cogitatio

URBAN PLANNING

Volume 9

2024

Industrial Heritage and Cultural Clusters: More Than a Temporary Affair?

Open Access Journal

ISSN: 2183-7635

Edited by Uwe Altrock and Janet Merkel

Urban Planning, 2024, Volume 9
Industrial Heritage and Cultural Clusters: More Than a Temporary Affair?

Published by Cogitatio Press
Rua Fialho de Almeida 14, 2º Esq.,
1070–129 Lisbon
Portugal

Design by Typografia®
http://www.typografia.pt/en/

Cover image: © venemama from iStock

Academic Editors
Uwe Altrock (University of Kassel)
Janet Merkel (TU Berlin)

Available online at: www.cogitatiopress.com/urbanplanning

Table of Contents

Urban Planning
2024 • Volume 9 • Article 9368
https://doi.org/10.17645/up.9368

EDITORIAL

Open Access Journal

Industrial Heritage and Cultural Clusters: More Than a Temporary Affair?

Janet Merkel [1] and Uwe Altrock [2]

[1] Department of Urban and Regional Economics, Technische Universität Berlin, Germany
[2] Department of Urban Regeneration and Planning Theory, University of Kassel, Germany

Correspondence: Janet Merkel (janet.merkel@tu-berlin.de)

Submitted: 5 October 2024 **Published:** 30 October 2024

Issue: This editorial is part of the issue "Industrial Heritage and Cultural Clusters: More Than a Temporary Affair?" edited by Uwe Altrock (University of Kassel) and Janet Merkel (TU Berlin), fully open access at https://doi.org/10.17645/up.i341

Abstract

The transformation of industrial heritage buildings into cultural clusters has emerged as a prominent topic of academic research in urban planning, urban studies, heritage conservation, and architecture. Cultural clusters, defined as geographically concentrated cultural activities and organisations, have become a key instrument in urban regeneration, fostering economic growth and cultural development. Despite the benefits that cultural clusters offer in terms of fostering cultural activity, they often prove to be short-lived due to various external factors, including urban regeneration pressures, shifts in policy, and changes in zoning regulations. This thematic issue presents seven case studies that offer insights into the current state of cultural clusters, their transient nature, and the conditions necessary to guarantee their long-term sustainability in industrial heritage sites. The research is particularly relevant in light of the mounting pressure on urban land, where industrial heritage sites are frequently repurposed for residential, commercial, or industrial purposes.

Keywords

adaptive reuse; brownfield development; cultural cluster; cultural development; industrial heritage; sustainability, UNESCO World Heritage; urban regeneration

1. Introduction

The transformation of industrial heritage buildings into cultural clusters has become a prominent topic of academic research across urban planning, urban studies, heritage conservation, and architecture. Cultural clusters, defined as geographically concentrated cultural activities and organisations, are considered crucial for urban regeneration, economic growth, and cultural development (Chapain & Sagot-Duvauroux, 2020;

Mommaas, 2004). Beyond mere spatial co-location, they often develop into dynamic socio-cultural environments that foster creative production (Pratt, 2008). Reusing industrial heritage sites has gained momentum as cities seek to repurpose obsolete spaces, preserve heritage, and stimulate local economies through cultural and creative industries in culture-led regeneration strategies (Evans, 2001; Hutton, 2016).

The debate on creative cities, stimulated mainly by the work of Charles Landry (2000) and Richard Florida (2002), played an important role in this context. The impulses they generated were perceived very differently around the world. Still, their work led to a race in many places to see which city was most attractive for creatives and which conditions should be created through urban development policy (Grodach & Silver, 2013). The critical debates that followed these publications could not prevent astute analyses from being translated clumsily into strategic approaches.

The culture-led regeneration approach is particularly relevant in this context as it positions culture as a catalyst for regeneration processes and is often integrated into wider urban development strategies (Tallon, 2020). This approach has emerged from the need to reposition cities in the post-industrial era and address the decline in their industrial heritage, both economically and physically (Hutton, 2016). In this context, service economies offer new uses for the legacies of the industrial age. This creates opportunities for both the revitalisation of urban districts and the improvement of everyday living conditions since services generally have a much lower impact on neighbouring residential areas. Based on the observation that cultural and creative uses sometimes arise in a transitional area between the commercial and non-commercial sectors, although it is uncertain to what extent they offer profitable business models, it is understandable that they are spatially formed as niche uses in obsolete existing buildings. With their gritty charm, they seemed almost predestined to serve as both a setting for appropriation by and a stage for the diverse uses of creative milieus (Shaw, 2013).

While these spaces provide fertile ground for cultural activity, allowing for low barriers to entry, adaptability, and experimentation, they are often short-lived due to urban regeneration pressures, policy shifts, or zoning changes (Boswinkel & van Meerkerk, 2023; Gainza, 2018). At the same time, operating under short-term leases limits long-term planning for cultural production and community engagement and makes them vulnerable to economic and political shifts.

As urban regeneration progresses, rising property values in former industrial areas often attract commercial developers, threatening to displace cultural clusters that rely on affordable rents. This cycle complicates the efforts of cultural organisations to establish themselves and sustain their activities. It highlights the "tensions between the use value" of brownfield sites "for cultural experimentation and their potential commercial value" (Colomb, 2012, p. 138).

What planning practices would sustain cultural activities, while managing the tensions that these spaces can generate? This crucial question has often been overlooked in the enthusiastic discourse on the potential of creative clusters and is the focus of this thematic issue. We approach the topic in a broader sense, asking first of all to what extent creative clusters create adaptable content for the respective former industrial sites that they reuse, even over short periods of use. The structural conditions, the use requirements, the urban environment, the history of use, and the identity of the site all play a role here; that is to say, precisely those aspects that contribute to the value of the cultural heritage of an industrial site. A discussion of cultural clusters and their appropriateness in a particular location therefore cannot be separated from the question of how to deal with

the industrial heritage. It is thus necessary to examine the value attributed to certain cultural clusters, as well as the extent to which their transient nature can be considered an inherent feature of creative networks or whether their existence at the location in question should be defended in the medium to long term against real estate and other challenges. Doing so would also require a thorough examination of the tools available for this purpose and the governance arrangements that could be considered for stabilisation and support, in partnership with the local government, businesses, philanthropists, and civil society.

2. Scrutinising the Transient Nature of Cultural Clusters: A Case-Based Approach

This thematic issue brings together case studies that shed light on the current state of cultural clusters, their temporary nature, and the conditions needed to ensure the long-term sustainability of industrial heritage sites. This research is particularly timely given the increasing pressure on urban land, where industrial heritage sites are often repurposed for housing, office space, or new industrial uses (Ferm, 2023; Martin & Grodach, 2023). A number of key themes and challenges relating to the development of cultural clusters emerge from the contributions, which inform this wider discussion.

First, all cases emphasise the need for a supportive policy environment, focusing on financial support, regulatory frameworks (e.g., zoning and heritage protection) and political will. Xueying Chen et al. examine the ambivalent top-down support for cultural brownfields in "Pro- and Contra-Coalition: Governing the Rise and Fall of Creative Industrial Parks in China." Land use regulations often treat cultural clusters as temporary, encouraging their replacement by more profitable activities as rent differentials widen. The reuse of industrial sites is tightly controlled by state authorities and agencies, creating opposing coalitions: local actors advocating for cultural uses and state authorities favouring economic redevelopment. The economic valuation of land often outweighs heritage protection or cultural development.

Uwe Altrock's article "Laissez-Faire or Sensitive Policymaking: The Legacy of Creative Clusters on Brownfield Sites in Berlin" offers a historical perspective on brownfield development in Berlin since the 1970s, tracing shifts in policy motivations and support for bottom-up cultural clusters. While early efforts were publicly driven, private sector involvement has increased in recent years. Despite an abundance of vacant industrial sites, these are now mainly located outside the city centre. Altrock points out that although policy has been inconsistent, many initiatives have benefited from public support. It is only in the last decade that a more decisive land use policy has emerged, focusing on the retention of land in public ownership.

Staying in Berlin, Janet Merkel's "Spatial Politics of Cultural Production: Negotiating Workspaces and Resisting Displacement at Industrial Heritage Sites in Berlin" explores recent political efforts to develop new cultural workspaces. Her analysis of a failed case for a permanent, publicly owned site of cultural production reveals several key issues. While the planning process successfully established governance and funding models that ensured collective use and decision-making, the financial costs of renovation, operation, and maintenance ultimately led the government to abandon negotiations with stakeholders, illustrating the difficulties of balancing cultural preservation with economic and operational viability.

A second recurring theme is the call for participatory governance models that involve a wider range of stakeholders in the planning, governance, and management of cultural clusters at industrial heritage sites. For example, Matilde Ferrero et al. argue for wider participation in the planning of heritage sites in

"Industrial Heritage and Citizen Participation: The UNESCO World Heritage Site of Ivrea, Italy." They stress the importance of including the perspectives of young people as they will be the future custodians of these sites. Similarly, in "Assessing Industrial Heritage Through Collaborative Counter-Mapping: A Case Study of Salts Mill, UK," Wenyan Jin and Jiayi Jin call for more inclusive stakeholder engagement and dialogue between local communities, site managers, and steering committees. They argue that this is crucial for developing revitalisation strategies that balance the needs of different stakeholders.

Both Chinese case studies highlight the limited opportunities for participatory decision-making despite the efforts of various groups to advocate for alternative approaches to managing creative clusters at former industrial sites. This leads to a third theme: the debate over the value of industrial heritage. A key tension emerges in public discourse between the potential for real-estate development—driven by the value of listed buildings and successful revitalisation—and the cultural values embodied in heritage protection measures such as building listings and world heritage site management plans. In "Industrial Heritage and Pathways for Cultural-Creative Development in Bamberg, Germany," Heike Oevermann et al. discuss how such a designation can divert attention away from industrial heritage and its potential role within the city.

Xiaohong Tan and Uwe Altrock illustrate the most extreme example of this conflict in "Resistance to Being Listed Industrial Heritage? The Conflicts and Dilemma of Heritage-Making During Land Banking in Guangzhou." They describe attempts to push for demolition before sites can be listed as industrial heritage, a practice common in several contexts. However, adaptive reuse strategies that integrate cultural and creative elements can sometimes prevent this outcome.

These discussions also raise the question of whether the gap between heritage conservation discourses—often informed by cultural studies—and the utility value, adaptability, and appropriate degree of transformation in the reuse of industrial buildings is insurmountable. This tension poses significant challenges in reconciling heritage conservation with practical regeneration.

A fourth theme running through the articles is the need for new methodological approaches to the study of cultural clusters at industrial heritage sites. Wenyan Jin and Jiayi Jin, for example, explore how user perspectives shape debates about the future of repurposed spaces, focusing on the affective atmospheres created by industrial materiality. However, the limitations of participatory approaches need to be acknowledged, particularly the tension between profit-driven real-estate interests and heritage conservation. While these approaches offer heuristic value in exploring strategies for managing industrial heritage, questions remain about their integration into urban regeneration processes.

Future research should include more historical contextualisation and build on decades of experience in redeveloping industrial buildings. As Uwe Altrock's study of Berlin suggests, examining the influence of economic cycles on the creative reuse of industrial sites could inform strategic urban planning. Understanding the broader urban dynamics and interactions between individual projects and their environments, with the factors driving both upgrading and devaluation, could provide insights into the long-term management of reused industrial heritage sites.

Conflict of Interests

The authors declare no conflict of interests.

References

Boswinkel, K., & van Meerkerk, E. (2023). Creative hubs: An anomaly in cultural policy? *International Journal of Cultural Policy*, *29*(6), 767–785. https://doi.org/10.1080/10286632.2022.2107636

Chapain, C., & Sagot-Duvauroux, D. (2020). Cultural and creative clusters—A systematic literature review and a renewed research agenda. *Urban Research & Practice*, *13*(8), 300–329. https://doi.org/10.1080/17535069.2018.1545141

Colomb, C. (2012). Pushing the urban frontier: Temporary uses of space, city marketing, and the creative city discourse in 2000s Berlin. *Journal of Urban Affairs*, *34*(2), 131–152. https://doi.org/10.1111/j.1467-9906.2012.00607.x

Evans, G. (2001). *Cultural planning, an urban renaissance?* Routledge.

Ferm, J. (2023). Hyper-competitive industrial markets: Implications for urban planning and the manufacturing renaissance. *Urban Planning*, *8*(4), 263–274. https://doi.org/10.17645/up.v8i4.7114

Florida, R. (2002). *The rise of the creative class*. Basic Books.

Gainza, X. (2018). Industrial spaces for grassroots creative production: Spatial, social and planning facets. *European Planning Studies*, *26*(4), 792–811. https://doi.org/10.1080/09654313.2018.1425377

Grodach, C., & Silver, D. (Eds.). (2013). *The politics of urban cultural policy. Global perspectives*. Routledge.

Hutton, T. (2016). *Cities and the cultural economy*. Routledge.

Landry, C. (2000). *The creative city: A toolkit for urban innovators*. Earthscan.

Martin, D., & Grodach, C. (2023). Resilience and adaptation in gentrifying urban industrial districts: The experience of cultural manufacturers in San Francisco and Melbourne. *International Journal of Urban and Regional Research*, *47*(4), 625–644. https://doi.org/10.1111/1468-2427.13175

Mommaas, H. (2004). Cultural clusters and the post-industrial city: Towards the remapping of urban cultural policy. *Urban Studies*, *41*(3), 507–532. https://doi.org/10.1080/0042098042000178663

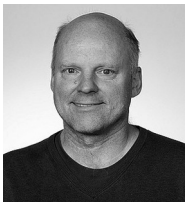
Pratt, A. C. (2008). Creative cities: The cultural industries and the creative class. *Geografiska Annaler: Series B, Human Geography*, *90*(2), 107–117. https://doi.org/10.1111/j.1468-0467.2008.00281.x

Shaw, K. (2013). Independent creative subcultures and why they matter. *International Journal of Cultural Policy*, *19*(3), 333–352. https://doi.org/10.1080/10286632.2013.788162

Tallon, A. (2020). *Urban regeneration in the UK*. Routledge.

About the Authors

Janet Merkel (PhD) is a senior researcher at the Institute of Urban and Regional Planning at Technische Universität Berlin. As an urban sociologist, her research interests include the social and spatial organisation of independent modes of work (e.g., coworking), culture and creative industries, and creative labour. She also works on urban cultural policies and cultural planning. She recently co-edited a book on *Coworking Spaces: Alternative Topologies and Transformative Potentials* (2023). Photo: © David Ausserhofer.



Uwe Altrock (Dr.-Ing.) is a professor of urban regeneration and planning theory at the Institute for Urban Development of the School of Architecture, Urban and Landscape Planning at the University of Kassel. His research interests are urban regeneration, urban governance, planning theory, megacities, and suburban development. Currently, he is the head of the German Research Foundation-funded research group FOR2425 Urban Expansion in Times of Re-Urbanization—New Suburbanism?

Urban Planning
2024 • Volume 9 • Article 8097
https://doi.org/10.17645/up.8097

cogitatio

ARTICLE

Open Access Journal

Pro- and Contra-Coalition: Governing the Rise and Fall of Creative Industrial Parks in China

Xueying Chen [1], Li Fan [2], and Zhikui Cao [1]

[1] School of Design, Zhijiang College of Zhejiang University of Technology, China
[2] Department of Urban Regeneration and Planning Theory, University of Kassel, Germany

Correspondence: Zhikui Cao (czk@zzjc.edu.cn)

Submitted: 22 January 2024 **Accepted:** 23 July 2024 **Published:** 2 October 2024

Issue: This article is part of the issue "Industrial Heritage and Cultural Clusters: More Than a Temporary Affair?" edited by Uwe Altrock (University of Kassel) and Janet Merkel (TU Berlin), fully open access at https://doi.org/10.17645/up.i341

Abstract

A great number of creative industrial parks (CIPs) have emerged in the past two decades in China as a critical and popular approach to the adaptive reuse of abandoned industrial land in cities. However, a few vibrant CIPs have been closed in the past few years, and the sites are set to be demolished and redeveloped in a property-led manner, suggesting the fragility of CIPs as a land reuse approach. This article aims to elaborate on the institutional rationale behind such a phenomenon. Cases in Shanghai and Guangzhou are examined and presented. The key arguments include: (a) in the industrial land redevelopment process, public and private actors flexibly establish pro-coalitions and contra-coalitions to foster and close CIPs, with strategies to overcome institutional obstacles and to implement land redevelopment-pursued regulatory plans, respectively; (b) key actors forming the two coalitions overlap, such as the local government and the state-owned enterprise land occupiers, and their positions shift subject to specific circumstances; and (c) the finding of the two coalitions echoes the existing argument that there are forces beyond the growth machine driving China's urban development and provides further insight into the explicit framework of the dual forces underneath.

Keywords

creative industrial parks; Guangzhou; industrial land redevelopment; pro- and contra-coalition; Shanghai

1. Introduction

In the Chinese context, the term "creative industrial park" (below as "CIP") involves the adaptive reuse of former industrial buildings for non-manufacturing purposes, marking a shift from "made in China" to "created

in China" (Keane, 2007). Unlike Western clusters with cultural facilities (e.g., Roodhouse, 2006), Chinese industrial land regeneration often prioritizes property development over cultural integration (Wang et al., 2015; Zheng, 2010; Zheng & Chan, 2014). However, despite revenue generation, some parks, like Shanghai's Red Town, faced closure or demolition despite initial success. Scholars have noted the temporary nature of CIPs and proposed various approaches to elaborate on the space–time dimension of urban restructuring. He (2019) introduced an analytical framework of the spatio-temporal fix to understand the political economy of temporal strategies of CIPs in Shanghai. X. Liu (2017) highlights the contestation of policy mobility in the different phases as actors struggle for space to explain the development and challenges of CIPs as temporary spaces. Li et al. (2018) took the concept of temporary use as a strategy for industrial restructuring and called for policy innovation to overcome the constraints of regulatory institutions for such uses. Indeed, spatial transformation depends largely on policy changes over time and their inherent inconsistencies, as suggested. However, the analysis often focuses on the contentious politics itself, overlooking the dynamics between policy change and internal politics. Taking a step further, this article aims to address the different partnerships behind the mobility of policymaking rooted in the Chinese bureaucratic system.

While the term "CIP" has been widely employed for the adaptive reuse of various types of buildings, the article specifically focuses on the adaptive reuse of old industrial sites established before the economic reform. Prior to China's late 1970s economic reform, all enterprises were state-owned and managed, with land allocated to them free of charge for an unlimited period. Post-reform, many of these enterprises underwent significant restructuring, mergers, and privatization, though some remained unchanged. Our analysis is based on an empirical study of brownfield regeneration in two cities: Shanghai and Guangzhou. These cities, predominantly occupied by a large number of state-owned enterprises (SOEs), are considered pioneers in developing CIPs in China.

2. Methodology

The article is grounded in a quantitative investigation of regeneration projects on old industrial sites in Shanghai and Guangzhou from 2000 to 2020. With the emergence of CIPs, scholars have shown interest in such urban spaces. However, their focus has primarily been on individual cases (He, 2019; Li et al., 2018; X. Liu, 2017; Sun & Chen, 2023; Yin et al., 2015; Zielke & Waibel, 2016). Our quantitative investigation into CIPs' trajectory over two decades aims to achieve a holistic understanding of the regeneration of industrial sites in terms of scale, location, and timing of regeneration. We have employed a mapping methodology to collect all cases within the defined administrative districts. Four districts in Shanghai and two districts in Guangzhou were selected for the identification of all former industrial sites. The Shanghai Atlas of Aerial Views and Guangzhou Atlas of Aerial Views, both published in 2001, facilitated the identification of the names and boundaries of old industrial sites in the year 2000 in these two cities. The analysis involved examining maps from 2020, including platforms such as Google Earth, Baidu Map, and Gaode Map. This enabled the identification of all regeneration projects by comparing spatial forms between 2001 and 2020. Although the spatial form of adaptive reuse projects remained unchanged, individual cases were identified through the publication of CIP cases on social media platforms such as the website of Shanghai Creative Industrial Parks (www.shanghaichuangyiyuan.com). Fieldwork conducted by the authors in 2019, 2020, and 2022 involved visiting all identified regeneration projects in Shanghai and Guangzhou to examine their regeneration process. Among various types of regeneration projects, mainly including redevelopment and adaptive reuse, over 150 in Shanghai and over 100 in Guangzhou can be identified as adaptive reuse of

existing industrial buildings. Each project was documented, including the name of the factory, spatial form in 2001 and 2020, text descriptions of the regeneration projects, and accompanying photos.

