviews and data analysis.

**Key words:** *Cultural heritage, identity, creative sector, local community.*

## ИНДУСТРИЈСКО НАСЉЕЂЕ КАО ПОТЕНЦИЈАЛ ЗА ОБНОВУ ПОСТИНДУСТРИЈСКИХ ОБЛАСТИ У АУСТРИЈИ

**Апстракт:** Овај рад представља генерални преглед и одабране примјере индустријског наслеђа у Аустрији. Такође ће бити ријечи и о потенцијалу за обнову постиндустријских области као и о тренутној политици и пракси обнове. Приликом разматрања активирања бивших индустријских области као и позитивних ефеката реактивације, посебна пажња је дата креативном сектору и грађанским иницијативама. Претпоставка је да регенерација индустријских области захтјева увођење релевантних фактора и различитих група људи како би се очувао идентитет мјеста и културна баштина била корисно употријебљена. Како би се показало да ови чиниоци требају имати важнију улогу у планирању материјалног наслеђа, размотрени су и наглашени позитивни ефекти овог приступа. Методологија која се користи је базирана на квалитативним и комбинованим методама, укључујући студије случаја, квалитативне интервјуе и анализу података.

**Кључне ријечи:** *културно наслеђе, идентитет, креативни сектор, локална заједница.*

## 1. THEORETICAL AND EMPIRICAL BACKGROUND

The paper deals with abandoned industrial buildings. They can be seen as remains of industrial culture that represent the so-called 'industrial heritage'. The significance of industrial heritage and its reuse is multiple, but one of the main issues is connected with its social and cultural value. Industrial heritage is nowadays a memory about the life of not only workers in those factories but also many other people. The factories were everyday surroundings for generations of workers and symbols of progress and pride for the local community. In the interest of the community is to preserve the existing place identity through the preservation of these buildings [17]. Often neglected, industrial places are today valuable places with alternative aesthetics and activities such as gardening, play, exploration and creativity. Though perception of post-industrial landscapes is sometimes negative, they are often positively connotated and considered to have a *potential*. Cultural potentials related to industrial heritage are man-made relicts such as technical structures, buildings and infrastructure, as well as intangible potentials such as tradition of miners, mining customs and identity. These potentials can be turned into cultural facilities, events, museums, industrial routes and tourist paths. 'Potential' has a progressive connotations, a 'potential approach' can be combined with urban and regional regeneration issues and it can be associated with a concept of 'innovation' [1: 9].

Values and potentials of industrial heritage were in a last few decades promoted to achieve economic, cultural or social benefits, especially in cities that have gone through decline in industry and now need new development options [2]. The integration of cultural potentials of mining regions in urban and regional development strategies can improve the outcomes of regeneration [1: 12]. This concept usually involves the introduction of new functions through *adaptive re-use* of former industrial sites, also known as *recycling* or *conversion*. Questions that often emerge are: How to combine monumental and contemporary activities successfully? Many authors are dealing with that question for decades and discussing the potentials and values of post-industrial sides from the pure preservation to opening to mass tourism [3]. How to maintain its values and retain the character of non-excludability? Experts believe that efficient reuse means making a monument accessible to the public and that it requires a participation of local population [23]. Many documents, such as the *Agenda 21 for culture*, promote the participation of citizens in cultural policies and other initiatives. The major concern is preservation and development of authentic local cultures that have a historical connection and interactive relationship with the territory [4]. Any exclusion of local people from development processes results in a lack of identification with the place itself. This is especially true for young people, whose exclusion can further diminish their identification with the region and exacerbate the brain drain among the young who see no perspective for themselves in the area [1: 19].

