Research Paper

Urban Shrinkage and the Future of Built Heritage:
a Resilience Perspective

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Abstract

This paper examines the concept of built heritage resilience in urban shrinkage, highlighting the need to reconsider heritage use, management, and preservation approaches in declining urban areas. Urban shrinkage, spreading worldwide and provoking implementation of right-sizing strategies, creates new, unfamiliar challenges for heritage resilience, which is traditionally considered in the framework of urban growth. The research question guiding this essay is: How does urban shrinkage impact the resilience of built heritage? The paper explores diverse dimensions of the resilience of built heritage and hypotheses for future research.

Keywords

Built heritage, heritage resilience, urban shrinkage, shrinking cities

1. Introduction.

The concept of heritage emerged as a response to rapid urban growth and the pressures of fast-paced urban development. The destruction and fear of loss associated with modernity and continuous urbanisation remain essential contributors to heritage-making. Destructions increase the values of rarity and uniqueness, which help "export" heritage (Heinich, 2011; Kirshenblatt-Gimblett, 1995). The heritage concept initially concentrated on the protection of individual objects – precious remnants of the past – from the destructive forces of urban expansion. Over time, the concept of heritage has continuously evolved by incorporating more categories (Dallen, 2014; Podder et al., 2018), becoming more inclusive in terms of diverse aspects (e.g. tangible and intangible) and values (Smith & Akagawa, 2009; Fredheim & Khalaf, 2016). In terms of relation with urban space, heritage concept expanded from focusing on isolated historical buildings to considering urban areas and cultural landscapes. (UNESCO, 2011; Veldpaus et al., 2013).

The approaches to heritage protection have also experienced significant transformations. In the Western tradition, materialistic vision and consequent obsession with material authenticity have long dominated conservation practices (Djabarouti, 2022; Veldpaus et al., 2013). The ongoing shift towards adaptive reuse and integration of heritage into everyday urban life and economy emphasises a necessity to rethink the previously settled rigid approaches (Cherchi, 2015). Today, heritage is increasingly recognised not as a static construct but as a dynamic component of the urban environment—one that must adapt to the ongoing transformations natural for urban life (Licciardi & Amirtahmasebi, 2012).

The concept of resilience provides a valuable framework for understanding the relationship between heritage and urban change (Garcia & Vale, 2017). It offers insights into how heritage can cope and adapt to the constant transformations that characterise urban development. However, much of the existing discourse on heritage resilience and the heritage concept itself results from thinking within the growth paradigm, often overlooking the perspective of urban shrinkage. At the same time, urban shrinkage raises new questions for heritage studies and creates unique challenges and opportunities for heritage preservation. What happens to urban heritage when there are no more risks related to development

pressure, commercialisation, and investment? Does it mean that heritage is safer in shrinking cities? What are the new risks? How should new approaches to heritage protection consider non-growing reality? Those are just a few of many questions that have seldom been asked, let alone answered.

This paper explores the resilience of built heritage in an urban shrinkage context. The guiding research question is: How does urban shrinkage impact the resilience of built heritage? It is the first attempt to draw attention to the issues associated with built heritage in urban shrinkage conditions and highlight some directions that require further research and discussion.

2. Heritage and resilience.

The constant transformation of the heritage concept is rooted in its nature as a social construct evolving with our changing understandings and concerns (Smith, 2006). Heritage reflects the present; the present is a moment in our timeline where we create and produce heritage (Kirshenblatt-Gimblett, 1995; Silverman et al., 2017).

The concept of urban resilience emerged as a response to global challenges that a contemporary city faces. (Coaffee & Lee, 2016; Colomer, 2017). Climate change, pandemics, global conflicts, and mass migrations require a city's capacity to resist and recover from diverse shocks and destructions, learn from them, and improve their adaptability to possible future challenges. Urban resilience is becoming relevant and is studied in relation to different components of urban – from urban-built fabric and technical infrastructure to urban communities and heritage.

The academic literature presents various ways in which heritage and resilience are interconnected.

One way of connection is the understanding that heritage must be dynamic and adaptable to survive in constant urban transformations and numerous threats linked to urbanization, socio-economic changes, unsustainable tourism, or resource shortages, referred to as heritage resilience (Murthy, 2013; Garcia & Vale, 2017). Various threats challenge the ability of built heritage to resist in its original form. Such understanding results in the process in which traditional conservation approaches with a focus on materiality are complemented by adaptability and reuse strategies. This perspective of heritage resilience calls for the active transformation of heritage into a resource for community identity, economic development and sustainability (Berg, 2017).