During the field trips, interviews and informal talks were conducted with urban planners, academics, site managers of CIPs, and government officials to gain insights into the governance of regenerating industrial sites. These interviews yielded valuable firsthand knowledge about the actors involved in the regeneration processes. Despite our quantitative investigation revealing a large percentage of adaptive reuse projects for CIPs beyond the demolition and redevelopment approach, it is noteworthy that a few of them have recently been closed. Red Town may be a famous case of a successful CIP being closed, but it is by no means "unique" (He, 2019, p. 317), nor is it the first and last case of a CIP being transformed into commercial space after an interim period of adaptive reuse. Therefore, it is necessary to arrive at a clear and systematic understanding of the urban governance of these temporary spaces. The article examines the trajectory of this type of spatial development and the governance underpinning its development, highlighting the power that opposes its development.

3. Conceptual Framework

The literature underscores the role of property-led urban strategies in fostering rapid economic growth (e.g., He & Wu, 2005; Y. Xu, 2017), notably in the revitalization of old residential areas in Chinese cities, where a coalition between the state and the market plays a pivotal role (Y. Liu & Yau, 2020; Wu et al., 2006). While residents are consulted in the redevelopment process, their participation is restricted, limiting their influence (Y. Liu et al., 2017; Zhai & Ng, 2013). Conversely, on industrial land predominantly occupied by SOEs, the relationship dynamics with the state necessitate a reevaluation. The universally ambiguous relationships between SOEs and the state (Rentsch & Finger, 2015) determines that a new conceptual framework, other than the simplified state–market interaction framework, is needed here. The new framework is briefly described as a "local government–SOE land occupier-market" but encompasses intricate interactions among the three actors and their agencies.

3.1. The Local Government–SOE Land Occupier Tensions

The primary tension between local governments and SOE land occupiers regarding industrial land reuse and redevelopment stems from overlapping land rights, a result of continuous institutional reforms since the 1980s.

Before the enactment of the 1987 Land Administration Law, which permitted land use right transactions and leasing, urban land in China was predominantly held by state institutions. They effectively acted as land owners with indefinite rights unless otherwise directed by higher authorities (Ho, 2005). Subsequent legislation such as the 1989 Law of the People's Republic of China on Urban Planning and the 1994 tax reform empowered municipal governments in urban land control and revenue generation through land leasing and development (J. Xu et al., 2009).

This situation poses a dilemma for SOE land occupiers: while they can maintain perpetual land use rights by keeping land use types and structures unchanged, they are typically prohibited from redeveloping or repurposing without municipal government approval (Ho, 2005). Any redevelopment must adhere to the

local government's land acquisition and release procedures, potentially leading to the termination of the SOE's indefinite land use rights (Zhu, 2019).

Another tension arises from the relationship between SOEs and the government bureaucracy. With political statuses equivalent to government officials, SOE leaders possess considerable influence, making it challenging for municipal governments or planning authorities to enforce land use plans or city masterplans involving SOE-occupied land (Cartier & Wu, 2023; Leutert, 2020). Moreover, as SOEs are integrated into the bureaucratic system, their interactions with local government agencies primarily occur within this framework (Leutert & Vortherms, 2021). Ultimately, industrial land reuse or redevelopment hinges on intra-bureaucratic dynamics.

3.2. Challenges for Market Players

Market players face several challenges when attempting to engage in industrial land reuse, particularly as critical operators amid tensions between local governments and SOEs. Their involvement hinges on intra-bureaucratic dynamics. Firstly, accessing opportunities for temporary adaptive land use is hindered by limited information availability compared to formal planning procedures. This necessitates strong personal relationships with government officials and landholders, alongside an understanding of local political dynamics (Smart & Lin, 2007). Consequently, only enterprises closely aligned with the local government or positioned between the market and the local state can access such projects. Secondly, policy risks arise due to the lack of a solid, legitimate basis for temporary land use. Temporary land rights are typically secured through non-statutory means like inter-agency agreements or government announcements, making them vulnerable to reversal (Li et al., 2018). This uncertainty undermines long-term marketing strategies for industrial land reuse, potentially reducing the attractiveness of locations to tenants and weakening operators' ability to secure land rights.

The temporary adaptive reuse of industrial land results from collaboration among various actors, with its termination signaling a breakdown in such collaboration. This analysis delves into the formation of pro- and contra-coalitions, unravelling the complexity behind the rise and fall of creative parks in China. Focusing on Shanghai and Guangzhou, the study explores how the regeneration of industrial sites occupied by SOEs is driven by coalitions between local governments, SOEs, and market actors within existing land and planning frameworks. By examining strategic interactions among local actors, this study sheds light on urban regeneration dynamics.

4. Evidence of Temporary Use of Industrial Land

Before delving into detailed case studies, we will provide an overview of the development trajectory of CIPs in Shanghai and Guangzhou. In the late 1990s, Shanghai witnessed the movement of artists into old industrial sites, reusing spatial and affordable small-scale warehouses along Suzhou Creek for art studios. In the early 2000s, the success of pioneering CIPs, such as M50, Tian Zi Fang, and Bridge Eight, led to a boom in reusing industrial sites for CIPs in Shanghai during that decade. In parallel, Guangzhou's first influential CIP, Xinyi Creative Park, was inaugurated in 2004 and transformed from a machinery manufacturing plant. Adaptive reuse of industrial parks in Guangzhou and Shanghai gained support from the local government,

especially during the preparation for international events such as the 2010 World Expo in Shanghai and the 2010 Asia Games in Guangzhou (Fan et al., 2022).

However, the period from 2010 to 2020 witnessed the disappearance of a few vibrant CIPs, a phenomenon that scholars have understated. Table 1 displays the opening and closing years of CIPs between 2000 and 2020 in Shanghai and Guangzhou, as captured through our mapping research and field research. Additionally, we included Red Town from Changning district in the table, as it is quite well-known and frequently referenced. The duration these parks existed varies from case to case, ranging from a few years to more than one decade.

From the overall number of cases collected in the table, two cases were selected for an in-depth discussion in this article. These two case studies aim to provide further qualitative insights into the governance of CIPs. Specifically, the cases "Red Town" in Shanghai and "Redtory" in Guangzhou are both well-known in their respective cities. They illustrate how state institutions change their positions regarding the destiny of CIPs when conflicts arise over the future land use of the sites on which they are located.

Table 1. Trajectory of selected CIPs in Shanghai and Guangzhou, compiled by the authors.

		Address	Opening year	Status by the end of 2020	Redevelopment project
Shanghai					
1	Red Town Creative Park	570 Huaihai West Rd, Changning District	2005	Demolished in 2017 (except for a monument building)	A commerce and office redevelopment project, "Shanghai Rongqiao Center," starting in 2019
2	Chuangyi Jinshagu Creative Park	Zhenbei Rd 988, Putuo District	2007	Closed in 2019	Unclear
3	Jing'an Chuangyi Space	Kangding Rd 1147, Jing'an District	2006	Demolished in 2014	Trial Court House of Jing'an Court finished in 2016
4	861 Creative Park	Jiangning Rd 861, Jing'an District	2012	Demolished in 2017	Affiliated School of Jing'an Education School finished in 2019
5	M50 West Taopu Creative Park	Wuwei Road 18 (Qilianshan Rd), Putuo District	2010	Demolished in 2020	Taopu Smart City
6	Shanghai Xinghuzhong Cultural Creative Park	Zhongshan North Road, Hutai Road, Pengyuepu River, and Shengshi Jiayuan North, Putuo District	2015	Demolished in 2019	Unclear
7	Jianqiao 69 Creative Park	Tongzhou Rd 69, Hongkou District	2007	Demolished in 2016	A commerce and office redevelopment project, "Shanghai Guohua Financial Center," starting in 2019

Table 1. (Cont.) Trajectory of selected CIPs in Shanghai and Guangzhou, compiled by the authors.

		Address	Opening year	Status by the end of 2020	Redevelopment project
Guangzhou					
1	Redtory Creative Park	128 Yuancun 4th Cross Rd, Tianhe District	2009	Closed in 2019	Part of a commerce and office redevelopment project "Guangzhou International Financial City"
2	Guangfanglian Industry (Creative) Park	Cunxi Street 2, Tianhe District	2012	Closed in 2016	Part of a commerce and office redevelopment project "Guangzhou International Financial City"
3	Linjiang 507 Creative Park	Linjiang Street 507, Tianhe District	Unclear	Closed in 2019	Part of a commerce and office redevelopment project "Guangzhou International Financial City"
4	No. 10 Creative Industry Association	10 Yuancun 4th Cross Rd, Tianhe District	Unclear	Demolished in 2019	Unclear
5	Xingfang 60 Cultural Creative Industry Park	60 Xianlie East Cross Rd, Tianhe District	Unclear	Demolished in 2013	A commodity housing project, "Shang Yuan Yi Du Hui," finished in 2017; the other creative park with the same name opened at 11 North Ring Rd, Panyu District
6	Nanshi 28 Creative Park	Nanshi Rd 28, Haizhu District	Unclear	Demolished in 2019	Unclear
7	Oriental Red (Dongfanghong) Creative Park	Gongye Middle Street 313, Haizhu District	Unclear	Closed in 2018	Unclear

4.1. Red Town Creative Park in Shanghai: Rise and Fall

The development of Red Town was directly facilitated by the Shanghai Urban Planning and Resource Administration Bureau (SUPLRAB). The predecessor of Red Town, the Shanghai Tenth Steel Plant, later merged into Baosteel Group, was established in 1956 and closed down in 1989. The site remained obsolete and unused for more than a decade before its transformation into a CIP. The reuse of the historical industrial buildings was initiated by artists to establish the Shanghai Sculpture Space, and was favoured by SUPLRAB. From the beginning, the urban planning authority directly supported the restructuring of the park. In 2004, SUPLRAB organized an open bid, inviting private companies to invest in and operate a creative park. Mr. Zheng Peiguang, with experience in heritage conservation projects in Shanghai, was awarded the operating rights for 20 years while renovating buildings and paying a comparatively low rent to Shanghai Tenth Steel Plant (Wang, 2009). Mr. Zheng later established Shanghai Red Town Cultural Development Co. Ltd. to manage the park. In November 2005, Shanghai Sculpture Space was completed and inaugurated, directly curated by SUPLRAB and closely linked to Red Town in publicity events. This indicates a close collaboration between the local government and private investors. Very soon, Red Town made its name in

Shanghai through influential art exhibitions and received several honours, such as being nominated an "Art Demonstration Zone" by the Shanghai Municipal Government.

However, its success as a CIP did not protect it from redevelopment. For the Shanghai Municipal Government and Changning District Government, revenue generated from selling centrally located land (near Huaihai Commercial Street) for high-density commercial and real estate development implied much higher economic profit than revenues from the CIP. Therefore, the district government abandoned the temporary use legally and formally for economic interests. Organized by the Changning District Government, the redevelopment was planned before the contract for the temporary use had ended. In 2012, Changning District Planning Bureau developed a detailed plan for redeveloping Red Town and the surrounding area into a mixed-use space combining commercial, office, and cultural functions, approved by the Shanghai Municipal Government in 2013 (He, 2019). In 2017, Mr. Zheng Peiguang and his team organized a "Farewell Party in the last 24 hours" on 29 June as the last cultural event of the park. To implement the redevelopment plan, Baosteel Group sold the land use rights to the Changning District Government, which could profitably sell it to the bidding winner in 2014 through a bidding process. The new land occupier, Rongqiao Group, is allowed to use the land for commercial-office purposes, legitimized by formal urban planning. In this way, land use is formally converted from industrial to non-industrial use. The trajectory of the rise and fall of Red Town Creative Park is illustrated in Figure 1.

The new complex, known as Rongqiao Center, will consist of an art and culture space of 6,000 m^2, a shopping space of 50,000 m^2, an office space of 100,000 m^2, and a parking lot for 1,000 vehicles (Shanghai Rongqiao Center, 2022). The majority of buildings were demolished to make space for a high-rise and high floor area ratio commercial–office cluster to maximize economic gains under the current institutional framework. The process went smoothly without involving tensions, conflicts, or lawsuits. Google Earth shows that the complex was demolished in 2017, except for the Shanghai Sculpture Space, which was listed as a Shanghai industrial heritage conservation building in 2014. The new construction work started in 2018, and Rongqiao Center is still under construction due to the pandemic, with no prediction as to when it will be completed and open.

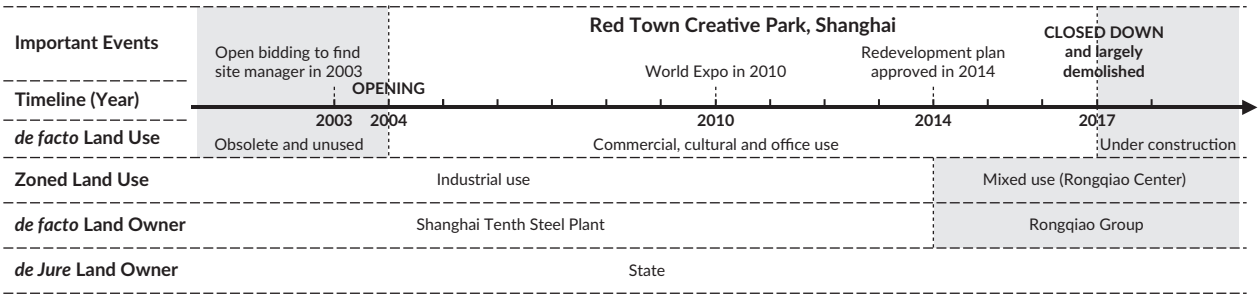


Figure 1. The trajectory of the rise and fall of Red Town Creative Park, illustrated by the authors.

4.2. Redtory Creative Park in Guangzhou: Rise and Fall

Redtory in Guangzhou is as well-known as 798 Art Zone in Beijing and M50 in Shanghai. Unlike Red Town in Shanghai, where SOEs are *de facto* owners of the land, in Redtory, the land was reclaimed by the Guangzhou Municipal Government and represented by the land banking institution, Guangzhou Land Development

Center (GLDC). On November 18, 2008, GLDC commissioned the land occupier, Eagle Coin Food Factory, to manage the land, addressing security and cleaning issues, as agreed in a contract signed by both parties. As the temporary land user, Eagle Coin was allowed to reuse the site at its own cost and benefit, with GLDC reserving the right to terminate the contract by providing Eagle Coin with two months' notice. In 2009, to capitalize on the land and its buildings, Eagle Coin entered a cooperation contract with Jimeizu Interior Design Company (J-company) to jointly invest in the site as a CIP and share the rental income. The contract explicitly stated that both parties knew that the land belonged to the state and that the reuse was temporary. Furthermore, the land had to be returned to the GLDC if a redevelopment project was implemented.

The plan to establish a CIP was grounded in an informal network between the J-company and the city mayor. Following successful lobbying and negotiations between artists, Eagle Coin, Tianhe district, and the then-Guangzhou city mayor, Mr. Zhang Guangning, Redtory was granted protected status for 10 years, starting in 2009 (Zielke & Waibel, 2015). Redtory Creative Park was opened during Guangzhou Asia Games in 2010 (Feng et al., 2019). During the Guangzhou Asia Games in 2010, Guangzhou Municipal Government intended to leverage CIPs for city marketing to the event's visitors (an expert from Guangzhou Urban Planning Institute, interview, November 6, 2019). A public-private coalition, including the artists, the district government, and Mayor Zhang, has been established to develop Redtory Creative Park.

Shortly after the Asia Games and the end of Mayor Zhang's term (in office from 2003–2010), the policy towards Redtory was completely changed. The new Mayor, Chen Jianhua, tended to redevelop the site to offset the expenditures incurred by the Asia Games. Consequently, GLDC intended to terminate the contract with Eagle Coin via an official government letter on 9 June 2010, instructing Eagle Coin to evict tenants and restore the land to its original state while ensuring social stability. This request was reiterated through court judgment and government notices in the subsequent years, available at China Judgements Online (https://wenshu.court.gov.cn). In 2013, the government announced plans to demolish the site to develop a more profit-promising "International Financial City," the so-called Wall Street of Guangzhou. The 2014 Mayor's Office Meeting Minutes (No. 100) stated that reserved land, including Redtory, could no longer be temporarily reused for CIPs. Consequently, the activities of the creative park had to be terminated despite its popularity and success.

However, it took another five years to evict tenants and close the park, which is precisely a 10-year history of reusing the site as originally planned. The eviction encountered resistance from sitting tenants and the site management company (C. Xu, 2015). J-company claimed they were obligated to return the site only if land bidding for a redevelopment project was carried out according to formal urban planning. With no existing zoning plan, it was not yet time to return the land (Guangzhou Intermediate People's Court, 2018). Also, J-company insisted that former Mayor Zhang had clearly promised a temporary use of 10 years in the written minutes of a government meeting. After the unsuccessful attempt to evict tenants, the court finally took action to end the disputes between the local government and J-company. On May 21, 2019, Tianhe District People's Court posted a public notice of forced execution, stating that all tenants must move out within one month. Finally, the park announced its closing on November 21, 2019, on its Wechat blog platform. Meanwhile, the redevelopment plan for the park has shifted towards a preservation-oriented approach rather than complete demolition. Driven by one of the most influential local media, *Southern Metropolis Daily*, the public debate promoting Redtory in 2009 and later advocating the conservation of industrial heritage in 2013 has influenced the decision-making process of the state correspondingly (X. Liu,

2017). An industrial heritage conservation plan developed by the Guangzhou Urban Planning and Land Resource Administration Bureau was approved on 22 November 2019, stating that only a part of the site would be demolished, while crucial historical monuments such as the historical rail station of Redtory would be conserved (Guangzhou Municipal Planning and Natural Resources Bureau, 2019). Although the focus is on conserving physical structures rather than activities, it can still be considered an outcome of the phases of temporary use, as the economic and cultural values of the buildings have been recognized through adaptive reuse. As of 2022, Google Earth indicates that the buildings remain undemolished. The trajectory of the rise and fall of Redtory Creative Park is illustrated in Figure 2.

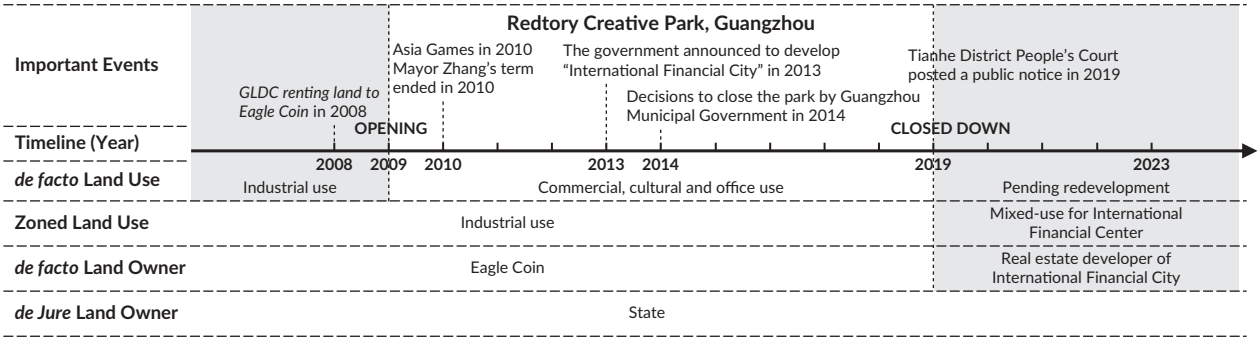


Figure 2. The trajectory of the rise and fall of Redtory Creative Park, illustrated by the authors.