## 2. SITUATION IN AUSTRIA

Since many industrial heritage buildings are located on brownfield sites, the topic of industrial heritage is closely connected with brownfield issues. In urban planning practice in Austria, the German term *Brache* has been used for formerly developed land since the 1970s. In 2009 the term brownfield (*Brachfläche*) was defined by the Austrian Standards Institute as: 'previously used site or part of a site, which is presently derelict or underused. Owing to the site characteristics (e.g. dedication, opening up for development, location), it offers a potential for reuse' [5]. In 2004 Austria had about 130km<sup>2</sup> of brownfields, or 3,000 to 4,000 abandoned sites.

The main challenges in planning in Austria for the forthcoming decades are: migrations of population to urban areas, increased need for space for the business sector, pressure on urban areas, spreading of cities and reduction of inbuilt land. Therefore, possible solutions are: increasing the building density, building compact forms and recycling already used land and buildings.

According to several sources [5, 6, 7, 8], barriers for bringing the brownfields back to use in Austria are:

- Lack of reliable data on brownfields
- No clear administrative procedures and government programs exist to handle brownfields; as a result, decisions are usually made on a case-by-case basis
- No specific brownfield legislation
- Brownfields are considered a low priority concerning funding for redevelopment
- Lack in incentives/de-taxation for brownfield redevelopment
- Better conditions exist to invest in greenfield sites and therefore investors still prefer them
- Questions related to the ownership structure
- Problems related to potential contamination and costs of remediation
- Opposing interests of different actors
- In Vienna, in addition to these barriers, significant problem is site availability and high price
- More intensive use of cultural potentials can be hampered by low public support, lack of adequate legal support, finance and consistent heritage conservation.

In contrast, the amount of industrial brownfields and related problems in Vienna is relatively low, due to the lack of large industries. Unlike in Eastern European cities, in Vienna and other Austrian cities, a lot has already been invested into modernizing industry to avoid environmental problems in an early stage. What is more, regeneration of former industrial sites shows to have positive effects on the environment, through the use and promotion of sustainable and innovative solutions in redevelopment [9]. The City of Vienna offers no specific funding opportunities for brownfield redevelopment, but two general programs can be used for this purpose: Wiener Wirtschaftsförderfonds (Vienna Business Agency) for industrial sites and Wohnfonds Wien (fund for housing construction and urban renewal) for housing sites. The actual contribution of brownfield redevelopment to urban development usually does not exceed 5%, but is often essential for creating a new image or achieving a new economic profile [5].

The Bundesdenkmalamt (BDA - Austrian Federal Monuments Office) is a department of the Austrian Federal Ministry for Education, Arts and Culture that is responsible for cultural heritage in Austria. Its duties include the preservation, restoration and cataloguing of immovable cultural heritage. The BDA has one central bureau and there are nine conservation authorities in provincial capitals. 'Denkmalgeschütztes Objekt' is a protected object listed on the Austrian cultural property list according to the Austrian monument protection law of 2007 [19].

Aside from brownfields in cities, significant part of former industrial land is related to mining. Austria has a long history of mining and mining industry can be seen as being a part of cultural identity in some parts of Austria, especially in small and medium-sized mining towns. After the Second World War, mining industry started to decline and these towns now face similar problems as mining towns in other countries: environmental degradation, decline in business and industry, economy in crisis (alternatives such as tourism are usually unable to produce as much prosperity as mining), high unemployment, outmigration, loss of human resources, lack of

high-quality education facilities, little administrative capacity and modest resources for strategy building and creative planning, financing and implementation. For example, population decline in Upper Styrian Central Region is 21% (1981-2009) and in the municipality of Eisenerz 48% (due to its disadvantageous location and accessibility, bad labor market situation and negative migration). Unemployment is high in the region (1991: 7.7%) and in Eisenerz municipality (1991: 12.1%)<sup>1</sup> [11: 82-84]. The mining left perception of the region as old, grey, loud and dirty and tourism and infrastructure are underdeveloped in comparison to the high standard of Austrian tourism [12: 221].

Though the cultural value of mining and industrial heritage is considered very high and irreplaceable, political stakeholders and public authorities often fail to provide sufficient support [1: 25]. The main problem is the lack of money and the strict obligations towards monument conservation [8, 24, 25].