The other relationship between heritage and resilience is when the historic environment can be a source of urban resilience. Historical sites accumulate traditional knowledge and techniques that can provide insight into ways of addressing contemporary urban challenges (Fatiguso et al., 2017). This perspective emphasizes the social and cultural values of heritage that can contribute to increasing urban resilience.

Furthermore, heritage can serve as an element of community resilience providing a sense of identity and continuity (Fabbricatti, Boissenin & Citoni, 2020). In times of shocks, crises, and dramatic changes, heritage can serve as an anchor, helping communities confront uncertainty and maintain a connection to their common past. Heritage, in this way, can also contribute to local economic resilience, integrating traditional local craftsmanship and monuments into local products that can be exported.

Different ways of understanding how heritage and resilience can be interconnected emphasize the need to evolve flexible and adaptive heritage policies. However, while recent research has explored urban heritage resilience as a means to adapt to global challenges, these discussions have largely overlooked the specific realities of urban shrinkage.

3. Built heritage in shrinking cities: why should we care?

The reality of shrinking cities needs to be added to heritage discussions. This reality is growing fast and spreading worldwide, driven by local and global processes – such as demographic transitions, climate change, wars, and economic migrations provoked by globalisation (Martinez-Fernandez et al., 2012). The number of shrinking cities in the world already goes into the thousands. However, heritage debates rarely question critically the future heritage meanings for a society facing challenges related to urban shrinkage.

Urban shrinkage remains an ambiguous concept, with population decline often being the only universally agreed-upon indicator (Mallach, 2017; Olsen, 2013; Haase et al., 2014). However, when considering urban shrinkage from the built environment perspective, the mismatch between socio-demographic processes and physical infrastructure becomes a key characteristic of shrinking cities (Reis, Silva & Pinho, 2015). Shrinking cities suffer from the redundancy of urban "hardware" – buildings, constructions, and infrastructure, simultaneously experiencing a lack of resources for the existing urban environment maintenance, and, in general, adapting urban form to new conditions is a heavy burden for a shrinking city (Herrmann et al., 2016).

The fate of built heritage in shrinking cities warrants special consideration for at least two reasons.

The first reason is the global character of the urban shrinkage phenomenon (Batunova, 2021). Some of such cities became world-famous – such as Detroit in the United States, which faced significant population decline due to deindustrialisation and suburbanisation, or Leipzig in Germany, which experienced shrinkage because of economic restructuring after reunification. Many other cities are experiencing urban shrinkage due to multiple factors, including demographic transition, globalisation, global labour division and migration, political transformations, wars and conflicts, and climate change (Haase et al., 2014). The increasing presence of shrinking cities in the urban agenda requires new strategies and approaches to urban planning and management in such a context. However, our knowledge of shrinking cities is still very limited.

Second, the primary responses to urban shrinkage have often been "right-sizing" strategies, including demolition programs. The lack of urban resources becomes the main driving force behind significant changes in urban policy to optimise budget spending in shrinking cities. Smart shrinkage and right-sizing strategies are widely used in Europe and the USA (Bernt, 2009; Bontje & Mustard, 2012). They are based on the physical reduction of redundant urban infrastructure to eliminate the burden of maintenance, fragmentation, and the city's negative image. These approaches may be motivated by different factors—such as a necessity to maintain the local real estate market, improving the city's image, or reducing infrastructure costs—but they frequently counter the goals of built heritage conservation (Mallach, 2011) and can impact the resilience of built heritage.

4. Resilience of built heritage in shrinking places.

The impact of urban shrinkage on the resilience of built heritage can be understood through several interrelated dimensions of resilience.

One of the most evident dimensions is physical resilience. Urban shrinkage often leads to widespread abandonment, vacancies, and underutilized infrastructure, resulting in urban fabric perforation (Florentin, 2010). The erosion of urban fabric disconnects built heritage from its surroundings, decreasing its functional and symbolic meaning within the city. The example of the iconic Michigan Central Station in Detroit can perfectly illustrate this statement. The station was abandoned and became an isolated, dilapidated structure that lost its role within the city context (Rottman, 2011)

Urban shrinkage can affect the environmental resilience of built heritage. As the urban fabric erodes, it becomes increasingly challenging to sustain infrastructure networks, which reduces the environmental

benefits typically associated with compact urban forms. In cities like Cleveland, Ohio, shrinking populations have made it difficult to maintain infrastructure systems initially built to serve much larger communities (Schwarz & Hoornbeek, 2009). Moreover, in shrinking cities, it is much more challenging to apply the strategies of building reuse due to economic decline and decreasing investors' interest. Thus, many historic buildings remain vacant in the shrinking Russian city of Vorkuta due to the lack of economic incentives despite their historical significance (Gunko, Batunova, & Medvedev, 2021).