5. Actors in the Pro- and Contra-Coalitions

The emergence and closure of CIPs reveal the power tension between two different coalitions, one in favour and the other against adaptive reuse. Despite having different aims, the agencies from the public sector behind the coalitions remain the same. The production of CIPs is heavily involved and controlled by state agencies at different levels, thereby referred to as spaces of "controlled creativity" (Zielke & Waibel, 2014). These agencies strategically take different positions to build pro- and contra-coalitions.

5.1. Municipal and District Governments

Municipal and district governments, representing the state, adopt various positions towards temporary use in industrial land redevelopment, ranging from acceptance to tolerance and from promotion to demolition. Fan et al. (2022) summarized four types of state strategies towards CIPs in Shanghai: i) the state actively supports CIPs when institutional gaps are successfully closed; ii) the state utilizes CIPs for city marketing; iii) the state tolerates CIPs when it serves economic development; and iv) the state demolishes CIPs according to urban planning. In the case of Red Town in Shanghai, the Changning District Government and Shanghai Municipal Government tolerated its development for temporary use before formal redevelopment was launched in 2017. Then, the state demolishes Red Town for redevelopment projects according to urban planning. In the case of Redtory, the Guangzhou Municipal Government made contradictory decisions towards the regeneration of industrial sites, embracing it before the Asia Games and redeveloping it after the Asia Games.

As an agency of the state, the planning authority aligns with municipal and district government, taking different positions. Positions supporting adaptive reuse can be observed from planning authorities, but we can also

see actions against them within the same institution. In Red Town, SUPLRAB acted as the leading agency and was directly involved in developing and managing the CIP. In the contra-coalition, SUPLRAB facilitated the new redevelopment plan to largely demolish the buildings. Regarded as a heritage conservation project, Red Town was greatly supported by the heritage conservation department of SUPLRAB in the early 2000s (Wang, 2009; Zheng, 2010, p. 158). This support ended when local government officials, who dominate the leasing and development of urban land, decided to redevelop the area into a commercial centre according to urban planning. Although the case of Red Town shows great support from urban planning authorities for its establishment, the planning authorities do not always favour creative space. Developing a CIP may bring legal risks to urban planning officials as land is not planned for CIPs. In Shanghai, opinions against CIPs by urban planning authorities, though not appearing officially, can be heard in informal interviews:

> The creative parks are not supported by the planning and land use authorities because they do not follow urban planning. However, the central state has issued policies to support the development of creative parks. We cannot say anything but have to accept. Ultimately, they are to be redeveloped according to the urban plan. (An officer from Shanghai planning authorities, interview, August 23, 2019)

The other officer from the Shanghai planning authorities shared a similar opinion: "We are neither for nor against it" (interview, October 24, 2022). In Shanghai, the leading institution that supports adaptive reuse is the semi-government agency known as the Shanghai Creative Industry Center. Established in 2004, this semi-governmental agency reports to the Shanghai Economic and Information Commission under the Shanghai Municipal Government. In certain instances, the Shanghai Creative Industry Center directly engaged in the investment and management of CIPs with the aim of pursuing economic revenue and functioning as an entrepreneurial entity (Zheng, 2010). Later, in 2010, it was replaced by the Office of the Leading Group for Promoting Cultural and Creative Industries in Shanghai, which holds a higher political position and reports directly to the Shanghai Municipal Government. In Guangzhou, a counterpart organization, known as the Guangzhou Creative Industry Association (www.cngca.com), is actively dedicated to fostering the advancement of CIPs. Such agencies advocate for the development of creative industries, which can be housed in various types of physical structures, not necessarily in the form of adaptive reuse of industrial sites. However, in practice, it is common for formerly abandoned industrial sites to accommodate creative industries due to their central location, low rent, and spatial structure.

5.2. The SOE Land Occupier

In both cases, the land occupiers are state enterprises. They enjoy both political power to a certain extent and have entrepreneurial status. Due to their political status, the local government cannot easily reclaim their land. Instead, they can negotiate with the local government on how the land can be redeveloped and how much compensation they can acquire. In the pro-coalition, they build a coalition with site management companies to develop CIPs. Shanghai Tenth Steel Plant from Red Town and Eagle Coin from Redtory rented the idle land they occupied to site management companies and gain direct rental incomes. In the contra-coalition, they transfer land to the local government and, in return, acquire considerable compensation to offset the loss of land. As *de facto* land owners, they wait for opportunities and seek the maximal benefits generated from land.

5.3. Private Companies

The private developer functions to extend the government's power in the market in both the pro- and the contra-coalitions. In Red Town, the urban planning authority selected a person to be park manager through public bidding and actively cooperated with him to develop the CIP. However, the site manager was not integrated into the decision-making process on whether or not to develop or demolish such a park, only performing a cultural approach of urban transformation regulated by the state. The decision-making process to determine its development and demolition remains within the state based on a "public–public" partnership between the state and the state enterprise Shanghai Tenth Steel Plant, *de facto* land owner. In Redtory, the development of CIPs was based on the initiative of the private sector with weak support from the government agencies. Only the former city mayor confirmed the support, which subsided with the termination of his office term. The site management company, J-company, could not decide the length of temporary use for CIPs rather than comply with government decisions. Consequently, the district government could finally make decisions to demolish the park.

In the contra-coalition, private companies seek profits generated from the rent gap before and after redevelopment. Before redevelopment, developers pay for the land use rights to the local government for a limited period through a bidding process. After comprehensive redevelopment, developers rent or sell the new space to individual tenants at market price, covering all the costs beforehand and generating lucrative income. They perform urban redevelopment activities regulated by the state and are excluded from the decision-making process on how the land is redeveloped. A "public–public" partnership between the district government, Shanghai Creative Industry Center, and land occupiers to promote creative space was more important than the "public–private" partnership between site managers and the state (Zheng, 2010).

6. Pro-Coalition to Foster the Temporary Use

6.1. Pro-Coalition Building

To foster the temporary use of underused industrial sites, a pro-coalition is built between the pro-agencies of the local government, the land occupier, and the market player. The coalition actors work together to pursue the adaptive reuse of industrial buildings and seek their economic profits individually (Zheng, 2010). Before initiating a CIP project in Shanghai, stakeholders collaborate and unite to gain approval through a coordination meeting. In this meeting, various government agencies are invited to express their perspectives on the planned CIP. For instance, the fire department must approve that safety considerations are adequately addressed in the reuse projects. The planning authority is also invited to attend the meeting to confirm if the project aligns with formal urban planning; however, their involvement is largely symbolic. The planning authorities are hesitant to adopt opposing stances if all other departments endorse the project (the manager of a site management company, interview, October 20, 2022).

6.2. Strategies to Overcome Institutional Constraints to Promote Temporary Use

To achieve temporary use, the "pro-coalition" must develop certain strategies to overcome institutional barriers. Shanghai Economic and Information Commission and its subordinated Shanghai Creative Industry Center managed to develop "three unchanging" strategies to overcome institutional obstacles. Proposed in

2005 in Shanghai, the "three unchanging" policy, i.e., implanting new functions into industrial land without changing building ownership, building structure, and *de jure* land use, attributes a quasi-legal status to creative parks. It simply suggests maintaining the *status quo* of land and buildings and allows for flexibility to control the future disposal of land. The aim was to accept adaptive reuse to bypass approval procedures for three formal issues in statutory plans: ownership, land use, and plot ratio (Y. Xia, interview, April 8, 2020). In Guangzhou, similar strategies have been applied. In the case of Xinyi Creative Park in Guangzhou, the granting of temporary land use from an industrial site to a creative park is based on "four unchanging conditions" regulated in the public–private partnership: layout, building number, building structure, and floor space (Li et al., 2018). Another well-known nationwide policy, withdrawing manufacturing industries in the urban area to give way to tertiary industry (*tuier jinsan*; Li et al., 2018; Zheng, 2010, p. 146), aiming at restructuring industrial land for non-industrial use, is often utilized to argue for the temporary use.

7. Contra-Coalition to Terminate the Temporary Use

7.1. Contra-Coalition Building

The pro-coalition actively supports the production of temporary space. However, its support is limited in strength and scale. The projects of temporary use depend highly on personalized coordination of key resources and are not completely institutionalized (Zielke & Waibel, 2015). Land-lease permissions granted to private actors for temporary use can be easily withdrawn as the state has the final judgement in any local decision on behalf of formal and legal redevelopment (Zielke & Waibel, 2016). Municipal and district governments, together with their sub-ordinated land agency and urban planning authorities, and the market player can build a contra-coalition and implement the comprehensive redevelopment of the CIPs. Acquiring land transfer fees and representing formal urban planning, public agencies in contra-coalition possess higher administrative sovereignty than public agencies in the pro-coalition. As all urban land belongs to the state, district governments hold the right to employ land acquisition in the name of the state and further to sell land use rights for redevelopment projects. The contra-coalition is often known as the "pro-growth coalition," identified in the context of property-led redevelopment formed by public and private actors while communities were excluded (Lai, 2010; Yang & Chang, 2007). A "rent gap-seeking regime" was proposed to explain the logic of capital accumulation in the pro-growth redevelopment process (Yang & Chang, 2007). Land conversion through a "pro-growth coalition" can maximize the full potential of land values and bring much larger profits for the district and municipal government than temporary use.

In Shanghai, Red Town is centrally located with high land value, providing a strong reason to be chosen by the "pro-growth coalition" for large redevelopment projects. Given the revenue deficit due to the Asia Games in 2010 in Guangzhou, the municipality was eager to embrace profitable redevelopment projects with higher floor area ratio rather than temporary use, which brought comparably less profit (an expert of Guangzhou Urban Planning Institute, interview, November 6, 2019).

7.2. Strategies to Legitimize the Termination of Temporary Use

For the contra-coalition, formal urban planning offers legitimacy to terminate temporary use. As such, temporary use is informal and not regulated in urban planning, so it can be abandoned according to formal planning. Statutory land use plans in China comprise two primary sets of maps: one illustrating existing land

use types and the other depicting planned land use. A CIP is not classified under existing land use categories; the respective sites are typically zoned as "industrial." Similarly, it is not considered part of planned land use. The areas designated for CIPs are often envisioned for residential or tertiary purposes with significantly higher floor area ratios than the existing urban structures (Zhong, 2010, p. 146). Industrial site transformations are typically conceptualized as redevelopment projects rather than adaptive reuse in the form of CIPs for "non-industrial" purposes, which do not entail fundamental changes to the physical structure. Adaptive reuse involves a temporary or interim utilization of industrial buildings before planned permanent redevelopment takes place. Formal urban planning legitimizes stakeholders to establish a contra-coalition aimed at terminating temporary use.

In Red Town, to legitimize the redevelopment project, the Changning District Government employed the instrument of urban planning and made a detailed plan in 2012, followed by approval by the municipal government in 2013. Reinforced by the new plan, Changning District Government was then able to establish the contra-coalition to undertake the development project. In Redtory, the site management company (J-company) was reluctant to close the park, arguing that the zoning plan was not formally published and the redevelopment project had not been launched. This indicates that stakeholders widely accept that a formal plan published by the local government functions as a legal instrument to terminate the temporary use. The actors and their interaction in the pro- and contra-coalitions are illustrated in Figure 3.

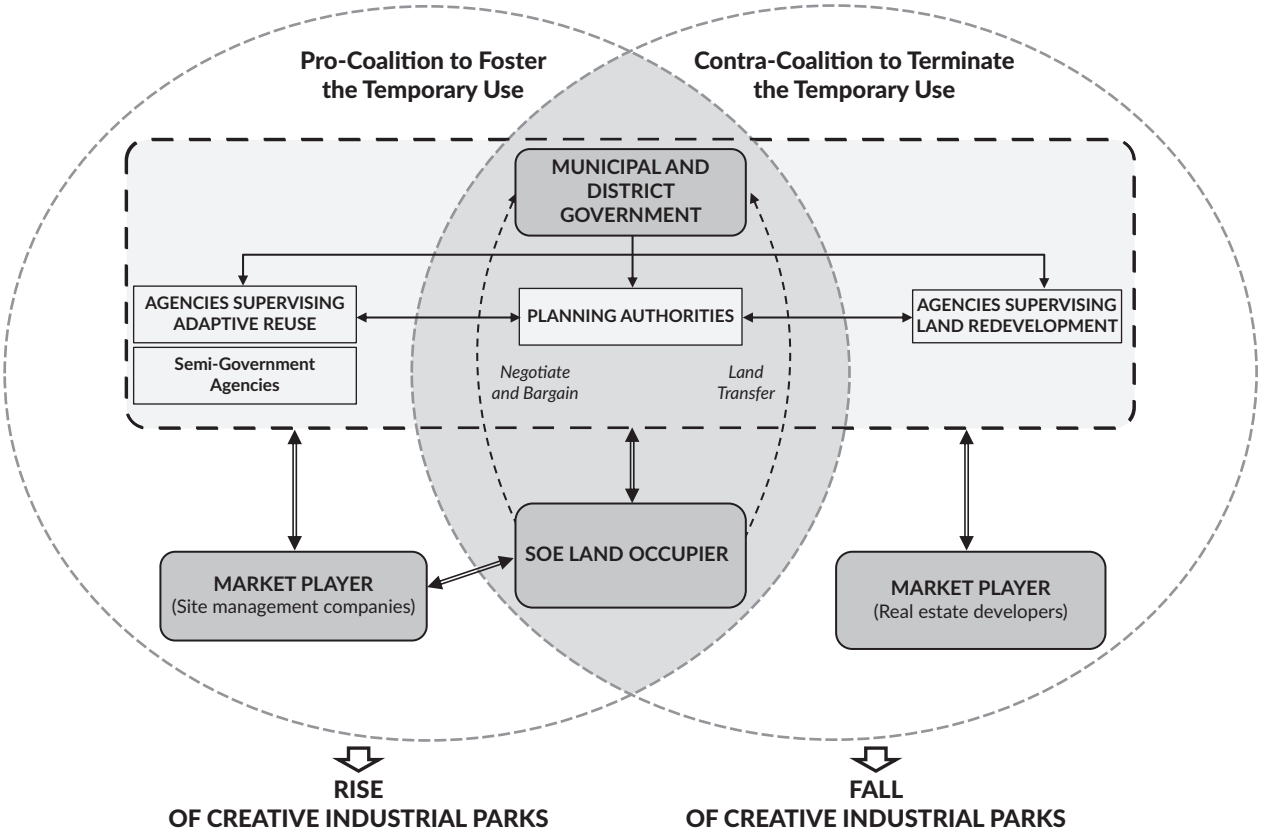


Figure 3. The pro- and contra-coalitions and actors, illustrated by the authors.

8. Conclusion

Driven by the urban phenomenon of demolishing creative parks in recent years, this research aims to discover how different actors position themselves and form flexible coalitions to foster and demolish CIPs. The article contributes to the scientific discourse on urban governance of CIPs by demonstrating how space has been produced and transformed through two coalitions, a "pro-coalition" and a "contra-coalition," each employing different strategies. The "pro-coalition" overcomes institutional obstacles to develop CIPs but is ultimately overruled by a "contra-coalition" to demolish them according to urban planning.

Urban governance in China is characterized by flexibility and resilience, as elaborated by concepts such as "political resilience" and "adaptive governance" (Heilmann, 2018), as well as "resilient governance" (Yao et al., 2020). Subject to changing domestic and international circumstances, a government agency can be part of the "pro-coalition" under certain circumstances and the "contra-coalition" under others. In the creative park development phase, district governments benefit directly from the taxes paid by quarter tenants and cooperate with public and private actors in the pro-coalition. In the demolition and redevelopment phase, district governments benefit from land transfer fees paid by real estate developers who purchase industrial land for property-led redevelopment. District governments tend to do so as land transfer fees have become the major revenue source for local governments since the commodification of land in the 1990s (J. Xu et al., 2009).

The motivation to develop the parks comes from the pro-coalition with the local government, semi-governmental, and non-governmental actors. The development of creative parks results from an emerging pro-coalition intending to mobilize resources and develop strategies to overcome institutional obstacles. The pro-coalition developed quasi-legal instruments, such as the "three unchanging policies" in Shanghai and the "four unchanging conditions" in Guangzhou, to bypass conflicts with the contra-coalition. The contra-coalition, built by the district and municipal governments together with land-related institutions and urban planning authorities, has the final say on the production or demolition of creative space. Although they tolerated and embraced its development in the beginning, they hold the right to make the final decision to demolish it when necessary.

This article's discussion reflects the tension between cultural-led urban transition and property-led regeneration in industrial heritage sites (Chen, 2023; He, 2019). We reveal the relations between the temporality of CIPs and the coalition of governance underpinning this urban phenomenon. However, compared to what has been observed in European countries where (local) governments have cultural clustering strategies to promote post-industrial urban development, local governments in China tend to make more cautious attempts to support cultural clustering in industrial sites—they temporarily create institutional room for creative industries to reuse the sites with conditions, and see how the CIPs work. Different from the European cases, where multi-sectoral engagement and interactions matter and cause complexities (Morris, 2010), whether a CIP in an industrial site can survive in the long term largely depends on whether the local government believes the socio-economic value of the CIP surpasses that of real estate development in the location. It is the local government alone, instead of multi-sectoral collaboration or partnerships, that makes the decisions to allow the temporary industrial land use as CIPs, as well as to terminate them. The intra-government negotiations and collaborations (or non-collaboration) matter to the decisions, which are affected by the macro-political environment and are significantly influenced by local

political leaders' preferences. Therefore, our examinations of the rise and fall of CIPs in China contribute to the international literature that, in a political environment of fragmented authoritarianism (Brødsgaard, 2017; Mertha, 2009), there are multiple representatives of the state and competing regimes working simultaneously (Gao & Chen, 2020; Hsing, 2006; McGee et al., 2007, p. 14). Unravelling the complexity among local authorities and their interrelations with market players helps to better understand under what conditions the contra-coalition would prevail over the pro-coalition, ultimately initiating the redevelopment of CIPs, and what would not. That is the focus of our future studies. This raises questions about the factors influencing its long-term perspectives and which factors are decisive for its short-term existence. For example, factors such as location (e.g., the central location of Red Town in relation to its commercial value) and timing (e.g., different levels of support before and after mega-events) need to be further elaborated upon in the next steps to identify the specific factors that trigger the formation of these two distinct coalitions.

Acknowledgments

We thank Dr. Xiaohong Tan for the guidance in projects in Guangzhou and Shenzhen. Special thanks are given to Prof. Li Hou and Prof. Saul Wilson for their insightful comments during the 2023 Harvard MIT UBC Urban China Conference.

Funding

The authors are grateful to the German Research Foundation (DFG) for funding research (No. 5515319) on industrial land regeneration in Chinese metropolitan cities, which provided significant data, context, and inspiration for the article. This work is also supported by the Zhejiang Provincial Philosophy and Social Sciences Planning Project (浙江省社科规划课题) (2023–12), the Scientific Research Fund of Zhejiang Provincial Education Department (No. Y202353866), and the 2022 Scientific Research Training Project ("科研攀高"培育课题) of Zhijiang College of Zhejiang University of Technology.

Conflict of Interests

The authors declare no conflict of interests.

References

Brødsgaard, K. (Ed.). (2017). *Chinese politics as fragmented authoritarianism: Earthquakes, energy and environment*. Routledge.

Cartier, C., & Wu, P. (2023). From the administrative hierarchy to the system of administrative divisions. In C. Ergenc & D. Goodman (Eds.), *Handbook on local governance in China: Structures, variations, and innovations* (pp. 30–47). Edward Elgar Publishing.

Chen, J. (2023). Industrial heritage reuse ideas on the move: Comparative case studies in Shanghai and Chongqing, China. *International Journal of Cultural Policy*, *29*(7), 844–861.