### 3. CASE STUDIES

Selected case studies (see Tab. 1) present examples of industrial areas where cultural potential of industrial heritage is used for regeneration. Special attention is put on innovative projects that focus on cultural, creative and socially responsible new uses which are not commercial. Therefore, of special interest are non-profit and low-budget initiatives, in which identity related to industry and cultural and social programs has a significant role.

*Tab. 1: Overview of the selected Austrian case studies*

Basic data	Significance, potentials, heritage status	Former function	Reuse projects	Actors
Styrian Iron Road, Styria	Since 2002 at UNESCO's tentative list / in 2007 officially recognised as cultural route / identity forming symbol for the region	Mines, buildings and railway	1978, Cultural route, museums	tourists, local residents High volunteerism
Adventure Erzberg, Eisenerz	Evaluated as highly successful / Part of Styrian Iron Road (tentative UNESCO list) / the only working mine in central Europe / identity forming symbol for the region / 'the most prominent ore mining example in Central Europe' (UNESCO).	Mining site	Adventure park	tourists 20 new jobs created / high acceptance / actors that gained most: young people, unemployed people and former miners / many visitors
WUK, Vienna, 1855	Social significance of projects in WUK	Locomotive factory	Cultural-educational centre since 1981 (first as a squat)	diverse actors, including children, disadvantaged youth and young adults

<sup>1</sup> Also, comparing to national average (16.8% in 2001), the share of the group under of 15-year-olds is very low in the region (13.3%) and especially in Eisenerz (10.2%) [10: 83].

Loft City, Vienna, 1891	Listed / once Europe's largest bread factory	Bread factory	2009 lofts, studios and galleries	arts and culture professionals, local residents, charity groups etc.
Tabakfabrik, Linz, 1930- 35	Listed / the largest and most modern tobacco factory in CE	Tobacco factory until 2009	2010	arts and culture professionals, local residents, etc.

### 3.1. STYRIAN IRON ROAD

The region around the Erzberg in Styria was European pre-industrial center for iron production and manufacture. In the course of globalisation of the resource market the decline started in 1960s. Despite drastic job cuts the region still hosts the only working Central European iron mine due to modern extraction methods and production of high-quality products [10: 80]. The *Steirische Eisenstrasse* (*Styrian Iron Road*) was created in 1978, aiming at retracing the history of iron in Europe and saving it from disappearing. Protection and tourism contributed to the development of a more positive image and creation of the common regional identity [20]. In 2007 *Central-European Iron Trail* (*Mitteuropäische Eisenstraße*) was officially recognized as a cultural route of the Council of Europe. This route is a part of the UNESCO's Tentative List for inclusion in the World Heritage List since 2002 [24]. It contains a network of sites and has 18 member municipalities, the largest being Leoben, Trofaiach and Eisenerz (fig. 1). The industrial heritage along the Styrian Iron Road features 19 ironworks dating back to the 16th century, the Gösser brewery (including a museum), the Leoben Donawitz VÖEST Alpine Plant tour, the wheelworks in Vordernberg [21] and many other traces of the mining legacy (fig. 2). Significant heritage represents old railway from Leoben to Eisenerz. Its most spectacular part is the so-called 'Erzbergbahn' a railway which was opened in 1891 to bring the iron ore from the iron ore mountain to the blast furnaces in Vordernberg and Leoben. The line passes eight viaducts and five tunnels. Goods and personnel were transported until 1978. In the last years railway enthusiasts from all over the world come to watch the steam engines working, and it contributes to doubling the number of overnight stays in the region [12].



