



# Brownfields do not “only live twice”: The possibilities for heritage preservation and the enlargement of leisure time activities in Brno, the Czech Republic

Josef Navratil<sup>a</sup>, Tomas Krejci<sup>b</sup>, Stanislav Martinat<sup>c,\*</sup>, Martin J. Pasqualetti<sup>d</sup>, Petr Klusacek<sup>b</sup>, Bohumil Frantal<sup>f</sup>, Klara Tochackova<sup>e</sup>

<sup>a</sup> University of South Bohemia, Faculty of Agriculture, Studentska 1668, 370 05 Ceske Budejovice, Czech Republic

<sup>b</sup> Institute of Geonics of the Czech Academy of Sciences, Department of Environmental Geography, Drobneho 28, 613 00 Brno, Czech Republic

<sup>c</sup> Institute of Geonics of the Czech Academy of Sciences, Department of Environmental Geography, Studentska 1768, 708 00 Ostrava, Czech Republic

<sup>d</sup> Arizona State University, School of Geographical Sciences and Urban Planning, 975 S Myrtle Ave, Tempe, AZ 85281, USA

<sup>e</sup> Faculty of Regional Development and International Studies, Mendel University in Brno, Tr. Generala Píky 7, 613 00 Brno, Czech Republic

<sup>f</sup> Faculty of Science, Palacky University in Olomouc, 17. listopadu 12, 771 43 Olomouc, Czech Republic

## ARTICLE INFO

### Keywords:

Brownfields  
Local tourism  
Urban regeneration  
Brno  
Czech Republic  
Heritage

## ABSTRACT

Central Europe is replete with legacy contaminated sites, commonly called “brownfields”. The question is what can be done to remediate them and make them again safe and useful to society. This question is addressed in post-socialistic city of Brno, the Czech Republic. Our research assesses public perceptions of such sites that are currently utilized for the leisure time activities. Special attention is paid to public views of heritage preservation as an option for brownfield regeneration. The principal aim of the paper is to measure public support of heritage preservation through the conversion of brownfields to leisure activities and tourism. Data were gathered by means of the questionnaire survey with visitors of four brownfields currently being used for leisure time activities ( $n = 130$ ). It was revealed that the awareness of the visitors of the issue of brownfield regeneration is very low, and that importantly affects the perception of heritage preservation of individual sites. Further, the opinions of the respondents are significantly influenced by the local contexts of individual brownfields (predominantly by the situation and the technical state). However, it might be stated that in locations where the historical state of building has already been repaired, historical heritage is perceived more positively.

## 1. Introduction

Brownfields, either being narrowly defined as a contaminated area or more broadly as contemporary deserted areas with a potential for a further development, both belong to problematic places of the cities of the developed and the developing countries (Oliver, Ferber, Grimski, Millar, & Nathanail, 2005). The issue of brownfields is broad and covers economic (van Duijn, Rouwendal, & Boersema, 2016), social (Simis, Awang, & Arifin, 2016), environmental (Doick, Sellers, Castan-Broto, & Silverthorne, 2009) and cultural dimension (Berg & Stenbro, 2015).

Brownfields regeneration is perceived as a significant element in the development of the contemporary cities (Alexandrescu, Martinat, Klusacek, & Bartke, 2014). The regeneration is accompanied by the decontamination of sites, the increase in the economic activity, and it also enables us to preserve the cultural heritage for future generations.

To spread the knowledge of these benefits among the population is possible mainly by continuous work with the local population, by information campaigns, or by temporary use – a kind of a trial basis – of brownfield sites. Brownfields with temporary uses are usually perceived by the public more positively than abandoned sites (Rall & Haase, 2011). Thus, the temporary use of brownfields creates great preconditions for accelerating long-term regeneration processes, or even the planning of such, and creates good conditions for public acceptance of new uses (Pizzol et al., 2016).

The opening of brownfields for tourists and visitors seems to be another important way how to attract public attention to brownfields issue. An increased interest in brownfields might increase a pressure on the decision-making sphere (Klusacek, Krejci, Kunc, Martinat, & Novakova, 2011) and to push forward the regeneration processes (Alexandrescu et al., 2014).