Fan, L., Altrock, U., & Appelhans, N. (2022). Implications of "conceded informality": The state and adaptive reuse in brownfield regeneration in Shanghai. *Urban Matters Journal*, *5*. https://urbanmattersjournal.com/implications-of-conceded-informality-the-state-and-adaptive-reuse-in-brownfield-regeneration-in-shanghai

Feng, S., Fu, C., Luo, B., & Ding, X. (2019, July 2). Behind closing down of Redtory: Turning direction of real estate industry along with old transformation. *China Southern News*. http://news.southcn.com/nfplus/yyl/content/2019-07/02/content_188186402.htm

Gao, J., & Chen, W. (2020). Spatial restructuring and the logic of industrial land redevelopment in urban China: III. A case study of the redevelopment of a central state-owned enterprise in Nanjing. *Cities*, *96*(2020), Article 102460.

Guangzhou Intermediate People's Court. (2018). *Second-instance civil judgement on lease contract disputes of Guangzhou Jimeizu Interior Design Engineering Ltd and Guangzhou Eagle Coin Enterprise Group*.

Guangzhou Municipal Planning and Natural Resources Bureau. (2019). *Industrial heritage conservation plan in Redtory has been reviewed by the experts*. http://ghzyj.gz.gov.cn/hdjl/rdhy/content/post_5536665.html

He, S. (2019). The creative spatio-temporal fix: Creative and cultural industries development in Shanghai, China. *Geoforum*, *106*, 310–319. https://doi.org/10.1016/j.geoforum.2017.07.017

He, S., & Wu, F. (2005). Property-led redevelopment in post-reform China: A case study of Xintiandi redevelopment project in Shanghai. *Journal of Urban Affairs*, *27*(1), 1–23.

Heilmann, S. (2018). *Red swan: How unorthodox policy making facilitated China's rise*. The Chinese University Press.

Ho, P. (2005). *Institutions in transition: Land ownership, property rights, and social conflict in China*. Oxford University Press.

Hsing, Y. (2006). Land and territorial politics in urban China. *The China Quarterly*, *187*(2006), 575–591.

Keane, M. (2007). *Created in China: The great new leap forward*. Routledge.

Lai, H. (2010). Uneven opening of China's society, economy, and politics: Pro-growth authoritarian governance and protests in China. *Journal of Contemporary China*, *19*(67), 819–835. https://doi.org/10.1080/10670564.2010.508581

Leutert, W. (2020). State-owned enterprises in contemporary China. In L. Bernier, M. Florio, & P. Bance (Eds.), *Routledge handbook of state-owned enterprises* (pp. 60–72). Routledge.

Leutert, W., & Vortherms, S. A. (2021). Personnel power: Governing state-owned enterprises. *Business and Politics*, *23*(3), 419–437.

Li, Y., Chen, X., Tang, B., & Wong, S. W. (2018). From project to policy: Adaptive reuse and urban industrial land restructuring in Guangzhou City, China. *Cities*, *82*, 68–76. https://doi.org/10.1016/j.cities.2018.05.006

Liu, X. (2017). "Contested policy mobility": The creative transformation and temporary use of brownfields in Redtory, Guangzhou. *Urban Geography*, *38*(6), 884–902. https://doi.org/10.1080/02723638.2016.1178882

Liu, Y., & Yau, Y. (2020). Urban entrepreneurialism vs market society: The geography of China's neoliberal urbanism. *International Journal of Urban and Regional Research*, *44*(2), 266–288.

Liu, Y., Wu, F., Liu, Y., & Li, Z. (2017). Changing neighbourhood cohesion under the impact of urban redevelopment: A case study of Guangzhou, China. *Urban Geography*, *38*(2), 266–290. https://doi.org/10.1080/02723638.2016.1152842

McGee, T. G., Lin, G. C. S., Marton, A. M., Wang, M. Y. L., & Wu, J. (2007). *China's urban space: Development under market socialism*. Routledge.

Mertha, A. (2009). "Fragmented authoritarianism 2.0": Political pluralization in the Chinese policy process. *The China Quarterly*, *200*, 995–1012.

Morris, M. (2010). *Multi-sectoral collaboration and economic development: Lessons from England's regional development agencies*. Community Development Institute, University of Northern British Columbia.

Rentsch, C., & Finger, M. (2015). Yes, no, maybe: The ambiguous relationships between state-owned enterprises and the state. *Annals of Public and Cooperative Economics*, *86*(4), 617–640.

Roodhouse, S. (2006). *Cultural quarters: Principles and practice*. Intellect.

Shanghai Rongqiao Center. (2022). *A.F.A Shanghai Rongqiao Center: Creating a new name card of art commercial center in Shanghai*. https://www.rongqiao.com/m/show.aspx?cid=473722&id=1707

Smart, A., & Lin, G. C. (2007). Local capitalisms, local citizenship and translocality: Rescaling from below in the Pearl River Delta region, China. *International Journal of Urban and Regional Research*, *31*(2), 280–302.

Sun, M., & Chen, C. (2023). Renovation of industrial heritage sites and sustainable urban regeneration in post-industrial Shanghai. *Journal of Urban Affairs*, *45*(4), 729–765. https://doi.org/10.1080/07352166.2021.1881404

Wang, J. (2009). "Art in capital": Shaping distinctiveness in a culture-led urban regeneration project in Red Town, Shanghai. *Cities*, *26*(6), 318–330. https://doi.org/10.1016/j.cities.2009.08.002

Wang, J., Oakes, T., & Yang, Y. (2015). *Making culture cities in Asia: Mobility, assemblage, and the politics of aspirational urbanism*. Routledge.

Wu, F., Xu, J., & Yeh, A. G. O. (2006). *Urban development in post-reform China: State, market, and space*. Routledge.

Xu, C. (2015, December 11). Guangzhou Redotry is comparable to Beijing's 798 from unsuccessful demolition to partial preservation. *Yangcheng Evening News*. https://www.chinanews.com.cn/m/cul/2015/12-11/7667367.shtml

Xu, J., Yeh, A., & Wu, F. (2009). Land commodification: New land development and politics in China since the late 1990s. *International Journal of Urban and Regional Research*, *33*(4), 890–913. https://doi.org/10.1111/j.1468-2427.2009.00892.x

Xu, Y. (2017). Property-led urban growth, institutional change and urban sustainability: The case of China in an international perspective. In F. Caprotti & L. Yu (Eds.), *Sustainable cities in Asia* (pp. 86–98). Routledge.

Yang, Y. R., & Chang, C. H. (2007). An urban regeneration regime in China: A case study of urban redevelopment in Shanghai's Taipingqiao Area. *Urban Studies*, *44*(9), 1809–1826. https://doi.org/10.1080/00420980701507787

Yao, Z., Li, B., Li, G., & Zeng, C. (2020). Resilient governance under asymmetric power structure: The case of Enning Road regeneration project in Guangzhou. China. *Cities*, *111*(2), Article 102971. https://doi.org/10.1016/j.cities.2020.102971

Yin, Y., Liu, Z., Dunford, M., & Liu, W. (2015). The 798 Art District: Multi-scalar driver of land use succession and industrial restructuring in Beijing. *Habitat International*, *46*, 147–155. https://doi.org/10.1016/j.habitatint.2014.11.007

Zhai, B., & Ng, M. K. (2013). Urban regeneration and social capital in China: A case study of the drum tower Muslim district in Xi'an. *Cities*, *35*, 14–25. https://doi.org/10.1016/j.cities.2013.05.003

Zheng, J. (2010). The "entrepreneurial state" in "creative industry cluster" development in Shanghai. *Journal of Urban Affairs*, *32*(2), 143–170. https://doi.org/10.1111/j.1467-9906.2010.00498.x

Zheng, J., & Chan, R. (2014). The impact of "creative industry clusters" on cultural and creative industry development in Shanghai. *City, Culture and Society*, *5*(1), 9–22. https://doi.org/10.1016/j.ccs.2013.08.001

Zhong, S. (2010). *Industrial restructuring and the formation of creative industry clusters: The case of Shanghai's inner city* [Unpublished doctoral dissertation]. The University of British Columbia. https://open.library.ubc.ca/soa/cIRcle/collections/ubctheses/24/items/1.0071145

Zhu, J. (2019). *Urban development in China under the institution of land rights*. Routledge.

Zielke, P., & Waibel, M. (2014). Comparative urban governance of developing creative spaces in China. *Habitat International*, *41*, 99–107. https://doi.org/10.1016/j.habitatint.2013.06.007

Zielke, P., & Waibel, M. (2015). Creative spaces and the local state in China: The case of Guangzhou's Redtory Art+ Design Factory. *City, Culture and Society*, *6*(2), 27–35. https://doi.org/10.1016/j.ccs.2015.03.005

Zielke, P., & Waibel, M. (2016). The urban governance of brownfield restructuring in China: The case of Guangzhou's T.I.T Creative Industry Zone. *Asia Pacific Viewpoint*, *57*(1), 91–105. https://doi.org/10.1111/apv.12105

About the Authors

Xueying Chen (PhD) is a lecturer at Zhijiang College of Zhejiang University of Technology, China. She got her PhD in 2019 from Henley Business School, University of Reading. Her research areas are urban regeneration governance and rural-urban transition. Her interests include the governance structure and power relations beneath and constructed by urban/rural policy initiatives.

Li Fan (PhD) is a senior researcher at the University of Kassel, Germany. She is a German Chancellor Fellow, a DAAD fellow, and the vice-chair of the ISOCARP Scientific Committee (2023–2025). Her research interests focus on urban regeneration and urban heritage conservation in both China and Germany.

Zhikui Cao is a professor at Zhijiang College of Zhejiang University of Technology and a member of the Small-Town Academy Committee of the Zhejiang Society of Territorial Spatial Planning. His research areas include traditional village protection and utilization, rural revitalization through integrating culture and tourism, and cultural heritage protection and revitalization.

Urban Planning
2024 • Volume 9 • Article 8236
https://doi.org/10.17645/up.8236

cogitatio

ARTICLE

Open Access Journal

Laissez-Faire or Sensitive Policymaking: The Legacy of Creative Clusters on Brownfield Sites in Berlin

Uwe Altrock

Department of Urban Regeneration and Planning Theory, University of Kassel, Germany

Correspondence: Uwe Altrock (altrock@asl.uni-kassel.de)

Submitted: 6 February 2024 **Accepted:** 9 August 2024 **Published:** 30 October 2024

Issue: This article is part of the issue "Industrial Heritage and Cultural Clusters: More Than a Temporary Affair?" edited by Uwe Altrock (University of Kassel) and Janet Merkel (TU Berlin), fully open access at https://doi.org/10.17645/up.i341

Abstract

With his saying "Berlin—poor, but sexy!" former Governing Mayor Klaus Wowereit framed the motto for a decade of transition in which the German capital became a Mecca for artists, media industries, and creative people from all over the world. Building on a longstanding tradition of tolerating diversity and as a centre of high culture and bohemians, the city developed a new cultural-political identity from a deep transformation crisis after German unification and the extensive loss of its industrial base. In conjunction with a blossoming of temporary uses in a wide variety of vacant properties, often abandoned production, infrastructure, or storage areas, an intense creative scene unfolded. Since the 2010s, this scene has been massively threatened by displacement due to the changed real estate market situation. Over the years, the city has tried to counteract this situation through cultural policy initiatives and niche projects for bottom-up initiatives, with limited success. Against the backdrop of accelerated development of former brownfield sites and funding cuts in urban cultural policy, the question currently arises as to what place subculture can occupy in urban policy in the future. Based on official documents, books, scholarly articles, project websites, newspaper articles, and own observations, this article attempts to evaluate the respective policies in the city over time, to place them in the context of approaches to a more land-security-oriented policy, and to make clear what role the re-used spaces and buildings from the industrial age play in this.

Keywords

adaptive re-use; artist-led regeneration; Berlin; creative clusters; Germany; industrial heritage; socio-cultural centres

1. Introduction and Research Design

This article deals with an essential facet of economic structural change in Berlin, the German capital known for its multi-layered high and subculture (Krätke, 2002). It shows that the architectural legacy of industrial urbanisation has not only been preserved to a considerable extent despite extensive wartime destruction but has also played a special role in the development of creative clusters due to the economic weakness of the divided city and its consequences for cultural policy. For a long time, these were strongly characterised by socio-cultural and artist initiatives, but are increasingly being supplemented by private sector-driven real estate development projects that understand and use culture as an important part of their profit-maximising strategies. The article examines how the public sector has had a moderating, stimulating, and accentuating influence on creative clusters through the interplay of urban development, land, and cultural policies. It looks at how policy changes have affected location patterns, competition between culture-related projects and the balance between high culture and subculture, and the significance of repurposed industrial buildings in particular. It then asks how urban policy has dealt with the challenges of property development and what effects this has had. The main arguments are, firstly, that the variety of industrial heritage buildings available have allowed politicians to dispense with the systematic promotion of creative clusters and instead support individual projects in terms of urban development and cultural policy, thereby achieving a highly differentiated variety of creative locations over the decades. Secondly, the city's reluctance in terms of land policies has meant that the emerging location pattern was strongly determined by the initiative of creative professionals and developers, for whom rights of disposal over property were a key factor for the feasibility of concepts. Thirdly, urban policy accepts that tensions in the property market could mean that diversity, recognised as key to the city's attractiveness, could gradually fall victim to an increasing commercialisation of culture and the enforcement of conventional, financially viable uses.

The following is based on more than two decades of research into the spatial characteristics of tertiarisation in Berlin (see Altrock, 2003, 2014; Altrock & Fan, 2023). In addition to analysing the scholarly literature on industrial heritage, conversion measures, artist-led regeneration, the creative scene and creative clusters, official documents from the Berlin Senate, the House of Representatives and the districts, self-portrayals of creative locations and projects, newspaper articles, and blogs were looked into (see Supplementary Material for an overview of key documents). The phasing used to systematise urban development, land, and cultural policy is essentially linked to government terms, but in combination with economic conditions and the general real estate climate, it stands for distinguishable orientations of the policy field examined here. Due to the dramatic political changes, it is usually possible to draw a clear timeline, although this only applies with certain restrictions to the last phase transition. As the mentioned cases were or have been in development over a longer period, they were categorised according to the period in which key decisions for the conceptual design were made.

2. Urban Development, the Creative Class, and the Role of Reutilised Industrial Buildings

The creative class has played a major role in the scholarly debate and the practice of urban development. In the definitions used for this purpose, the creative sector encompasses film, art, media, design, architecture, fashion, advertising, and several other industries (Evans, 2009, p. 1026; see also Biehl, 2020). The definition encompasses both commercial and non-commercial industries, the latter covered by public support for culture in Berlin including film, dance, theatre, music, literature, museums, art, heritage, and

public libraries and archives (Der Regierende Bürgermeister von Berlin, 2014; Senat von Berlin, 2006). For cities, related hopes for a successful economic transformation, the strengthening of urban attractiveness and competitiveness, an enrichment of urban diversity and changes in urban development processes are related to a broad set of policies. With those, cities pursue both economic and socio-cultural objectives (Grodach & Loukaitou-Sideris, 2007; Stern & Seifert, 2010) that have been received both euphorically and critically (Florida, 2002; Landry, 2000; Mould, 2015; O'Connor et al., 2020; Peck, 2005; Pratt, 2009; Watson & Taylor, 2017).

On the one hand, "place-making by design" building on iconic architecture, "urban allure" and locally embedded ethnic, heritage, cultural, and creative quarters (Evans, 2009, 2015; Goldberg-Miller, 2019; Roodhouse, 2006) create branding opportunities and are sometimes used to revitalize industrial districts fallen into disuse. While Rosenstein (2011) claims that cultural development policies neglect neighbourhood-related needs and are rather focused on the central city, creative uses may contribute to the revitalisation of urban districts, increasing local attractiveness (Ooi & Stöber, 2010) and applying artist-led strategies in alternative revitalisation processes (Nedučin & Krklješ, 2022). However, despite the boom of creative uses, their outright promotion at a higher-scale in the context of "creative hubs" is by no means the rule and it remains open to what extent policymaking can contribute to inventing or stabilising creative clusters (Boswinkel & van Meerkerk, 2023; Senatsverwaltung für Stadtentwicklung, 2006).

On the other, the role of artists and creatives in the development process is often criticised. For example, artists are described as a "development tool" (Bain & Landau, 2019, p. 422; Jakob, 2013), and culturally-driven renewal is often linked to gentrification (Andres & Grésillon, 2013; Cameron & Coaffee, 2005; Lloyd, 2010; Miles, 2020; Whiting et al., 2022; Zukin, 1982, 1987), albeit without always demonstrating the causality behind this (Altrock & Fan, 2023; Grodach et al., 2018).

Gradually, artists' contributions are discussed in a more complex and context-related manner: "Artists can play different roles: They participate directly or indirectly in gentrification processes, but they can oppose to such dynamics opening the debate for desirable urban development and rethinking models for growth, aligning themselves with local communities" (Pradel-Miquel, 2017, p. 14). Their potential impact on social innovation as small-scale developers and in the context of neighbourhood development is increasingly acknowledged (Bain, 2018; D'Ovidio & Cossu, 2017; García et al., 2015; Grodach, 2011; Rius-Ulldemolins & Díaz-Solano, 2023), reflecting their diversified strategies between cooperation and resistance to urban development policies (Borén & Young, 2017) and their linkages with small-scale manufacturing (Grodach et al., 2017).

In the context of industrial heritage, the strategy of adaptive re-use has been analysed in numerous case studies (Loures, 2015; Mieg & Oevermann, 2014). The conversion into cultural spaces is a revitalisation strategy in many places (Arbab & Alborzi, 2022; Della Lucia & Trunfio, 2018; Duarte & Sabaté, 2013; Fossa, 2014; Mackrodt & Kalandides, 2014). It is positively recognised from a heritage conservation perspective (Harfst et al., 2016), while its impact is questioned (Andres & Golubchikov, 2016).

Many of these observations resonate in the literature on Berlin. One focus of the analyses is on documenting the limits of political influence and the precarious status of creatives as part of a protest movement in underused spaces based on individual cases. Although the leeway creatives had in times of

economic stagnation in the liberal climate of the city is generally taken for granted, there is a lack of analyses shedding light on the tense relationship between profit-oriented creative industries and socio-cultural initiatives in the context of transforming the rich industrial heritage (Colomb, 2012; Jakob, 2010; Novy & Colomb, 2013; Plevoets & Sowińska-Heim, 2018; Shaw, 2005) and taking temporal embeddedness and social learning into consideration (Bain & Landau, 2022).

Whether the subsequent use of an industrial site should be labelled a creative cluster here depends on its definition. If the demands for complexity, diversity, and cross-user interactions associated with a cluster are realised on a site depends on its size, but also its environment and the property management approach. In the following, we look at complex, functionally mixed re-use approaches on former industrial sites, regardless of their size, which are characterised by a relevant proportion of cultural uses.

In this context, it can be observed firstly that even smaller properties are often characterised by a variety of different stakeholders. Secondly, they form elements of creative clusters at the micro level of the plot as part of their development—either as a result of an initiative by a collective of users from the cultural sector or targeted profiling marketing by a property owner. Thirdly, several properties of this kind sometimes also form recognisable clusters at a higher-scale, referred to as cultural and/or trendy districts and perceived as such. However, the object of urban policy and funding programmes are usually individual providers and users, while districts with a cultural focus are addressed indirectly via the promotion of urban development qualities, for example, in area-based urban regeneration. Fourthly, depending on the location, environment and operator structure, there is a wider range of utilisation approaches that also develop different focal points over time. For example, one can distinguish between early socio-cultural locations with a high public impact through cultural events and training courses and later commercially oriented special properties characterised by users from the creative industries with a high proportion of office space and less public impact. How this diversity has evolved and changed over time in interaction with local politics is examined in the following section.

3. Berlin: A Metropolis Undergoing Structural Change and the Rise of a Creative Subculture

3.1. Historical Background

The German capital has a long tradition of subcultural re-use of historic buildings. This can be traced back to the interplay of its role as an industrial metropolis in the early 20th century, the decline of its industrial base since the division of Germany, its long-lasting importance as a centre of the international subculture, and its special tradition of urban renewal (see Industriekultur Berlin, n.d., for a rich introduction). Rapid industrial urbanisation in the late 19th and early 20th centuries made Berlin the outstanding industrial centre of Germany. This growth was based, among other things, on the textile industry, the food industry, locomotive, vehicle and mechanical engineering, the electrical industry, and the media and film industries. These industries are associated with significant architectural and typological interventions, some of which still shape the image of the city. For example, the textile industry often established itself in multi-storey factories in the backyards of residential buildings, while the mechanical engineering industry built large factory complexes on the outskirts of the city, and the electrical industry finally developed independent factory districts. Up until the 1920s, many innovative multi-storey complexes, now listed buildings, were erected. Given the economic stagnation of the divided city between 1945 and 1990, they experienced a partial

decline, while the economic structural change was delayed overall so that especially the larger factory complexes continued to be used for a long time.