Figures 1 and 2: Styrian mining region: View from Ore Mountain to the city of Eisenerz and Barbara festival hall in Vordernberg (photos by Wolfgang Fischer, 2013 and Jasna Cizler 2012)

**Eisenerz** is a town next to the Erzberg (Ore Mountain) where miners' houses, old railway, show-mines and City museum (Stadtmuseum) in the former administrative headquarter of the state-owned mines can be seen. The "Abenteuer Erzberg" (Adventure Erzberg) is probably the most

successful project in the area. It is the event facility that uses underground galleries and surface landscape as a spectacular set. Among local and regional residents this attraction has a high acceptance. Those who gain the most from the project are young people, unemployed and former miners. 20 new jobs were created as a result of the project.

Styrian Iron Road is today identity-forming symbol for the region. Erzberg is the most prominent ore mining example in Central Europe (UNESCO website). Research revealed that people identify very strongly with the reconstruction of the railway and steam trains [12], whose success can be attributed to the voluntary work on its functioning<sup>2</sup>. But at the same time, only 26% of young people in Eisenerz consider themselves attached to the region [13]. Similar studies show that attachment to mining as the traditional activity of the region is moderate. Despite the cultural and historical importance of the local mining heritage, these potentials do not contribute significantly to the attractiveness of the region. Although the number of overnight stays increases continuously, tourism is still not an important economic factor. The increase in tourism in Eisenerz is partly a result of “Erzbergrodeo” – an international motorcycle competition on the Ore Mountain, and “Abenteuer Erzberg” that attracts a number of visitors, mostly school classes. The numerous museums dedicated to mining and events related to industrial past have already had a positive impact, such as: summer festival “Culture on the Iron Route”, International Mining Music Festival, special days of mining and miners’ parades. Developing the region into a tourist area requires establishment of a strong identity and forming a tourist organization which would allow joint work of all municipalities [12]. Notwithstanding all these positive initiatives the tourist performance (particularly overnight stays) remains below expectations.

### 3.2. WUK IN VIENNA

The WUK is located in a former locomotive factory in Vienna built in 1855. It accommodated the Technological Trades Museum (TGM) from 1884 to 1980 and the building was abandoned after that. “In addition to diverse commercial and municipal plans there has always been a concrete interest in an ‘alternative’ function” [14]. Finally social workers, artists, teachers, feminist groups, students and pensioners have come together under the motto ‘Save the TGM’.

‘It is evident that there is a lack of cultural spaces, which promote an everyday culture as a life practice and investigate social models that support community-oriented conduct. In an open cultural and workshop house the association sees the opportunity to widely remedy this deficiency and to create in the TGM such a social model’ [18].

In 1981 activists from the ‘Verein zur Schaffung offener Kultur- und Werkstättenhäuser’ (Association for the Creation of Open Culture and Workshop Houses) squatted the former TGM premises. Official recognition and subsidies came from the City of Vienna. Today it occupies a floor area of 12,000m<sup>2</sup> and is a location for art events and home to around 130 groups, initiatives and projects. The WUK cultural production consists of different program areas: the WUK Theatre, the WUK Culture for Kids, the WUK Music and Visual Art in the Kunsthalle Exnergasse. Since 1982 *WUK Education and Counselling* initiates and conducts innovative labour market projects for disadvantaged youth and young adults.

<sup>2</sup> ‘It goes without saying that personal enthusiasm rather than adequate funding contributed most to the success of this project, which is run by a group of former miners and others interested in mining’ [1: 24-25].