Demographic changes in shrinking cities are associated with quantitative population decline and ageing and population replacement due to migration. The transforming composition of local society influences socio-cultural resilience of built heritage. Whose heritage should be preserved and for whom - are the questions that naturally appear in relation to built heritage. In shrinking cities, new residents may not share the same attachment to existing heritage, leading to a disconnect between the community and the built environment. For example, the once-thriving Jewish community in the Serbian city of Subotica left behind the remarkable heritage of their Synagogue, which, without the community to sustain its cultural significance, became unused and lacked meaning for the non-Jewish population (Camprag, 2019). As these cultural connections erode, heritage becomes less central to the identity of the community, which in turn impacts efforts to maintain and preserve these sites. The socio-cultural resilience of built heritage in shrinking cities is therefore closely tied to the ability of communities to adapt, maintain their connection to heritage, and find new ways to sustain its relevance in a changing social landscape.

The economic resilience of built heritage in shrinking cities suffers from economic decline and depopulation because the economic resources available for heritage preservation are decreasing. This issue is strongly connected with the political aspects. Shrinking cities, whose regional and national economic role is decreasing, tend to lose their political influence, which impacts their capacity to attract state investments. When a place becomes less significant to the state or regional authorities, public investment in heritage often declines, leaving the built environment vulnerable. For instance, in many post-industrial cities across Eastern Germany, the reduced political clout of these areas has resulted in fewer resources being allocated for the preservation of their built heritage (Neugebauer, 2022).

Therefore, urban shrinkage can impact different dimensions of the resilience of built heritage – physical, environmental, social, cultural, economic, or political. This impact calls for a necessity to learn more about the processes that affect built heritage under urban shrinkage conditions, and which approaches to heritage management, preservation and adaptation work effectively or need rethinking. A better understanding of such processes and issues can help in developing and implementing wiser and more effective solutions, instruments and approaches to urban heritage by urban planners, policymakers and local communities.

5. Conclusion.

Urban shrinkage is no longer a rare condition relevant for isolated specific cases of urban environment. It spreads worldwide and is increasingly recognised as a critical element of contemporary urban challenges. Urban development professionals and politicians must prepare to address the complexities of urban shrinkage, just as they have learned to manage urban growth. While there has been progress in understanding and addressing the challenges of shrinking cities, the work remains in its infancy. Still, many important actors and decision-makers impacting urban development consider urban shrinkage taboo and associate it only with negative connotations (Hospers & Reverda, 2014; Pallagst et al., 2017).

The need to develop new approaches to deal with different components of "urban" in urban shrinkage is already well-pronounced in academic literature (Pallagst et al., 2017). However, many aspects of urban development are almost not discussed. Heritage resilience is one such aspect.

There is still much to learn about urban shrinkage, how it changes the operation and interrelation of different urban elements and aspects, and its impact on built heritage. Many questions should be asked, and many questions will require research to be answered. What is more effective – adaptation, conservation or abandonment of built heritage? How do we deal with the underlying challenges? How do we overcome physical and social disconnection of heritage? What are the costs of saving energy-inefficient buildings? Can nature reclaim built heritage? Should built heritage be living or frozen? What should be in the focus – the present or the future community? Is heritage a source or a burden for a shrinking city? What should be prioritised – local or national issues? Those are just a few examples that can be relevant for heritage resilience research in an urban shrinkage context.

Studying the issue of heritage resilience in shrinking cities can contribute to its revaluation in such a vulnerable context and its transformation into a relevant resource for community well-being. It will contribute to the development of new approaches that move beyond the traditional view of heritage as merely a resource to be capitalised on as a tourist product. Developing comprehensive and collaborative approaches will require integrating theoretical and empirical knowledge of scholars, professional experts, politicians, decision-makers, activists, heritage promoters and its users, and many other actors involved in built heritage use, management, popularisation or preservation.

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