3.2. Development of the Creative Sector and the Role of Industrial Heritage

Given the weakness of the tertiary sector in the divided city, the roots of the creative sector in the second half of the 20th century can be traced back to the interplay of several factors. Firstly, urban development, particularly in the western part of the city, aimed to promote business start-ups, alternative tertiary uses, and educational infrastructure. Secondly, urban development efforts to raise the city's profile as a cultural metropolis played a key role, in capitalist West Berlin as a policy of strengthening soft location factors and in socialist East Berlin as a centralised approach to promoting high culture. Thirdly, countercultures emerged in both parts, supported by non-profit socio-cultural initiatives in West Berlin that aimed to improve the general living conditions in neighbourhoods, and civic approaches beyond state cultural production in East Berlin (Bodenschatz, 1987; Kimmel, 2018; Maechtel, 2020). For a long time, the city's attractiveness for the creative-artistic milieu was due to low property prices and the large amount of space available in vacant manufacturing buildings. As early as the 1970s and 1980s, these buildings took on a special significance, being used for low-threshold re-utilisation for creative uses in a broad sense, partly by public companies, partly by artists and citizens' initiatives (Senatsverwaltung für Bau- und Wohnungswesen & STERN Berlin GmbH, 1991).

Since the reunification in 1990, structural change has accelerated significantly, but was slowed down by a longer phase of economic stagnation from the end of the 1990s to the mid-2010s. In addition to underused commercial and warehouse space, vacant ports, airports, railway stations, post office buildings, electricity, gas, and power plant sites gradually became the scene of adaptive re-use as part of a neoliberal reorganisation of urban infrastructure (Suwala et al., 2021). However, this also encompassed historic manufacturing buildings, excluded from simple redevelopment strategies due to their compact design and heritage value. Structural change is embedded in changes in lifestyles and the accompanying new consumption and production patterns, as well as corresponding global investments reflected locally in a wide variety of places (Mackrodt & Kalandides, 2014; Schmidt et al., 2014; Schroeder, 2020).

4. Location Patterns and Political Strategies in Berlin

In Berlin, a complex network of creative locations with different profiles and varying degrees of stability has emerged. The sometimes interacting and contradictory political strategies do not show a clear spatial pattern and can only be understood by considering the historical context (see Arandelovic & Bogunovich, 2014, for an attempt to recognise this complexity). The main lines of urban development policy, cultural policy, and the transformation of former industrial sites since the mid-1970s will be presented in Tables 1 and 2. The complexity of the events makes it impossible to provide even an approximately comprehensive description of the total picture, which can only be mentioned briefly here. It has concerned the trend towards tertiarisation of companies in the secondary sector on site, subsequent use of production sites by other production companies, or a more conventional tertiarisation without explicit reference to creative clusters. This can include numerous projects of subsequent use by hotels, retail, and sometimes also housing. Culturally relevant strategies go clearly beyond the promotion of "classical high culture" (museums, theatres, concert halls, public broadcasting) and include the valorisation of both industrial heritage and historical infrastructure building (see Table 1 and the overview in the Supplementary Material).

Table 1. Cultural policy and creative uses in Berlin since the mid-1970s.

	Phase 1	Phase 2	Phase 3	Phase 4
Period	Before 1990	1990–2001	2001–2015	Since 2016
Social environment	Division of the city and emerging alternative culture	Becoming the capital	International appeal during the crisis	Refugee immigration and multiple crises
Economic environment	Economic stagnation and moderate tertiarisation	Short-lived unification boom	Economic stagnation, debt crisis, and austerity policy	Growth and tightening of property markets
Urban regeneration policy	Transition from area redevelopment to careful urban regeneration and public funding	Transfer of careful urban regeneration to East Berlin and mobilisation of private capital	Socially-integrative regeneration, the emergence of temporary uses, and gradual regulation and location policy	Stabilising socially-integrative regeneration in the face of increasing polarisation
Important cultural policies	Festivalisation (750th-anniversary in 1987), high culture as a soft location factor	Consolidation and marketing of high culture	Active marketing of Berlin's creative image ("poor, but sexy!")	Expansion and completion of the museum landscape in the city centre
Role of creative uses	Gradual project-related acceptance of socio-cultural initiatives	Expansion of socio-cultural initiatives and gradual increase in importance of creative industries	Emerging interim uses and private sector initiative (Media-Spree)	Targeted promotion of experimental spaces

Table 2. Creative locations on former industrial sites in Berlin since the mid-1970s.

	Phase 1	Phase 2	Phase 3	Phase 4
Period	Before 1990 (mainly West Berlin)	1990–2001	2001–2015	Since 2016
Socio-economic environment for creative locations	Low purchasing power, small-scale art scene, and the gradual establishment of subculture	Unification-related property boom and subcultural development in the eastern part of the city	Extensive vacancies and a favourable environment for niche uses and Berlin as an internationally renowned creative metropolis	Significant tightening of property markets and accelerated realisation of brownfield sites
Types of brownfield sites	City centre multi-storey factories and isolated factory sites	Larger factory sites and isolated centrally located multi-storey factories	Neglected small-scale craft, production, and storage areas	Larger factory sites, small-scale craft, production, and storage areas on the outskirts

Table 2. (Cont.) Creative locations on former industrial sites in Berlin since the mid-1970s.

	Phase 1	Phase 2	Phase 3	Phase 4
Development of creative locations	Property purchase, squatting, and letting to prevent squatting	Squatting and public project development	Establishment of temporary uses and a few larger complex site developments	Creative uses move into a few remaining niches, including peripheral locations
Significant types of subsequent use	Socio-cultural centres in the neighbourhood context	Socio-cultural centres, clubs, bars, event spaces, and complex cultural centres	Office locations for the creative sector, clubs, bars, and event spaces	Office locations for the creative sector, profit-oriented, or cultural uses instrumentalised as part of branding, art, and exhibition centres
Owner	State of Berlin, public redevelopment agencies, and initiatives	State of Berlin and public property developers	Foundations and private and public developers	Private developers
Forms of organisation	Association	Association and non-profit limited liability company	Association, non-profit limited liability company, and co-operative	Non-profit limited company
Important examples	Ufa-Fabrik (1974), Mehringhof (1979/1982), Fabrik Osloer Straße (1979), and Regenbogenfabrik (1981)	Brotfabrik (1986/1991), Pfefferberg (1990/1999), Arena (1995), Kulturbrauerei (1996), and RAW (1999)	Königstadt-Brauerei (1995/2003), Backfabrik (2002–), ExRotaprint (2007), and Malzfabrik (2009–)	Kindl-Brauerei (2011/2016), Bötzow-Brauerei (2011/2019), Bockbrauerei (2015–), and Bärenquell-Brauerei (2021–)
Challenges	Demolition policy, precarious legal, and economic situation	Short-lived unification-related property development boom	Property disposals	Significant rise in property prices and displacement of precarious uses from the city centre

4.1. Phase 1 (Before 1990): Special Support for Subcultural Initiatives

A central root of the creative re-utilisation of production buildings lies in pre-unification West Berlin. In the course of economic decline and the cultural devaluation of the old inner-city buildings near the Berlin zone border, increasing vacancy rates could be observed, to which the subcultural scene, active beyond Berlin at the time, reacted, particularly in the late 1970s and early 1980s. Numerous occupations of large Wilhelminian-style building complexes with residential and commercial buildings as well as former multi-storey factories, tenancies granted to avert squatting, or the purchase and development of vacant properties resulted in partly complex, self-managed, and functionally mixed re-uses. They were consolidated

in various legal organisational forms and often represented an explicitly socio-cultural claim (van Schipstal & Nicholls, 2014; Vasudevan, 2015). The best-known of these are maybe the Mehringhof, the Regenbogenfabrik, the Ufa-Fabrik, and the Fabrik Osloer Straße (see Table 2 and Supplementary Material for details about the mentioned cases), all of which still exist and are of supra-local significance for the cultural scene. Over the years, users and projects based in them have been supported by the Berlin Senate in a variety of ways, which has contributed significantly to their long-term stability, as has the contractual security of property use.

The protection by the Berlin Senate of some of the mentioned initiatives took place as part of the development of "careful urban regeneration" with the help of an International Building Exhibition (IBA) from the early 1980s as a reactive measure to pacify the squatter scene, which could claim to publicly denounce the demolition of reusable buildings in times of scarcity of affordable housing and emerging criticism of newly built large housing estates of the post-war period (Bodenschatz, 1987; Senatsverwaltung für Bau- und Wohnungswesen & STERN Berlin GmbH, 1991). The public sector's tolerance of the initiatives was linked to the promotion of maintenance and modernisation measures in self-help, and support for socio-cultural projects with a neighbourhood focus, which had developed reactively over a transitional phase of several years from the initially demolition-oriented renewal policy of the early 1960s (see Supplementary Material for further examples in this context).

4.2. Phase 2 (1990–2001): The Dream of the "Service Metropolis" and the Transformation of Pre-Reunification Cultural Policy

The urban development policy of the Berlin Senate, completely changing after the reunification, initially focused on an explicitly internationally oriented policy of urban competition, in which Berlin was to be profiled as a "service metropolis," in view of the structural change in the economy in the former socialist East Berlin, still strongly characterised by the secondary sector, and the location factors for office space in the capital. As Berlin had become the seat of parliament and government again, those location factors had significantly improved. The focus here was not least on the development of the city centre, the renewal of historic districts, the preparation of large-scale service locations on inner-city conversion sites, and housing construction on the periphery to accommodate the expected growth. Transferring "careful urban regeneration" to East Berlin resulted in a smaller number of socio-cultural complexes comparable to the previous era due to changes in subsidy policies, the rapid suppression of a new squatter movement, and the different urban fabric. A considerable number of large factory complexes, still in use for their original purpose until 1990 but subsequently fallen out of productive use, were quickly utilised for the development of office complexes in the city centre, while other re-use concepts (retail and university) were prepared and implemented in the periphery. To prevent the speculative sale of industrial sites, only triggered by a short-term sharp rise in property prices, the so-called "industrial site protection concept" (*Industrieflächensicherungskonzept*) was adopted in 1993, intended to prevent the re-use of such sites outside certain preferred locations and thus avoid property speculation (Senatsverwaltung für Stadtentwicklung und Umweltschutz, 1993). Despite the abandonment of larger former production sites, some of which have considerable heritage value, there has been less re-use as socio-cultural centres or other creative clusters (Oevermann et al., 2016). Some of the newer cultural centres in former smaller factories can be traced back to conversion approaches before reunification, such as the Brotfabrik in the northeast of the city.

When it became apparent around the mid-1990s that the growth hopes and some of the plans for new office services had been dashed, economic and demographic stagnation set in—in parallel with an economic crisis at the end of the 1990s in Germany as a whole. Nevertheless, major property development projects from the early 1990s were still being completed. In their shadow, due to the special ownership situation, creative clusters with different profiles were established at some locations in larger vacant historic industrial buildings such as the Pfefferberg, the Arena, and the Kulturbrauerei, each of which had a larger proportion of event uses, but also accommodated other cultural and leisure uses. They were the result of various initiatives and management constellations ranging from associations to commercial project development by the state-owned Treuhand Property Trust.

4.3. Phase 3 (2001–2015): Poor, but Sexy—A City in the Process of Re-Profiling Between Austerity Policy and Niche Uses

At the beginning of the 2000s, this stagnation led to the replacement of the conservative-led "grand coalition" that had ruled during the 1990s with a left-wing coalition government under the Social Democratic Party of Germany Governing Mayor Klaus Wowereit. The worsening debt crisis in Berlin's budget led to considerable savings efforts by the public sector, and Wowereit, responsible for the state's cultural policy, increasingly focused on marketing the city's creative potential under the internationally known slogan "poor, but sexy!" The flourishing design industry was politically supported and "culturepreneurs" enjoyed comparatively great freedom to develop suitable, affordable spaces, and concepts for creative pioneer uses (Lange, 2011). From the end of the 1990s, the economic downturn created opportunities to establish interim uses in numerous places, in the context of which other derelict plots of land or buildings were re-used for socio-cultural purposes, sometimes under precarious conditions. The Socially Integrative City regeneration programme introduced in 1999, widely implemented in Berlin, supported such interim uses almost from the outset. In the early 2000s, the private Media-Spree initiative established an entrepreneurial approach to the commercial redevelopment of neglected residual sites in the former border strip of the divided city (see Bader & Scharenberg, 2010; Novy & Colomb, 2013). Its redevelopment projects in close proximity to the city's creative subcultural districts were in direct competition with potential recreational uses along the Spree riverbank and interim uses established there. A referendum in the Friedrichshain-Kreuzberg district revealed the enormous resistance of the local population to the massing of property projects that was seen as a "takeover." Here, the clash of diametrically different understandings of creative neighbourhoods (beyond a supposed political opposition between support for high culture and subculture) became apparent: On the one hand, the legacy and further development of the local "scene," hardly perceived as profit-oriented and manifested in socio-cultural centres and a small-scale variety of gastronomy and entertainment in the time before reunification, and investments in office complexes in prime riverside locations driven by global media corporations; on the other, urban policy was forced to focus both on the growth of the commercial media industry in the competition between cities and not to jeopardise an essential resource of the newly gained attractiveness with the creative diversity of its urban society. The resulting contradictions of simultaneously promoting globalised creative industries and local initiatives, especially acting as "urban pioneers" temporarily re-using vacant lots and industrial buildings became noticeable only to some extent due to the low economic dynamism (Senatsverwaltung für Stadtentwicklung, 2007; Shaw, 2005). In addition to stabilising individual projects like Holzmarkt, gradual displacement by higher-value uses was to be compensated for by relocating temporary uses to the area of the abandoned inner-city Tempelhof airport (Hilbrandt, 2017). Even in this

context, it became clear that the main threat to precarious creative uses was much more pronounced in significantly underutilised areas than in listed industrial buildings.

During the economic crisis, further decentralised creative centres were able to establish themselves on former industrial sites due to the lack of pressure from the real estate industry in the context of an urban policy that was generally more focused on the promotion of creative clusters, but which had only limited financial scope for action (Senatsverwaltung für Stadtentwicklung, 2006). At the same time, commercial re-use concepts in the creative spectrum were established very slowly in a few individual cases. This ambiguous constellation is exemplified by the proximity of the former Königstadt Brewery, gradually developed by a co-operative from 1995 and into this period for a wide range of uses between crafts and culture, and the profit-oriented Backfabrik complex, which could not be completed for several years. Commercial, cultural, and social facilities come together at the ExRotaprint site, gradually developed by an association since 2007, whose ownership has been secured through the work of charitable foundations. However, the city's international fame was certainly embodied most prominently by the cultural and entertainment cluster RAW (Borufka, 2017). It is well-known internationally not the least for its abundance of bars and clubs established on a former railway repair workshop already at the end of the preceding period and "saved" by considerable public planning interventions against private redevelopment efforts.

4.4. Phase 4 (Since 2016): Property Boom, Re-Profiling of the "Service Metropolis," and the Role of the Media and Creative Industries Against the Backdrop of Tight Property Markets

The increasingly tense property market situation since the end of the 2000s fundamentally changed the development environment for brownfield sites. In the inner-city, they were gradually redeveloped into office and residential districts, but previously unattractive sites were now mobilised by private investors for a variety of uses. Less densely built-up residual areas on the edge of the city centre and areas on the periphery were included to a greater extent. Owners of extensive manufacturing sites, such as the Siemens Group, designed their complex restructuring into multifunctional urban neighbourhoods, resulting in several projects currently being prepared or implemented. The Berlin Senate responded by subsidising the allocation of artists' studios and "experimental spaces" for creative uses outside of the market (Der Regierende Bürgermeister von Berlin, 2014; Senatsverwaltung für Kultur und gesellschaftlichen Zusammenhalt, n.d.). The range of events is epitomised by the subsequent use of different former brewery sites. The KINDL brewery was partly converted into a top-class art centre by Swiss philanthropists. The Bötzow-Brauerei, having previously suffered extensive war damage and long vacancy, was converted into a Berlin representative office by a German hidden champion, incorporating cultural offerings. The multifunctional re-densification and "second transformation" of the former Bockbrauerei, which had long been used for small businesses and some creative uses and is now partly redeveloped, is accompanied by heavy local criticism (see Wem gehört Kreuzberg, 2024) yet securing future creative uses (see Bünger, 2023). The revitalisation of Bärenquell brewery on the outskirts, which had fallen into disrepair following failed attempts to convert it into a DIY store, as well as Malzfabrik, a site already slowly started in the previous period, are other revitalisation efforts of sites that had long been off the agenda of developers. For all their differences, almost all are characterised by the extensive use of private capital, the support of the public sector due to great planning, and the architectural importance of complementary buildings, multifunctionality, and the accommodation of cultural uses (see Supplementary Material for more information).

5. Discussion

5.1. Location Differentiation, Stabilisation, and Gradual Questioning

Looking at the development of creative locations over the decades, a gradual differentiation and multiplication of what is understood as a creative cluster and of the locations in the city that are developed can be observed. It goes hand in hand with the emergence of diverse governance structures and complex actor constellations. First, a series of socio-cultural centres, legalised during the politicised era of the squatter movement via the IBA and similar strategies, is consolidating significantly over decades despite all the questioning. The reunification of the city leads to an initial push for further development in which regeneration policies are transferred to the eastern part of the city. The decline of the industry means that numerous vacant factories are available for new occupations and further socio-cultural initiatives. As expected, many are transformed conventionally without many creative uses, accommodating office space, retail centres, or a more complex functional mix. More significant are the Kulturbrauerei, the first appearance of a commercially orientated project development that nevertheless extends into the breadth of the social "demand" for small-scale art, which still exists today after certain restructuring. With the Arena, the Pfefferberg, and the RAW site, new concepts with a high proportion of entertainment and events are also established. They are supported by culturepreneurs gradually upgrading vacant properties and professionalising their offerings in a market-oriented manner. Design, media, and other focal points of creative production-orientated office services initially remain in the background. Interestingly, given the city's economic weakness, they continue to make a name for themselves into the new millennium and form the basis for the international image of the city, which initially becomes a cultural and party metropolis rather than a service centre. In fact, they can defy the first noticeable property realisation approaches—with support from the state, districts, and foundation capital, the resistance of the local population and the early securing of power of disposal over land and property. Although many emerging temporary uses are displaced soon, there is no clear trend towards property-driven displacement despite the tight budget situation of the city and the associated limited scope for public funding in the 2000s. Amidst the spotlight on cultural hotspots, private-sector investors succeed in preparing spectacular industrial monuments, in some cases very slowly, for a growing demand from the creative sector for unconventional office and event space. But even now, ExRotaprint is still a rather "alternative" project, strongly influenced by the art scene, which is able to revitalise a seemingly unattractive but historically significant inner-city industrial wasteland and remove it from the property market with the help of foundation capital. Only with the recent property boom, there is a surge in demand for the last available spaces, once again focusing on examples of industrial culture on a larger-scale. Ironically, however, even in the limited area of former brewery sites, there are still plenty of locations available for utilisation. The disadvantageous characteristics of these remaining sites in times of economic stagnation, which only have a small proportion of remaining structural substance that would be costly to renovate, are now an advantage for profit-oriented utilisation. In some cases, this leads to displacing previously established niche uses. Multi-layered utilisation concepts come into play here, using cultural uses and historical substance for simple location branding, but in other ones also for the creation of original and "unique" locations. With the subsequent use of a brewhouse as the KINDL centre for contemporary art in a "problem quarter," another philanthropist-based art project is now being created in an industrial monument, following other private art collections that have been the subject of much discussion in the city, further broadening the spectrum of subsequent uses related to the creative scene.