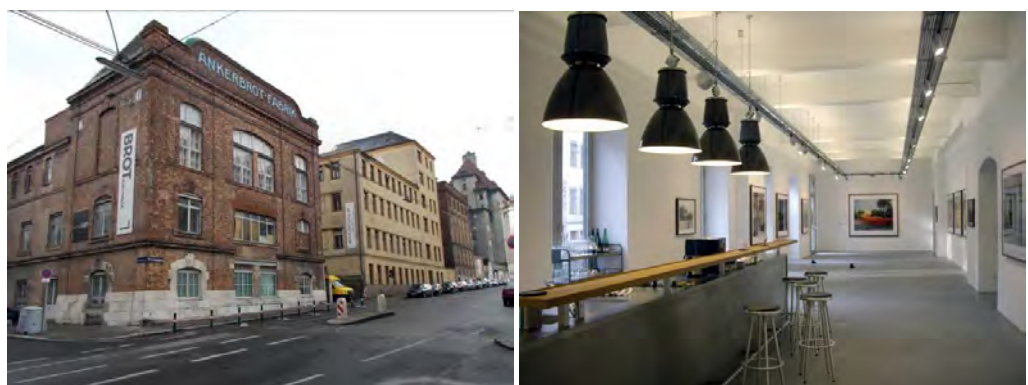


Figures 3 and 4. WUK (photo by Jasna Cizler, 2012)

Also their mission statement highlights the social responsibility by defining itself as "an open cultural space, a space for lively interaction between art, politics and social issues... The WUK unites the overlapping synergetic models of a sociocultural center and an international center of art and culture." (Excerpt from [14]).

### 3.3. ANKER BROT FACTORY (THE LOFT CITY) IN VIENNA

Ankerbrotfabrik is a bakery built in Vienna in 1891. This was one of the largest manufacturers of bakery products in Austria and one of the biggest bakeries in Europe. Thanks to the advancement in technology and logistics, production continues only in part of the complex and unused parts of the complex were sold. Since 2009 the new project, the Loft City has been implemented [20].



Figures 5 and 6. The Loft City (photo by Jasna Cizler, 2012, 2013)

The project is a private investment. Built area is 26,000m<sup>2</sup>, split in 12 buildings located around two big courtyards at the parcel surface of 16,000m<sup>2</sup>. The intention is to use the place by the representatives of the creative industry for studios, galleries and offices and 50 lofts of different functions and sizes (140-1,000m<sup>2</sup>). Due to the high demand, 70% of lofts were sold shortly after.



Some of the buildings in the complex are protected and the goal is to obtain the status of a cultural monument for more buildings in the complex. As Walter Asmus, an architect and investor, stated in the interview, owners and residents generally prefer when the object is not protected, mostly because then they have greater freedom in using it. In his opinion, industrial heritage in Austria does not enjoy great protection and no importance is given to it as to other types of heritage, or as it would be the case in some other countries [25]. This might be explained by the abundance of cultural heritage, mainly historical (esp. before industrialisation) and natural sites.

The Loft City project is characterized by great flexibility. Investors have only partially restored buildings and lofts have only minimal design. This enabled the cheaper restoration and lower selling prices. Users can adapt the space according to their possibilities and needs. Lofts accommodate studios for artists, photography gallery with public library, Hilger Brot-Kunsthalle, exhibition space, Music and media academy and a charity organisation. The small hall from 1912 - Expedithalle, serves as a temporary space for exhibitions, musical and theatre performances and other cultural events, functioning through a special program that allows artists to get the space for temporary use under favourable conditions [26].

Since the project is a private investment, it could be regarded as rather commercial. However, even though the complete destruction of old buildings on the site and construction of apartments would bring more profit, the investor is committed to the history (reflected in the careful restoration of the historical architecture) and the promotion of independent artists. The project has already attracted a wide public, including residents from the district. Taking into account that this is one of the poorer districts in Vienna, the project can have a big impact on local residents and young people who do not have many options for leisure and education. Although this was not part of the original concept, the investor is now aware of this opportunity, and the new goal is to involve the local community more in the program. Selling the part of the space to charities and the organization of socially responsible and open programs, contribute to this goal and have a positive impact on the entire neighbourhood. The design of courtyards and open spaces in the complex is an important factor in the production of public space. While it was inevitable to make parking places in the courtyards, the plan is to make car approach possible only to those who work there, and open space will be designed as a public place (comparisons are made with the Vienna's Museum Quarter).