\* Corresponding author.

E-mail addresses: [krejci@geonika.cz](mailto:krejci@geonika.cz) (T. Krejci), [martinat@opf.slu.se](mailto:martinat@opf.slu.se) (S. Martinat), [pasqualetti@asu.edu](mailto:pasqualetti@asu.edu) (M.J. Pasqualetti), [klusacek@geonika.cz](mailto:klusacek@geonika.cz) (P. Klusacek), [frantal@geonika.cz](mailto:frantal@geonika.cz) (B. Frantal), [klara.tochackova@seznam.cz](mailto:klara.tochackova@seznam.cz) (K. Tochackova).

<https://doi.org/10.1016/j.cities.2017.11.003>

Received 20 May 2017; Received in revised form 25 September 2017; Accepted 9 November 2017  
0264-2751/ © 2017 Elsevier Ltd. All rights reserved.

An important issue in this connection is the protection of cultural heritage, and brownfields are such heritage. It is predominantly about using the spaces within cities related to some of their significant era (Xie, 2015), which provides the given environment of the city its unique and one-of-a-kind character.

Post-socialistic cities in Central Europe are the specific areas in which the issue of regeneration of brownfields is being solved within the transformation of their economies from the central planning model in the last quarter-century (Osman, Frantal, Klusacek, Kunc, & Martinat, 2015 or Maly & Mulicek, 2016). The problem of the frequent occurrence of brownfields in the 1990s as a consequence of this overall transformation is combined with the economic weakness of cities, towns and communities that might be marked as one of the main barriers of brownfield regeneration (Krzysztofik, Tkocz, Sporna, & Kantor-Pietraga, 2016). One of the model examples of such a city is Brno, the Czech Republic (Kunc et al., 2014) – a significant upper-regional centre with rich industrial history and huge efforts of the city administration to support the regeneration of local brownfields and to preserve historical heritage via various ways (Frantal et al., 2015).

Thus, the main aim of the paper is to measure public reactions to the idea of supporting heritage preservation through the conversion of brownfields to leisure activities and tourism. Brno was chosen as the case study.

## 2. Conceptual background

### 2.1. Urban brownfields, industrial heritage and public opinion

The ongoing discussions about the regeneration of abandoned sites resulted in several issues connected to urban brownfields: (i) the uncontrolled expansion of built-up areas on city margins, i.e. urban sprawl (Halleux, Marcinczak, & van der Krabben, 2012; Vaclavik & Rogan, 2009) and on the contrary the re-urbanization concept (Ourednicek, Simon, & Kopečna, 2015), (ii) the necessity of eliminating (or at least reducing) environmental burdens (Schoenbaum, 2002), (iii) the reuse or demolition of brownfields as physical barriers to the urban development (Krzysztofik et al., 2016), and (iv) the emergence of socially excluded communities in the vicinity of brownfields (Greenberg, Lowrie, Mayer, Miller, & Solitare, 2001; Kabai, 2017; Kunc et al., 2014; Woo & Lee, 2016).

But we can find many interlinks in relations between sustainable regeneration of brownfields and heritage preservation (Blik & Gauthier, 2007; Duzi & Jakubinsky, 2013). An occurrence of “heritage” is quite frequently perceived as a barrier to speed-up the brownfield redevelopment process (Berg & Stenbro, 2015). On the other hand, the preservation of heritage fulfils the characteristics of a public good, and increased costs for regeneration of such sites are justified (Sable & Kling, 2001).

The heritage preservation depends predominantly on recognizing its value by the developers (Rypkema, 2009). They are commodifying the heritage – in its new usage they keep the “old”, i.e. such thing that is unique to the place, making a profit, and the “old” is protected from the demolition (Berg & Stenbro, 2015).