5.2. Between Laissez-Faire, Property Policy Support, and Location Marketing: Urban Development and Cultural Policy in Slow Transformation

Looking at the interplay of urban policy approaches over the period under review, an ambiguous picture emerges. The first phase was strongly characterised by social policy in the context of the IBA. In addition to the legalisation and medium-term stabilisation of squats with a socio-cultural focus, the IBA took up or developed further socio-cultural concepts from local initiatives and thus also contributed to the subsequent use of commercial properties. The urban cultural policy was explicitly geared towards branding and festivalisation in the context of the 750th-anniversary celebrations in 1987. The period after reunification saw a simultaneous promotion of high culture and subculture. The city was gearing up for an expected boom and restructured large development areas alongside numerous private re-use projects at key locations. Despite a targeted establishment of important university locations in industrial landmarks and a policy to preserve inner-city production sites, land policy support for creative locations was rather decentralised and limited. Without pronounced policies, creative clusters had emerged through the re-use of vacant inner-city properties, some of which were to be stabilised in the context of careful regeneration. In the economic crisis of the 2000s, neoliberal adjustment measures were accompanied by successful international branding underpinned by cultural policy, albeit without significant shifts in emphasis for the creative scene. The promotion of the "independent scene" continued, and the noticeable success of the creative industries attracted international corporations (Colomb, 2012, pp. 138). Despite the spectacular resistance of the local population to the Media-Spree initiative, temporary uses with a creative veneer and a focus on bars, clubs, and events spreading in many places were not immune to the long-term commercial valorisation of niche locations, especially those with low-density development. Nevertheless, individual projects were also secured against commercial property utilisation, as the re-use of Tempelhof airport for interim uses outside the hotspots of the city's creative scene demonstrates. The great supra-regional attention that Berlin enjoyed increasingly made foundations and philanthropists revitalise unusual properties off the market. Low property prices allowed an affordable entry into this field for a long time. Nowadays, however, soaring real estate prices put pressure on less densely built-up private developments of former industrial sites using culture-orientated branding strategies. The public sector supports site re-densification, as in the case of the RAW site and the Bockbrauerei. While displacement of creative uses is not solely attributable to this policy constellation, rising property prices are gradually destabilising creative and niche uses.

In summary, it can be observed that urban policy supports creative uses in a variety of ways, whether as an initiator of projects, a mediator, or a stabiliser. The everchanging priorities pursued in this context, which are based on a rather broad understanding of cultural policy, range from socio-cultural promotion at the neighbourhood level to support for artists and image building through creative spaces (Boswinkel & van Meerkerk, 2023). Cultural policy is only loosely linked to property policy or urban development policy. Only recently, the state's general land policy has gradually changed, using both leaseholds and concept procedures for the provision of public properties (Silomon-Pflug & Heeg, 2013). In the latter, it is not the highest bidder but the one with the most suitable concept for urban development according to predetermined criteria—one of which is usually a comparatively high proportion of socio-cultural uses and affordable housing—that is awarded the property. This is also intended to take into account less affluent users or protect them from being driven out of the city. However, the recent focus on economic sustainability in the development of cultural centres suggests that support for artists could be neglected in times of rising property prices.

6. Conclusions

In Berlin, there is evidence to confirm common scientific assessments of the role of creative uses, art, and culture in urban development and urban regeneration policies accompanying sectoral structural change. Nevertheless, some of the findings in the literature appear to reflect the differentiated events only in an abridged form. There has been a change over time in what is referred to as "cultural use" and promoted at all, from the socio-cultural places in the 1970s to the cultural-economic factories in the 1990s to the temporary subcultural places in the 2000s ("urban pioneers") and the 2010s and now rather a narrowing down to artistic production. The city's diverse clusters represent an important, incrementally grown, creative infrastructural capital that is often not recognised in its full breadth and whose contribution to the city's cultural life is often too little perceived by politicians. There are clear signs of the instrumentalisation of art and culture for branding approaches. However, these are also linked to an explicit preservation and sustainable re-use of industrial heritage. Structural additions to it exploit opportunities for space-saving inner-city development and create attractive new locations for diverse user groups where traditional centres have lost vitality. Besides attractive spaces for an expanding creative industry, they also offer a variety of other services for different local user groups, ranging from intercultural understanding, the integration of young people into the labour market, decentralised cultural offerings, and spaces for the independent cultural scene to gastronomy, entertainment, and educational purposes. The various ownership and organisational constructs that have led to the stabilisation of non-profit initiatives, in combination with philanthropists' projects, provide a multi-layered addition to the multitude of conventional and creatively branded re-uses of historic industrial buildings.

In summary, urban development, land, and cultural policies tend to run side by side for long stretches rather than being coherently coordinated to stringently promote the creative scene (Ebert & Kunzmann, 2007). The fact that this leads to conflicts is shown not least by the repeatedly observed resistance to the instrumentalisation of art and culture for an urban policy characterised as "neoliberal" and the associated signs of displacement. The keyword gentrification is not always accurate at this point, especially as some of the locations affected are only subject to very indirect or long-term upgrading processes. The Senate and the districts, in cooperation with civil society actors, are repeatedly able to stabilise locations, projects, and initiatives in individual cases. If we analyse the criticism in the literature and from the "scene" in more detail, it becomes clear that niche users on remaining spaces are the long-term "main losers," but have still been able to a certain extent to switch to others, often more peripheral locations in cases such as the bar and club scene hardly touched on in this article or urban gardening projects. It remains to be seen whether the repeated success in stabilising socio-cultural projects means that Berlin's typical diversity of creative uses can be stabilised in the long term or even further enriched as in the past. In any case, there are several important prerequisites: a stable orientation towards existing buildings when dealing with industrial heritage, the enormous importance of local resources for the creative industries and tourism in the city, the still active counterculture repeatedly resisting simple profit-orientated transformations, the experience with alternative development concepts and their legal protection, as well as the social demand for a differentiated offer between high culture and subculture. While the orientation towards cultural heritage is not being questioned, resistance to profit-oriented conversions is becoming increasingly difficult in the face of increasing pressure on the property markets. At the same time, attempts are being made to counteract a loss of vitality in traditional sub-centres and brownfield sites by strengthening non-commercial uses. In addition to the Senate's support for artists' spaces, there are opportunities here to secure de-commodified spaces, in

particular through the districts, which are operated by the public, foundations, or non-profit organisations. These efforts have been partially successful in these milieus and should be seen as an important future task to promote alternative uses beyond entertainment and design studios at the neighbourhood level (see Land Berlin, n.d.).

I would suggest further discussing the overall picture sketched in this article as rent-gap seeking in an environment of strong heritage and socio-cultural policies, which seems to be typical for Berlin and many European cities. The extent to which a comparable scope for creative uses, which is nevertheless heavily dependent on property developments, can also emerge beyond the market depends largely on the general self-conception of a city and its most important governance actors. This applies in particular to the relationship between urban development and cultural policy and their respective instruments. As the Berlin case study clearly shows, the importance of industrial heritage for the preservation of historical monuments means that there is no further threat to the structural substance from profit-oriented developments. However, the iconic significance of some of the properties examined has increasingly narrowed the scope for developments beyond the market. Alternative projects with creative uses can establish themselves in individual cases, particularly if they can demonstrate a major significance for a small-scale urban district development and are supported in elaborate processes by the city, the districts, or municipal companies. Their long-term survival will also depend on the interplay between cultural policy, property policy, and urban development policy, especially since industrial heritage is seen as an important spatial resource for the cultural and economic development of the city.

Acknowledgments

I thank the reviewers for their valuable comments.

Conflict of Interests

The author declares no conflict of interests.

Supplementary Material

Supplementary material for this article is available online in the format provided by the author (unedited).

References

Altrock, U. (2003). *Büroflächen in Berlin*. Reimer.

Altrock, U. (2014). Ökonomisierungstendenzen in der Stadtentwicklungspolitik: Die schleichende Neoliberalisierung der Deutschen Städte? In G. S. Schaal, M. Lemke, & C. Ritzi (Eds.), *Die Ökonomisierung der Politik in Deutschland* (pp. 151–173). Springer.

Altrock, U., & Fan, L. (2023). Spekulation nach Abschluss einer erfolgreichen Sanierung? In U. Altrock, R. Kunze, D. Kurth, H. Schmidt, & G. Schmitt (Eds.), *Stadterneuerung und Spekulation* (pp. 279–314). Springer.

Andres, L., & Golubchikov, O. (2016). The limits to artist-led regeneration: Creative brownfields in the cities of high culture. *International Journal of Urban and Regional Research*, *40*(4), 757–775. https://doi.org/10.1111/1468-2427.12412

Andres, L., & Grésillon, B. (2013). Cultural brownfields in European cities: A new mainstream object for cultural and urban policies. *International Journal of Cultural Policy*, *19*(1), 40–62. https://doi.org/10.1080/10286632.2011.625416

Arandelovic, B., & Bogunovich, D. (2014). City profile: Berlin. *Cities*, *37*, 1–26. https://doi.org/10.1016/j.cities.2013.10.007

Arbab, P., & Alborzi, G. (2022). Toward developing a sustainable regeneration framework for urban industrial heritage. *Journal of Cultural Heritage Management and Sustainable Development*, *12*(3), 263–274. https://doi.org/10.1108/JCHMSD-04-2020-0059

Bader, I., & Scharenberg, A. (2010). The sound of Berlin: Subculture and the global music industry. *International Journal of Urban and Regional Research*, *34*(1), 76–91. https://doi.org/10.1111/j.1468-2427.2009.00927.x

Bain, A. L. (2018). Artists as property owners and small-scale developers. *Urban Geography*, *39*(6), 844–867. https://doi.org/10.1080/02723638.2017.1405687

Bain, A. L., & Landau, F. (2019). Artists, temporality, and the governance of collaborative place-making. *Urban Affairs Review*, *55*(2), 405–427. https://doi.org/10.1177/1078087417711044

Bain, A. L., & Landau, F. (2022). Generating cultural quarters: The temporal embeddedness of relational places. *Urban Geography*, *43*(10), 1610–1637. https://doi.org/10.1080/02723638.2021.1940446

Biehl, B. (2020). *Management in der Kreativwirtschaft: Grundlagen und Basiswissen*. Springer. https://doi.org/10.1007/978-3-658-28817-4

Bodenschatz, H. (1987). *Platz frei für das neue Berlin: Geschichte der Stadterneuerung in der größten Mietskasernenstadt der Welt seit 1871*. Transit.

Borén, T., & Young, C. (2017). Artists and creative city policy: Resistance, the mundane and engagement in Stockholm, Sweden. *City, Culture and Society*, *8*, 21–26. https://doi.org/10.1016/j.ccs.2016.05.002

Borufka, S. (2017, November 5). RAW-Gelände—Touristen auf der Suche nach dem Mythos Berlin. *Berliner Morgenpost*. https://www.morgenpost.de/berlin/article212442577/Touristen-auf-der-Suche-nach-dem-Mythos-Berlin.html

Boswinkel, K., & van Meerkerk, E. (2023). Creative hubs: An anomaly in cultural policy? *International Journal of Cultural Policy*, *29*(6), 767–785. https://doi.org/10.1080/10286632.2022.2107636

Bünger, R. (2023, March 23). Bockbrauerei in Kreuzberg: Bauwert AG zapft Gewerbequartier für Wohnungsbau an. *Tagesspiegel*. https://www.tagesspiegel.de/berlin/berliner-wirtschaft/bockbrauerei-in-kreuzberg-bauwert-ag-zapft-gewerbequartier-fur-wohnungsbau-an-9549230.html

Cameron, S., & Coaffee, J. (2005). Art, gentrification and regeneration—From artist as pioneer to public arts. *European Journal of Housing Policy*, *5*(1), 39–58. https://doi.org/10.1080/14616710500055687

Colomb, C. (2012). Pushing the urban frontier: Temporary uses of space, city marketing, and the creative city discourse in 2000s Berlin. *Journal of Urban Affairs*, *34*(2), 131–152. https://doi.org/10.1111/j.1467-9906.2012.00607.x

D'Ovidio, M., & Cossu, A. (2017). Culture is reclaiming the creative city: The case of Macao in Milan, Italy. *City, Culture and Society*, *8*, 7–12. https://doi.org/10.1016/j.ccs.2016.04.001

Della Lucia, M., & Trunfio, M. (2018). The role of the private actor in cultural regeneration: Hybridizing cultural heritage with creativity in the city. *Cities*, *82*, 35–44. https://doi.org/10.1016/j.cities.2018.05.003

Der Regierende Bürgermeister von Berlin. (2014). *Kulturförderbericht 2014 des Landes Berlin*. https://www.berlin.de/sen/kultur/kulturpolitik

Duarte, F., & Sabaté, J. (2013). 22@Barcelona: Creative economy and industrial heritage-a critical perspective. *Theoretical and Empirical Researches in Urban Management*, *8*(2), 5–21.

Ebert, R., & Kunzmann, K. R. (2007). Cultural industries, creative spaces and urban development in Berlin. *disP—The Planning Review*, *43*(171), 64–79. https://doi.org/10.1080/02513625.2007.10556997

Evans, G. (2009). Creative cities, creative spaces and urban policy. *Urban Studies*, *46*(5/6), 1003–1040. https://doi.org/10.1177/0042098009103853

Evans, G. (2015). Rethinking place branding and place making through creative and cultural quarters. In M. Kavaratzis, G. Warnaby, & G. J. Ashworth (Eds.), *Rethinking place branding* (pp. 135–158). Springer. https://doi.org/10.1007/978-3-319-12424-7_10

Florida, R. (2002). *The rise of the creative class*. Basic books.

Fossa, G. (2014). Milan: Creative industries and the use of heritage. In H. A. Mieg & H. Oevermann (Eds.), *Industrial heritage sites in transformation: Clash of discourses* (pp. 62–78). Taylor & Francis.

García, M., Eizaguirre, S., & Pradel, M. (2015). Social innovation and creativity in cities: A socially inclusive governance approach in two peripheral spaces of Barcelona. *City, Culture and Society*, *6*(4), 93–100. https://doi.org/10.1016/j.ccs.2015.07.001

Goldberg-Miller, S. B. (2019). Creative city strategies on the municipal agenda in New York. *City, Culture and Society*, *17*, 26–37. https://doi.org/10.1016/j.ccs.2018.08.004

Grodach, C. (2011). Art spaces in community and economic development: Connections to neighborhoods, artists, and the cultural economy. *Journal of Planning Education and Research*, *31*(1), 74–85. https://doi.org/10.1177/0739456X10391668

Grodach, C., Foster, N., & Murdoch, J. (2018). Gentrification, displacement and the arts: Untangling the relationship between arts industries and place change. *Urban Studies*, *55*(4), 807–825. https://doi.org/10.1177/0042098016680169

Grodach, C., & Loukaitou-Sideris, A. (2007). Cultural development strategies and urban revitalisation: A survey of US cities. *International Journal of Cultural Policy*, *13*(4), 349–370. https://doi.org/10.1080/10286630701683235

Grodach, C., O'Connor, J., & Gibson, C. (2017). Manufacturing and cultural production: Towards a progressive policy agenda for the cultural economy. *City, Culture and Society*, *10*, 17–25. https://doi.org/10.1016/j.ccs.2017.04.003

Harfst, J., Pizzera, J., & Simic, D. (2016). Industrial heritage, cultural resources of current industries and creative pioneers: Utilising industrial culture in Central Europe. *Revizja za geografijo*, *11*(2), 47–56. https://doi.org/10.18690/rg.11.2.3965

Hilbrandt, H. (2017). Insurgent participation: Consensus and contestation in planning the redevelopment of Berlin-Tempelhof airport. *Urban Geography*, *38*(4), 537–556. https://doi.org/10.1080/02723638.2016.1168569

Industriekultur Berlin. (n.d.). *Berliner industriekultur im Überblick*. https://industriekultur.berlin/entdecken/berliner-industriekultur

Jakob, D. (2010). Constructing the creative neighborhood: Hopes and limitations of creative city policies in Berlin. *City, Culture and Society*, *1*(4), 193–198. https://doi.org/10.1016/j.ccs.2011.01.005

Jakob, D. (2013). The eventification of place: Urban development and experience consumption in Berlin and New York City. *European Urban and Regional Studies*, *20*(4), 447–459. https://doi.org/10.1177/0969776412459860

Kimmel, E. (2018). *West-Berlin: Biografie einer Halbstadt*. Ch. Links.

Krätke, S. (2002). *Medienstadt: Urbane Cluster und globale Zentren der Kulturproduktion*. Springer. https://doi.org/10.1007/978-3-663-01270-2

Land Berlin. (n.d.). *Informationsplattform zum Modellprojekt Rathausblock Dragonerareal*. https://www.berlin.de/rathausblock-fk

Landry, C. (2000). *The creative city*. Earthscan.

Lange, B. (2011). Professionalisation in space: Social-spatial strategies of culturepreneurs in Berlin. *Entrepreneurship & Regional Development*, *23*(3/4), 259–279. https://doi.org/10.1080/08985620903233978

Lloyd, R. (2010). *Neo-bohemia: Art and commerce in the postindustrial city* (2nd ed.). Routledge.

Loures, L. (2015). Post-industrial landscapes as drivers for urban redevelopment: Public versus expert

perspectives towards the benefits and barriers of the reuse of post-industrial sites in urban areas. *Habitat International*, *45*, 72–81. https://doi.org/10.1016/j.habitatint.2014.06.028

Mackrodt, U., & Kalandides, A. (2014). Competing yet supplementing narratives in Berlin: Creative branding and heritage policies in Berlin's post-industrial development. In H. A. Mieg & H. Oevermann (Eds.), *Industrial heritage sites in transformation: Clash of discourses* (pp. 126–145). Taylor & Francis.

Maechtel, A. (2020). *Das Temporäre politisch denken: Raumproduktion im Berlin der frühen 1990er Jahre*. b_books.

Mieg, H. A., & Oevermann, H. (2014). *Industrial heritage sites in transformation: Clash of discourses*. Taylor & Francis.

Miles, S. (2020). Consuming culture-led regeneration: The rise and fall of the democratic urban experience. *Space and Polity*, *24*(2), 210–224. https://doi.org/10.1080/13562576.2020.1775573

Mould, O. (2015). *Urban subversion and the creative city*. Routledge.

Nedučin, D., & Krklješ, M. (2022). Culture-led regeneration of industrial brownfield hosting temporary uses: A post-socialist context-case study from Novi Sad, Serbia. *Sustainability*, *14*(23), Article 16150. https://doi.org/10.3390/su142316150

Novy, J., & Colomb, C. (2013). Struggling for the right to the (creative) city in Berlin and Hamburg: New urban social movements, new "spaces of hope"? *International Journal of Urban and Regional Research*, *37*(5), 1816–1838. https://doi.org/10.1111/j.1468-2427.2012.01115.x

O'Connor, J., Gu, X., & Lim, M. K. (2020). Creative cities, creative classes and the global modern. *City, Culture and Society*, *21*, Article 100344. https://doi.org/10.1016/j.ccs.2020.100344

Oevermann, H., Degenkolb, J., Dießler, A., Karge, S., & Peltz, U. (2016). Participation in the reuse of industrial heritage sites: The case of Oberschöneweide, Berlin. *International Journal of Heritage Studies*, *22*(1), 43–58. https://doi.org/10.1080/13527258.2015.1083460

Ooi, C.-S., & Stöber, B. (2010). Authenticity and place branding: The arts and culture in branding Berlin and Singapore. In B. T. Knudsen & A. M. Waade (Eds.), *Re-investing authenticity: Tourism, places and emotions* (pp. 66–79). Channel View Publications.