#### 3.4. TABAKFABRIK IN LINZ

Peter Behrens and Alexander Popp designed tobacco factory in Linz in 1935. It was the largest and most modern tobacco factory in Central Europe. With the exception of few new buildings, the whole ensemble (including the interior decorations) is listed under historical monument protection since 1981. It was bought by the City in 2009 and a group of architects, urban planners and social scientists are engaged in the process of transformation of the building today. Sponsors are private supporters, federal, provincial and local governing bodies. Since 2010 the Tabakfabrik hosts a non-profit organization *Lin zukünf*, as well as the *Umbauwerkstatt*, a think tank and a research lab for the future of the Factory, providing independent information and transparency to citizens [16, 22, 27]. The rental structure is differentiated according to quality categories of the premises and it is based on transparent criteria. Financially weaker initiatives have a permanent place in the complex, according to the principles of just society, and there are three rate levels: commercial rate, special rate and cultural rate. 2% of the complex is permanently used and about 100 people work there. There are about 15-20 events every month.



*Figures 7 and 8. Tabakfabrik (photos by Jasna Cizler, 2013)*

Though the city invests in the projects, it agreed to an experiment with an open end and there is no master plan for the area. City planner recognised that since the site is a great chance for the city it should be planned carefully [15]. The development of the Tabakfabrik is not planned in a conventional sense, but the space is open to experiments. This is in accordance with the approach that Behrens had while designing the Tabakfabrik and its big, open and adaptable spaces. The Tabakfabrik is not seen as solely commercial, but as a cultural policy and urban planning project, that should belong to everyone and stay public. The fact that Tabakfabrik is now publicly owned again signals the revitalization of social demands, the interdisciplinary orientation and the commitment to participation, transparency and openness. It is based on the pillars of creativity, social responsibility, work and education [16] and intends to be the heart and landmark of a newly formed district. The space in the middle of the complex (previously occupied by train rails that connected Tabakfabrik with a harbour) is transformed into a public space by converting part of the property into a communal garden for local residents.

#### 4. CONCLUSION

Austria is still dominated by the traditional perspective of historical monument protection often neglecting its recent past. Generally industrial monuments conjure up a negative image, which is counterproductive to any after-use concept. At first glance industrial relics do not seem to harmonise with touristic concepts. Only if they are considered as cultural heritage they can strengthen and keep alive a specific sense of identity and contribute to an economic restart. Industrial heritage can be both a link to the past and to new beginnings. Its potential is on the one hand determined by the integration of these monuments into contemporary use and on the other hand by the acceptance and incorporation of local residents.

Returning to the fundamental question of this paper, the inclusion of the civil and creative class in the course of regeneration, it has to be stated that urban surroundings seem to be very beneficial to put creative reuse concepts into action. This can be explained by the following factors: Firstly, creative classes concentrate in urban centres; secondly, the lack of open space

increases the pressure on vacant buildings; thirdly, urban centres are more likely to implement innovative ideas due to better financial back-up (investors) and the variety of economic exploitability (e.g. high rent lofts, cultural events or social facilities) of these large and extraordinary buildings. Besides their architectural attractiveness, these buildings often seem to be predestined for festivals, museums and other big in-door events: they are often not adjacent to residential areas, obviate noise disturbances and offer large parking-space. In other cases, such as the Anker Brot Factory, a parallel use of living and cultural activities is exemplified.

Yet this is not to say that smaller urban communities do not have the possibility or the demand for successful after-use concepts. In many of our field observations the close ties among local actors foster cooperation and creative ideas for low-budget-initiatives. These findings are backed by the practical experiences related to innovative milieus and regional identity (Jekel and Fromhold-Eisebith 2003). Contrariwise, identity can be a stumbling block, if the legacy hampers a re-orientation and promising future initiatives. This may be the case if local groups are more interested in preserving and exhibiting the 'old times' than to reinvent their past in attractive way. However, the crucial question is whether the local groups are willing to break old structures and open up to new perspectives without compromising their cultural legacy or a value creation in the future.

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