Public participation in the urban planning process is needed for the redevelopment of brownfields (Loures, Panagopoulos, & Burley, 2016). The attitudes of residents, especially regarding the preferences for different types of regeneration, are of a great importance for this process (Glumac, Han, & Schaefer, 2015), and public support for the brownfield redevelopment project is seen as crucial (Kim & Miller, 2017). On the other hand, residents perceive favourably almost all the brownfield regenerations (Maliene, Wignall, & Malys, 2012). The attributes of a successful regeneration based on public opinion are generally: mobility and accessibility, use of renewable energies, environmental education, economic redevelopment, and safety/security (Loures et al., 2016). At the same time, the same types of regenerations may in different places cause a different level of satisfaction (Franz, Gueles, & Prey, 2008;

Maliene et al., 2012).

We may thus conclude that the issue of preference of the relation of brownfields towards the historical heritage (here, most often industrial) is a significant topic when studying the broader relations of brownfield regeneration. The literature then reminds us of the existence of a general public opinion regarding the regeneration, yet the perception of the given regeneration differs from the other concrete regenerations. For this reason, we will focus our research on three research questions: (i) are there any differences in preferences for brownfield regeneration among visitors of particular regenerated brownfields, (ii) how different are forms of regeneration for tourism perceived, and (iii) what role does the heritage play in influencing visitor's satisfaction when visiting a particular site?

### 2.2. Particularities of post-socialist space

The occurrence of brownfields in the post-socialist countries has been primarily caused by a set of social and economic factors appearing during the transition period from a centrally planned to a market economy since 1989 (summarized e.g. by Osman et al., 2015 or Berkes, 2016). These brownfields are often abandoned former military areas, sites left over from industrial or agricultural activities, abandoned buildings for housing, or disused transport infrastructure (Kunc et al., 2014). As the majority of brownfields that are located in cities usually are of the industrial origin, wider consensus exists that this type of brownfields is the most important for the development of cities (Filip & Cöcean, 2012). Even though the majority of brownfields originated in the early stages of transformation together with the global changes of the economy of the last decade of the 20th century, a wider attention to brownfield-related issues was paid only after 2010 (Frantal et al., 2013). The reuse of brownfields is in the post-socialist countries a rather “new” phenomenon (Frantal et al., 2015) and the private-public partnership, common in the western developed economies, is here only poor (Kunc et al., 2014). Some kind of selection or prioritization of brownfields as tools for support regeneration has emerged only recently (Alexandrescu et al., 2017 or Bartke et al., 2016). Another problematic issue is sometimes the unclear ownership structure of brownfield sites resulting from the privatization process during the 1990s; due to a large number of unsuccessful privatization projects, sites are sometimes still blocked by banks or the absence of unambiguous ownership (Frantal et al., 2015). A multiple ownership of sites, which complicates the consensus-building about the future use, is also quite common.

The areas occupied by brownfields usually form an important part of traditional industrial centres in Central Europe. These are an integral part of the identities of these cities (Suchacek, Seda, Friedrich, Wachowiak-Smolikova, & Wachowiak, 2016). Brownfields in these locations create important spatial barriers limiting the suitable development of a compact urban organism (Kladivo & Halás, 2012). It is obvious that such a huge occurrence of brownfields and following efforts to make the regeneration of these sites easier frequently lead to underestimation of the importance of their heritage. Buildings are frequently remodelled or even demolished without any respect to their historical values (Gilbertova, 2017). Such a short-term profit strategy is fortunately regulated by efforts of the state; however, relatively low penalties for such behavior in the post-communist countries sometimes favours the willingness to be penalised than to invest money for the preservation of the cultural heritage (Ashworth & Tunbridge, 1999).

Based on the above-mentioned information we can conclude that chances for heritage preservation in the environment of the post-socialist countries are different in comparison to the developed “western” part of the world.

### 2.3. Brownfields, tourism, and heritage

As stressed by De Sousa (2000) or Alker and Stone (2005), brownfields typically reduce the attractiveness and economic value of given

Download English Version:

<https://daneshyari.com/en/article/7417469>

Download Persian Version:

<https://daneshyari.com/article/7417469>

[Daneshyari.com](https://daneshyari.com)