Peck, J. (2005). Struggling with the creative class. *International Journal of Urban and Regional Research*, *29*(4), 740–770. https://doi.org/10.1111/j.1468-2427.2005.00620.x

Plevoets, B., & Sowińska-Heim, J. (2018). Community initiatives as a catalyst for regeneration of heritage sites: Vernacular transformation and its influence on the formal adaptive reuse practice. *Cities*, *78*, 128–139. https://doi.org/10.1016/j.cities.2018.02.007

Pradel-Miquel, M. (2017). Kiezkulturnetz vs. Kreativquartier: Social innovation and economic development in two neighbourhoods of Berlin. *City, Culture and Society*, *8*, 13–19. https://doi.org/10.1016/j.ccs.2016.05.001

Pratt, A. C. (2009). Urban regeneration: From the arts "feel good" factor to the cultural economy: A case study of Hoxton, London. *Urban Studies*, *46*(5/6), 1041–1061. https://doi.org/10.1177/0042098009103854

Rius-Ulldemolins, J., & Díaz-Solano, P. (2023). Local political change, the neo-creative city paradigm and the mutations of Valencian cultural branding. *City, Culture and Society*, *34*, Article 100535. https://doi.org/10.1016/j.ccs.2023.100535

Roodhouse, S. (2006). *Cultural quarters: Principles and practice*. Intellect Books.

Rosenstein, C. (2011). Cultural development and city neighborhoods. *City, Culture and Society*, *2*(1), 9–15. https://doi.org/10.1016/j.ccs.2011.02.002

Schmidt, S., Brinks, V., & Brinkhoff, S. (2014). Innovation and creativity labs in Berlin: Organising temporary spatial configurations for innovations. *Journal of Economic Geography*, *58*(1), 232–247. https://doi.org/10.1515/zfw.2014.0016

Schroeder, S. (2020). Crafting new lifestyles and urban places: The craft beer scene of Berlin. *Papers in Applied Geography*, *6*(3), 204–221. https://doi.org/10.1080/23754931.2020.1776149

Senat von Berlin. (2006). *Mitteilung—Zur Kenntnisnahme—Eckpunkte für ein kulturpolitisches Gesamtkonzept* (Drucksache 15/4976). https://www.parlament-berlin.de/ados/IIIPlen/vorgang/d15-4976.pdf

Senatsverwaltung für Kultur und gesellschaftlichen Zusammenhalt. (n.d.). *Kulturförderung*. https://www.berlin.de/sen/kultur/foerderung

Senatsverwaltung für Stadtentwicklung. (2006). *Kreativräume in der Stadt*. Senatsverwaltung für Stadtentwicklung Berlin.

Senatsverwaltung für Stadtentwicklung. (2007). *Urban pioneers*. Jovis.

Senatsverwaltung für Stadtentwicklung und Umweltschutz. (1993). *Konzept zur Industrieflächensicherung*. Unpublished document.

Senatsverwaltung für Bau- und Wohnungswesen, & STERN Berlin GmbH. (1991). *Internationale Bauausstellung Berlin. Projektübersicht*. Senate Department for Building and Housing.

Shaw, K. (2005). The place of alternative culture and the politics of its protection in Berlin, Amsterdam and Melbourne. *Planning Theory & Practice*, *6*(2), 149–169. https://doi.org/10.1080/14649350500136830

Silomon-Pflug, F., & Heeg, S. (2013). Neoliberale Neuordnung städtischer Verwaltungen am Beispiel des Liegenschaftsfonds Berlin. *Geographische Zeitschrift*, *101*(3/4),184–200. https://www.jstor.org/stable/24576975

Stern, M. J., & Seifert, S. C. (2010). Cultural clusters: The implications of cultural assets agglomeration for neighborhood revitalisation. *Journal of Planning Education and Research*, *29*(3), 262–279. https://doi.org/10.1177/0739456X09358555

Suwala, L., Kitzmann, R., & Kulke, E. (2021). Berlin's manifold strategies towards commercial and industrial spaces: The Different cases of Zukunftsorte. *Urban Planning*, *6*(3), 415–430. https://doi.org/10.17645/up.v6i3.4239

van Schipstal, I. L. M., & Nicholls, W. J. (2014). Rights to the neoliberal city: The case of urban land squatting in "creative" Berlin. *Territory, Politics, Governance*, *2*(2), 173–193. https://doi.org/10.1080/21622671.2014.902324

Vasudevan, A. (2015). *Metropolitan preoccupations: The spatial politics of squatting in Berlin*. Wiley.

Watson, A., & Taylor, C. (2017). *Rethinking creative cities policy: Invisible agents and hidden protagonists*. Routledge.

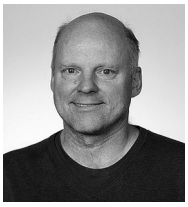
Wem gehört Kreuzberg. (2024). *Statement der Stadtteilinitiative Wem gehört Kreuzberg zum Neubau auf dem Gelände der Bockbrauerei*. https://wem-gehoert-kreuzberg.de/index.php/ueber-uns/2-start/9050-statement-der-stadtteilinitiative-wem-gehoert-kreuzberg-zum-neubau-auf-dem-gelaende-der-bockbrauerei

Whiting, S., Barnett, T., & O'Connor, J. (2022). "Creative city" R.I.P.? *M/C Journal*, *25*(3). https://doi.org/10.5204/mcj.2901

Zukin, S. (1982). Loft living as "historic compromise" in the urban core: The New York experience. *International Journal of Urban & Regional Research*, *6*(2), 256–267. https://doi.org/10.1111/j.1468-2427.1982.tb00577.x

Zukin, S. (1987). Gentrification: Culture and capital in the urban core. *Annual Review of Sociology*, *13*, 129–147. https://doi.org/10.1146/annurev.so.13.080187.001021

About the Author



Uwe Altrock (Dr.-Ing.) is a professor of urban regeneration and planning theory at the Institute for Urban Development of the School of Architecture, Urban and Landscape Planning at the University of Kassel. His research interests are urban regeneration, urban governance, planning theory, megacities, and suburban development. Currently, he is the head of the German Research Foundation-funded research group FOR2425 Urban Expansion in Times of Re-Urbanization—New Suburbanism?

Urban Planning
2024 • Volume 9 • Article 8269
https://doi.org/10.17645/up.8269

cogitatio

ARTICLE

Open Access Journal

Spatial Politics of Cultural Production: Negotiating Workspaces and Resisting Displacement at Industrial Heritage Sites in Berlin

Janet Merkel

Department of Urban and Regional Economics, Technische Universität Berlin, Germany

Correspondence: Janet Merkel (janet.merkel@tu-berlin.de)

Submitted: 14 February 2024 **Accepted:** 19 August 2024 **Published:** 30 October 2024

Issue: This article is part of the issue "Industrial Heritage and Cultural Clusters: More Than a Temporary Affair?" edited by Uwe Altrock (University of Kassel) and Janet Merkel (TU Berlin), fully open access at https://doi.org/10.17645/up.i341

Abstract

Derelict industrial spaces have been crucial spatial resources for artists and cultural production for decades, often forming vibrant cultural clusters. However, these spaces are increasingly threatened by speculative real-estate development and displacement through more "productive" creative industries. The case of Alte Münze in Berlin provides empirical insight into the politics, practices, and strategies essential for preserving these heritage sites in the long term for cultural use. This research underscores the need for supportive planning regulations that combine cultural policy with urban planning, advocate for public-civic partnerships, and promote public or community-based ownership models. The findings extend to small-scale manufacturers and businesses facing similar challenges in maintaining workspaces amid competitive urban land use pressures.

Keywords

cultural clusters; cultural production; displacement; industrial heritage; spatial cultural policy; workspaces

1. Introduction

Workspace provision for cultural production has historically been neglected in both cultural policy and urban planning. Yet, affordable workspaces and housing are critical material conditions that facilitate and shape cultural production (Bingham-Hall & Kaasa, 2018; Farías & Wilkie, 2016; Williams, 1993) and help promote equity and inclusion within the cultural sector. Industrial heritage sites have been critical resources for affordable workspaces (Andres & Grésillon, 2013; Wijngaarden & Hracs, 2024) but face increasing displacement due to redevelopment and gentrification (Pollio et al., 2021; Shaw, 2013). The COVID-19 pandemic exacerbated the situation, with many artists giving up their workspaces due to economic

insecurities and inadequate support. The affordability crisis for workspaces is now considered the most significant threat to cultural development and production in cities (BOP, 2018).

This article examines workspace struggles in Berlin based on the single case study of Alte Münze, revealing emerging policies and strategies for maintaining industrial heritage sites as affordable cultural workspaces (Pollio et al., 2021). It argues that developments at Alte Münze reflect a shift in policy that challenges the transient nature of cultural clusters in such sites (Boswinkel & van Meerkerk, 2023; Krivý, 2013). The first section of this article reviews the literature on cultural production at industrial heritage sites, the spatial struggles of artists and cultural workers in urban environments, and recent policy developments. The second section presents the findings of the case study analysis, and the third section discusses the conclusions drawn from this analysis.

2. Cultural Production at Industrial Heritage Sites

In recent decades, derelict industrial heritage, such as disused factories and warehouses, has been a critical spatial resource for cultural production. Industrial spaces have provided "affective atmospheres" (Wijngaarden & Hracs, 2024) and material and symbolic assets for many independent cultural producers (Gainza, 2018; Hutton, 2006; Zielke & Waibel, 2015; Zukin, 1982) in various spatial contexts, from urban to rural areas. Their spaciousness and adaptability facilitate multiple artistic practices and uses, while also allowing for noisy, dirty, large-scale, and complex work. As these workspaces are often located on the periphery, they remained affordable. Andres and Grésillon (2013) discuss these vacant industrial sites as cultural brownfields that play a substantial role in cultural development strategies and "creative city" aspirations for "altering the perception of a deindustrialized vacant land and becoming part of the contemporary post-industrial cityscape" (Gainza, 2018, p. 794).

Research underscores the temporary and transient nature of cultural uses in industrial heritage sites (Gainza, 2018; Mould & Comunian, 2015). Cities often instrumentalise these spaces and their temporariness, using cultural production for urban production (Boswinkel & van Meerkerk, 2023; Cossu, 2022). Thus, Andres and Golubchikov (2016) argue that artists are usually co-opted agents, mere "cleaners of derelict brownfields" (p. 771), with these spaces only serving as "soft infrastructure of creativity" (p. 760). They assert that while these spaces are utilised as breeding grounds for grassroots creativity, artists' engagement with these sites is often temporary and operational rather than lasting and strategic. The evolution of cultural brownfields typically leads either to their adaptation into less contentious spaces included in urban policy or to their eventual disappearance (Andres & Grésillon, 2013; Vivant, 2022). Investments and urban redevelopment strategies have often prioritised spaces for cultural consumption—such as performance or exhibition venues—over spaces for cultural production (Mould & Comunian, 2015). This raises the question: Do cultural clusters at industrial heritage sites always have to remain "liminal spaces of the post-industrial city in the margins of both, the built environment and the social imaginary" (Gainza, 2018, p. 794)? While there is a great deal of research on how cultural clusters emerge in brownfields (Andres & Grésillon, 2013; Lidegaard et al., 2018), there is little on how these sites can be maintained in the long term as a cultural cluster—here understood as the spatial clustering of cultural production activities (Chapain & Sagot-Duvauroux, 2020; Pratt, 2008)—or on the spatial needs, practices, and processes of artists and cultural workers in affordable workspace development.

3. Spatial Struggles and Spatial Inequalities of Artists and Cultural Workers

Virginia Woolf (1929/2002) famously argued in her essay *A Room of One's Own* that "a woman must have money and a room of her own if she is to write fiction" (p. 4). In contemporary cities, sustaining both conditions—a sufficient income and a dedicated workspace—is increasingly challenging for cultural workers. In Berlin, for instance, it is reported that 90% of the city's 9,500 visual artists cannot rely on their artistic income alone and require additional sources of income (Schwegmann et al., 2021, p. 27). Similarly, 80% of artists in Toronto cannot earn a living wage (Toronto Arts Foundation, 2019, p. 3). These statistics highlight the pervasive economic precarity among cultural practitioners, illustrating the critical combination of financial stability and workspace accessibility in supporting creative livelihoods.

Even before the COVID-19 pandemic and its profound impacts on freelance and self-employed cultural workers, there was growing criticism from artists' advocacy groups regarding their displacement and disenfranchisement from urban centres. These collective protests underscored the acute challenges surrounding the affordability of housing and the availability of suitable workspaces, particularly in cities recognised as global art hubs. For instance, in New York City, discontent culminated in the drafting of *The People's Cultural Plan for Working Artists and Communities* (PCP, 2017). This initiative challenged the inadequacy of housing and workspace provisions in the city's official cultural strategy amidst the cost of living crisis. Similarly, in Berlin, the newly formed Coalition of the Independent Arts emerged as a vocal advocate, critiquing the marginalisation of cultural work in traditional policy debates and highlighting the pressing issues of affordable workspace scarcity and displacement (Berlin Visit, 2014; Landau, 2019). In many cities, arts squatting has emerged as a tangible manifestation of these spatial struggles (d'Ovidio & Cossu, 2017; Moore & Smart, 2015; Vivant, 2022).

Artists and cultural workers have long contended with challenges in securing affordable housing and workspaces in urban environments, rendering them particularly vulnerable and reliant on their ability to navigate spatial constraints (Anderson, 1996; Bain & March, 2019; Shkuda, 2015; Williams, 1993). Despite these ongoing struggles, supportive policy initiatives have been introduced in some instances. In New York's Soho district, artists advocated to legalise their live-work studios in industrial lofts, ultimately influencing zoning laws to convert these spaces from illegal housing into legal residences (Shkuda, 2015; Zukin, 1982). Many cities have introduced artist housing initiatives (Strom, 2010), provided subsidised rent schemes (Hoe, 2020; Pruijt, 2013), or zoned arts and entertainment districts (Rich & Tsitsos, 2016). Cultural philanthropy can also play an important role in offering stability to the local art community (Bain & March, 2019). Despite such municipal and philanthropic interventions, artists still face significant challenges in securing adequate workspaces.

Artists' survival and adaptation strategies to pressure on land use remain understudied. Anderson (1996) discusses cooperative housing as a strategy for artists to control their living and working environments. Bain (2018) explores how property ownership shields artists from market pressures. Pollio et al. (2021) examine spatial adaptation strategies and solidarity economies among artists in Sydney. Williams (2019) illustrates how guild-like structures facilitate mutual support through spatial co-location and resource sharing, while squatting has also been employed to secure disinvested properties as workspaces (Moore & Smart, 2015; Pruijt, 2013; Vivant, 2022). In Paris, many art squats were then legalised through public domain occupancy agreements with artist collectives. However, these agreements introduced expectations with regard to artist

professionalisation and fostered competition among art groups, diluting artistic critique in "the new spirit of capitalist urban planning" (Vivant, 2022, p. 8).

The recent shortage of workspaces is primarily attributed to the loss of informal spaces in former industrial sites (Curran, 2010; March, 2020; Ross, 2022), which are being repurposed into residential or commercial developments and often cater to more "productive" creative and cultural industries (Sprague & Rantisi, 2019). The workspace crisis became more pressing during the pandemic, with many artists relocating their workspaces to their homes and relinquishing their studio spaces (Marquardt & Hübgen, 2021; Musicboard Berlin, 2021).

4. Affordable Workspace Provision as New Spatial Cultural Policies

Rising spatial inequalities in access to affordable workspaces for artists have been increasingly discussed over the past ten years (Merkel, 2023; Moreton, 2013; Pollio et al., 2021; Shaw, 2013). The insecure and vulnerable workspace situation is due to short-term rents, financial pressure from the cost-of-living crisis, a lack of ownership among artists, and imminent threats of (re)development (Ferm et al., 2022; Pollio et al., 2021; Scott, 2022). Newly created spaces are often unsuitable and commercial leases are subject to commercial lease law, which usually provides less protection. For instance, in Germany, commercial leases have shorter notice periods and no caps on rent increases. Moreover, artists often invest in refurbishing their workspace to suit their needs (Pollio et al., 2018, p. 7).

Many cities acknowledge the workspace problem, often in conjunction with the broader displacement and loss of performance venues and clubs (BOP, 2018). They aim to develop new strategies and policies for the spatial provision of cultural spaces. These plans signify a remarkable shift as they employ planning instruments and regulations to protect existing cultural spaces and facilitate the creation of new cultural infrastructures amidst the pressures of finance-led (re)development and the resulting gentrification (Aalbers, 2019). These new policy guidelines evolve at the intersection of cultural policy and planning and aim to enhance access to affordable workspaces, rehearsal spaces, and performance venues for artists, while also safeguarding existing spaces. For example, London has developed comprehensive guidelines with a *Cultural Infrastructure Plan* (GLA, 2019) and established a Creative Land Trust to secure the creation of long-term affordable workspaces (Creative Land Trust, 2020). Similarly, the Cultural Affairs Office in Cologne commissioned a report on new planning guidelines for safeguarding cultural spaces and outlined how planning instruments at various scales (building, neighbourhood, city) can protect existing cultural spaces and foster new developments (Dewey Muller, 2020).

Despite these efforts, workspaces for cultural production are seldom discussed and often marginalised in cultural policies, receiving minimal resources, especially compared to public subsidies allocated for high art institutions. However, the scarcity of affordable and suitable workspaces impacts artists' ability to work and maintain artistic quality. Furthermore, the loss of each studio not only reduces the physical space available for cultural production but also disrupts the relation networks and the broader cultural ecosystem of the city (Ferm et al., 2022; Karimnia & Kostourou, 2023; Shaw, 2013). These broader implications for urban cultural economies are rarely discussed.

5. Methodology

This research began with a broad exploratory research question aimed at understanding current developments in cultural workspace provision in Berlin and the role of planning and cultural policy in this context. Adopting an inductive, exploratory qualitative case study approach (Stake, 2005), the aim was to develop a detailed contextual understanding of each case, the stakeholders and their positions, and the negotiation processes related to several industrial heritage sites in Berlin. Alte Münze was chosen as a single case for this article because it exemplifies a shift in cultural policy in Berlin regarding the use of inner-city industrial heritage as long-term cultural workspaces and new formations of actors challenging and negotiating the city's cultural policy. As the events were widely reported on and comprehensive documentation of the process is available, the case study is mainly based on document analysis with a focus on content (Prior, 2003) and complemented with participant observations and informal interviews conducted over the past seven years. It builds on past research on art activism and cultural policy development in Berlin (Landau & Merkel, 2019; Merkel, 2015). The reported insights are based on the analysis of secondary sources, primarily protocols from the Berlin parliament's cultural committee meetings that have negotiated the political reimagining of Alte Münze since 2017, official documentation of the participation process in 2019, 27 articles from four local newspapers (*Berliner Morgenpost*, *Berliner Zeitung*, *Tagesspiegel*, and *taz*), and stakeholder publications (i.e., concept studies, press releases). Additional data were derived from media interviews with relevant stakeholders, websites, studies on workspace provision in Berlin, informal conversations with artists and art activists during site visits, and public fora during the planning process in 2019. These unplanned, "accidental" interviews helped to contextualise decisions and events, gather better data, and understand individuals' experiences and perceptions of the process (Swain & King, 2022). If quotes are used, the author translated all of the texts and interviews.

The data analysis for analysing agenda-setting in policy processes is based on the multiple streams framework (MSF) approach (Kingdon, 1984). MFS views public policy as dynamic and complex, subject to ambiguity and uncertainty (Cairney & Jones, 2016), and identifies three distinct streams in policy formulation: problems, policies, and politics. These streams must converge during a brief "window of opportunity" in order for policy to change (Cairney & Jones, 2016, p. 39). Policy entrepreneurs who invest resources and reputation in their preferred projects facilitate the convergence of these streams. These entrepreneurs, who may hold formal or informal positions, possess persuasion and negotiation skills, connections, authority, and expertise and can come from bureaucracies, political parties, NGOs, or local communities (Herweg et al., 2018). MSF is used as a heuristic to understand the agenda setting behind the case of Alte Münze and to explain why it eventually missed the "window of opportunity" for policy change. The thematic, emergent coding of the documents (Kuckartz, 2018) focused on the stakeholders, as well as their interests, positions, and points of contention, to retrace the negotiations to maintain Alte Münze as a cultural workspace.

5.1. Berlin's Workspace Funding Programme Since 2016

Over the past three decades, Berlin has attracted artists with its abundance of disused industrial spaces, affordable housing, vibrant cultural scenes, and supportive art and cultural policy (Colomb, 2012; Grésillon, 1999; Marguin, 2015; Merkel, 2015). Since 2008, however, dissent among artists regarding urban development and the sale of public land has grown, with protests against projects like the Mediaspree property investment project (Novy & Colomb, 2013; Weber-Newth, 2019). Discontent peaked with the

controversial 2011 “Made in Berlin” art showcase, uniting artists against budget imbalances and workspace loss (Merkel, 2015). Since then, several campaigns highlighted the increasing loss of affordable workspaces in Berlin’s former industrial sites. Artists’ symbolic occupation of Haus der Statistik in 2015 (Berg, 2019), an empty high-rise at Alexanderplatz, was a pivotal moment that brought the issue to the political forefront, ultimately contributing to a renewed workspace program in 2016.

Berlin is estimated to lose 350 artist studios annually due to industrial building conversions and rising rents. At the same time, there is demand for over 10,000 new studios and workspaces (Schwegmann et al., 2021, p. 27). Recent studies from art organisations underline the severity of the issue. A survey of 1,673 visual artists revealed that 25% of artists cannot afford a studio, 33% are interim tenants at risk of losing their space, and 87% are actively searching for a new studio, most of them currently without one (BBK Kulturwerk, 2023). A third of the artists with studios indicated that losing their space would likely force them to leave Berlin. The situation is similarly dire for musicians, with 50% of Berlin’s 9,000 professional musicians seeking rehearsal spaces (Musicboard Berlin, 2021). A survey of 663 artists in performing arts, music, and literature found that 50% are searching for new workspaces, while 25% have abandoned the search due to financial constraints (Marguin et al., 2023).

With the new government coalition in 2016, safeguarding and developing cultural (work)spaces assumed a prominent role, marking a shift towards a new cultural infrastructure policy (SPD, 2016). This policy is founded on three pillars.

First, in the short term, the existing workspace programme (*Arbeitsraumprogramm*) will be expanded to allow artists to apply for subsidised studios. This approach is based on borrowed infrastructure, with cities leasing long-term commercial workspaces as general contractors and then subsidising rents (Scott, 2022). This model has recently been used to safeguard Uferhallen, a studio complex in Berlin with over 80 ateliers and rehearsal spaces (SenKultGZ, 2024c). While the Senate of Berlin intends to subsidise more than 5,000 workspaces by 2030, it had only 1,852 in 2022 (SenKultGZ, 2024a, p. 6).

Second, new cultural workspaces will be created only on public properties to avoid subsidising rising rents, a strategy deemed more sustainable and effective (SenKultGZ, 2024a, p. 3). Developing workspaces on vacant public properties is a long-term strategy as they first need to be assessed for suitability, most need substantial renovation, and they are often listed buildings (SenKultGZ, 2024a, pp. 8–9). In 2018 an acquisition fund (SIWANA IV) was established within the Special Investment Fund for Infrastructure of the Growing City and Sustainability (SIWANA), allocating a EUR 20 million budget for cultural acquisitions (SenFin, 2018). Another long-term goal is to revive studio flats for artists in public housing and to facilitate more workspaces on public commercial and industrial properties (SenStadt, 2019).

Third, due to political pressure from artists and their collectives, a new administrative unit, the *Kultur Räume Berlin* alliance (Cultural Spaces Berlin), was created in 2021 to oversee the new infrastructure policy. This has given rise to complex horizontal governance structures between various art organisations and the public administration. This multifaceted approach represents a significant advancement in Berlin’s cultural infrastructure policy, emphasising the collaborative efforts between government entities and artists to address the need for affordable, long-term cultural workspaces.

6. Case Study: Alte Münze

Alte Münze (Figure 1), a former state-owned mint that ceased operations in 2006, exemplifies several industrial heritage sites in Berlin's inner city claimed by artists and cultural workers as publicly owned, permanent cultural production sites. However, in contrast to many other sites (e.g., Uferhallen, B.L.O.Ateliers), Alte Münze is still publicly owned. After two unsuccessful attempts to sell the entire site to private property developers in 2008 and 2011—both of which proposed luxury housing and "creative quarter" developments—the sale option was abandoned due to a political shift in the approach to public land use and property tenders (Silomon-Pflug & Heeg, 2013). The remaining public properties are being reassessed to determine their cultural potential and must be reviewed by a committee. This policy shift reflects a broader trend in urban governance, emphasising the importance of preserving cultural spaces within the public domain and ensuring that redevelopment projects align with the government's cultural and social objectives.

Since 2009, Alte Münze has been utilised for interim purposes, such as events, festivals, and workspaces, with contracts having to be renewed every six months. In 2015, Berlin's state-owned company for public real-estate management, Berliner Immobilienmanagement GmbH (BIM), assumed management and maintenance of the site. By 2017, the property was incorporated into a new public property trust (SODA, Sondervermögen für Daseinsvorsorge), which assembles properties for public use and prohibits their sale. With 15,500 square meters across four buildings, including 6,600 square meters underground, the site offers substantial flexibility for various uses. The central location across from the Red Town Hall in Berlin-Mitte enhances its real-estate value and political significance (Urban Catalyst, 2020).

Figure 1. Alte Münze, Berlin. Source: Nineties.berlin (2018).

In 2016, the Federal Government proposed utilising the property as a "House of Jazz," commissioning a feasibility study and allocating EUR 12.5 million for the project. However, the Senate Department for Culture responded cautiously, preferring to secure work and rehearsal spaces for independent musicians and employ a participatory planning process to develop a new use concept. In a decisive move, the Berlin House of Representatives passed a resolution to secure the former mint as a "cultural and creative site" (Abgeordnetenhaus Berlin, 2018a). It allocated EUR 35 million for the initial phase of renovations. The parliament insisted on a participatory process to draft a concept for the site, ensuring it remains "close to the scene and efficient" (Abgeordnetenhaus Berlin, 2018a, p. 4). The governing coalition agreed to use Alte Münze as a production site, rejecting other proposals such as a new museum.

Several key stakeholders are involved in the Alte Münze case (see Table 1). The Spreewerkstätten, a private company and the most significant interim users since 2014, occupy nearly half of the building. They have renovated significant parts of the site, including updating electrical systems, installing heating, and creating contemporary event spaces, funded by event income and "sweat equity." With over 100 workers in its various companies and more than 20 ateliers, Spreewerkstätten aims to maintain its workspaces and pursue long-term "organic growth" (Urban Catalyst, 2020, p. 16). AG Alte Münze, part of the Coalition of the Independent Arts, is the second stakeholder advocating for the site to be entirely dedicated to the needs of independent artists. The third stakeholder, based in the Direktorenhaus exhibition house since 2010, has a design background and seeks to establish a "design forum" at the site. Along with Riverside Studios, they developed the "Haus of Berlin" concept to showcase the city's creative talent.

Public actors include the Senate Department for Culture, which seeks to enhance the cultural infrastructure by creating new workspaces (Abgeordnetenhaus Berlin, 2018a). BIM manages and maintains the site, focusing on renovations and cost management for sustainable operation. The Berlin House of Representatives has supported securing the site for cultural use and allocated funds for renovation.

Table 1. Stakeholders, objectives, and bargaining power in negotiations related to Alte Münze.

Actors	Description	Objectives	Bargaining power
Spreewerkstätten	Interim users since 2014, cultural enterprise renting spaces for artists, events, and exhibitions Both a company and a recently created association to underline a non-commercial approach	Keep site after having renovated substantial parts with "sweat equity" Gain a long-term perspective for their different cultural event businesses on the site	Current user with successful business model for workspaces and events Developed Buildings 1, 3, and 4 Local spatial knowledge
AG Alte Münze	Artists' interest group composed of the Coalition of the Independent Arts in Berlin	Maintain and secure the site for artists and cultural workers with affordable workspaces and 100% cultural use of the location Participatory process to decide on future uses Alte Münze as public property and common good	Influences decisions by means of personal relations, mobilising media and protests

Table 1. (Cont.) Stakeholders, objectives, and bargaining power in negotiations related to Alte Münze.

Actors	Description	Objectives	Bargaining power
CCI Actors	Interim user design museums Direktorenhaus since 2010, Riverside Studios, and Meisterrat Berlin-Brandenburg e.V.	Create a design forum with a focus on artistic crafts and design Maintain and secure the site for designers with affordable workspaces	Influences decisions by means of personal relations
Senate Department for Culture and Europe (since 2023: Senate Department for Culture and Social Cohesion)	Responsible authority	Promote the arts Develop new cultural production spaces Focus on independent performing artists and musicians A self-governing and sustainable project with a cost-neutral, mixed-use approach	Political responsibility for Alte Münze Policies Allocates funds
BIM	Berlin's state-owned property service for public real-estate management in Berlin	Create a cultural infrastructure that is self-sufficient and able to create reserves for maintaining buildings	Operational responsibility for Alte Münze Controls land use and collects rent Approves renovations and leases
Berlin House of Representatives	Berlin state parliament	Develop Alte Münze as a "cultural and creative site"	Policies Allocates funds
Federal Government Commissioner for Culture and the Media	Support arts of national interest and cultural infrastructure development	Federal government owns two properties in the complex Favour a "House of Jazz" and reserved substantial financial help for it	Owns two buildings at the site Allocates funds
IG Jazz	Represents 350 actors from the jazz and new music scene in Berli	Creation of a new anchor institution for the jazz and new music scene	Negotiated directly with the federal and state government to develop a "House of Jazz"
Berlin Monument Authority	Berlin's state authority for the preservation of historical monuments	Heritage protection	Alte Münze protected as a listed building

The German Federal Government owns two buildings on the site. It plans to develop a "House of Jazz" and has reserved a federal funding package of EUR 12.5 million and negotiated directly with stakeholders from the jazz and new music scene, IG Jazz. As Alte Münze is a listed building, the Berlin Monument Authority is also a crucial stakeholder.

The requested planning process, conducted from February to June 2019, involved 20 designated stakeholders and an additional 20 participants from the public, chosen by lot (Urban Catalyst, 2020, p. 23). The aim was to develop a sustainable use concept for the various buildings and spaces. As the former Senator for Culture explained, "the property does not have to yield profits, but provisions should be formed from the revenues, which allow continuous maintenance of the property" (Urban Catalyst, 2020, p. 10). Potential uses were categorised into different "spatial talents" of the site, and a joint charter was created to guide the site's future use (Urban Catalyst, 2020, pp. 40–49).

Two significant points of contention emerged during the workshops. First, there were conflicting ideas about the kind of cultural production to be prioritised and who was most in need. The parliament's resolution called for a "cultural and creative site" (Abgeordnetenhaus Berlin, 2018a), a vague definition that invites various interpretations. For example, AG Alte Münze advocated for independent artists and non-commercial uses, emphasising their vulnerability in contemporary urban development processes. Meanwhile, CCI actors argued that workers in the design sector, too, require affordable workspaces, and Spreewerkstätten aimed to maintain their events and exhibitions. Most stakeholders, especially the Berlin Senate, excluded creative industries (i.e., IT, advertisement or design after the German definitions for culture and creative industries; see BMWK, 2022) from the outset and argued against a single private business to manage the site.

The second point of contention was how to bridge the funding gap between affordable rents for artists and the revenue needed to maintain the buildings sustainably without regular public subsidies. Given the site's capacity for various activities, a workable financial model would require a mixed-use concept to mutually subsidise affordable workspaces with more revenue-generating activities (i.e., club or live music venue) and an innovative governance structure to sustain it. The final recommendation proposed a non-profit governance structure with a supervisory body and bottom-up governance mechanisms (Urban Catalyst, 2020, p. 53).

Following the planning phase, the Senate Department for Culture evaluated the findings and advocated a music-centric vision for the site. This proposal incorporated the federal government's concept of a "House of Jazz" as an anchor tenant, featuring concert halls and production and rehearsal spaces for musicians, with 75% of the site dedicated to production areas. However, this plan conflicted with the principle of self-sufficiency. The building, suitable for intensive commercial use, would necessitate subsidies rather than generating income to cross-finance affordable workspaces across the entire site.

Progress has stalled due to the COVID-19 pandemic, a political shift towards a more conservative city government since 2023, and a significant rise in construction and renovation costs in recent project evaluations (SenKultGZ, 2024a). Existing interim users have benefited from this delay, preserving their self-management and creative independence, which may strengthen their future position. However, given the current government's conservative stance and newly imposed austerity measures, the immediate future of the project and the workspace program remains uncertain. The new Senate Department for Culture and Social Cohesion announced plans to rent the whole site long term to Spreewerkstätten and forgo renovations, which has caused widespread protests by many art organisations and resulted in stakeholder hearings in the parliament's cultural committee (Abgeordnetenhaus Berlin, 2024; SenKultGZ, 2024a). Furthermore, the new coalition treaty lacks concrete goals for workspace provision (Senatskanzlei, 2023), and Alte Münze has been removed from the Senate's infrastructure project list (SenKultGZ, 2024b).

7. Discussion: Negotiating Workspaces and a Missed Window of Opportunity

7.1. Problem Stream: Acknowledging the Political Relevance of Workspace Provision

Only a few problems catch policymakers' attention, and a shift can be operationalised through three mechanisms: changes in indicators, focusing events (including disasters, personal experiences, and symbols), and feedback (Herweg et al., 2018, pp. 21–22). In the case of Alte Münze, several mechanisms were evident. First, in 2014, a Senate-commissioned study highlighted the dire workspace situation for artists, raising political awareness and illustrating the problem in numbers (Der Regierende Bürgermeister von Berlin, 2014). Second, the symbolic occupation of Haus der Statistik in 2015 broadened public debate on the scarcity of artist workspaces (Berg, 2019). Third, the strong organisation of artists in the city resulted in numerous protest campaigns, events, and advocacy efforts, bringing the material working conditions of independent cultural workers into the political and public spheres (Landau, 2019). When the new government coalition was formed in 2016, the issue of workspace provision had already gained political relevance and aligned with other urban planning problems. Consequently, the coalition treaty acknowledged workspace provision as a critical issue: "Spaces for culture are particularly subject to the pressure of commercialisation in a booming city. Berlin's cultural and creative professionals will continue to need sufficient space at favourable conditions and in suitable surroundings in the future" (SPD, 2016, p. 122). Moreover, it suggested that public properties "should be utilised, converted or repurposed for cultural purposes" (SPD, 2016, p. 122), laying the foundation for claims to use Alte Münze as a production space.

7.2. Policy Stream: Developing Solutions

While attention swiftly shifts from issue to issue, viable solutions require time to develop and gain acceptance within policy networks. Alternatives are discussed "until a limited number of viable policy alternatives emerges" (Herweg et al., 2018, p. 23). Policy entrepreneurs are crucial in this process, characterised by persistence, political connections, access to policymakers, and negotiation skills (Kingdon, 1984, p. 190). Several policy entrepreneurs were instrumental: individuals from AG Alte Münze, the Senator of Finance, a Green Party member who previously was the spokesperson for culture, and the cultural administration who negotiated solutions with various stakeholders. Several challenges needed to be overcome: financial, technical, and conceptual. Initially, there were no viable instruments, such as funds to repurchase properties for cultural use or to support extensive renovations needed to transform Alte Münze into a self-sufficient project.

Furthermore, the Senate Department for Culture lacked experience in developing a project of this magnitude, particularly regarding the extensive, necessary renovations and the complex governance arrangements with new stakeholders in Berlin's Alliance for Cultural Spaces and Alte Münze (Table 1). Furthermore, stakeholders had diverging ideas regarding the use of Alte Münze, ranging from events-based programming (Spreewerkstätten) and affordable workspaces for independent artists (AG Alte Münze) to a new anchor institution for the new music scene (IG Jazz). Hence, planning was crucial for facilitating stakeholder negotiations and identifying a shared concept and viable solutions.

7.3. Political Stream: Turning Solutions Into Policies

Governments and legislatures play a critical role in translating solutions into policy in the political stream. Kingdon (1984) observed that policy windows open with shifts in government composition, parliamentary changes, or national mood shifts. In 2016, the coalition of the Social Democratic Party, Left Party, and Green Party acknowledged the workspace issue in their agenda (SPD, 2016, p. 123). They proposed solutions tied to the preservation of public properties, building on the transparent public property policy initiated in the early 2010s (Silomon-Pflug & Heeg, 2013). In addition, the 2014 public referendum on the former Tempelhof airport signalled a shift in public opinion, reflecting increased politicisation of neoliberal urban planning efforts (Hilbrandt, 2017).

Initially, the workspace provision problem was effectively integrated into the policy environment. The Berlin parliament steered the process with a resolution that mandated a cultural use for Alte Münze and a public participation process to develop a use concept. It assigned responsibility to the Senate Department for Culture (Abgeordnetenhaus Berlin, 2018b). Seeking rapid progress, a participatory planning process was commissioned and heavily criticised for its demanding workload and tight deadlines (Urban Catalyst, 2020, p. 60). Within five months, the 40 participants had developed recommendations for a mixed-use concept, a charter with guiding principles, governance structures with participatory decision-making, and a viable funding mix (see Urban Catalyst, 2020, pp. 41–53).

Upon reviewing the recommendations, the Senate Department for Culture unexpectedly endorsed the federal government's proposal for a "House of Jazz" to establish a new anchor institution for jazz and experimental music (Abgeordnetenhaus Berlin, 2020). The decision was justified by the "mature concept" for "a sector in need" and the federal government's commitment to contribute the allocated EUR 12.5 million to the running costs and project funding of such an institution (Abgeordnetenhaus Berlin, 2020, p. 4). The contentious decision faced opposition from various stakeholders as it contradicted the Senate's previous position against creating new institutions requiring continuous subsidies. Furthermore, it undermined the financial strategy intended to support Alte Münze as a non-commercial production space because the allocation of Building 4 would disrupt the planned funding mix and revenue-generating capacities. This new concept effectively prioritised the redevelopment of a single building and closed the policy window for comprehensive site redevelopment and further negotiations with the stakeholders.

Support for the project diminished as the government had to mitigate the impacts of the COVID-19 pandemic. Following the election of a more conservative government in May 2023, focus shifted towards the need for more clubs and a vibrant night-time economy (Senatskanzlei, 2023, p. 105), reflecting the "event-logic of cultural supply" (d'Ovidio & Cossu, 2017, p. 12) in the neoliberal creative city. The Senate Department for Culture now favours a long-term lease (30 years) for the interim user, who runs event-based businesses, even ending plans for the "House of Jazz" at this site (SenKultGZ, 2024a). Responsibilities for the property have already been transferred back to BIM (SenKultGZ, 2024a, p. 26). This proposal relinquishes political control over the site's development, allowing a single business to dominate this central location.

7.4. A Missed Window of Opportunity

When the Berlin parliament adopted the resolution on 17 May 2018 (Abgeordnetenhaus Berlin, 2018b), a critical juncture occurred where the three streams—problems, policies, and politics—converged, allowing for a resolution to guide the process until the new government cancelled it in 2023 (SenKultGZ, 2024a, p. 25). Policy entrepreneurs from the governing parties and stakeholders primarily facilitated this convergence. However, it later became evident that, despite the resolution, there were still too many potential solutions to decisively guide the development of Alte Münze as a cultural and creative site.

Another critical juncture was the participatory planning process, which produced several guidelines that informed subsequent decision-making in the Senate Department for Culture and the House of Representatives Cultural Committee. Despite contrasting ideas for Alte Münze (Urban Catalyst, 2020, p. 16), the planning process was characterised by a pragmatic approach among participants to overcome their vested interests in the site, as illustrated by the adopted charter (Urban Catalyst, 2020, p. 41). As one participant commented: "We want to give the site a history and an image, which lasts longer than our engagement, our voluntary, unpaid 'expensive hobby'" (Urban Catalyst, 2020, p. 61).

However, the CCI stakeholder later filed a lawsuit against the government, claiming their interests as an intermediate user had not been sufficiently taken into consideration (Abgeordnetenhaus Berlin, 2019, p. 28). Ultimately, financial constraints and shifting policy priorities under the new government closed the policy window for a collaborative development approach that would prioritise arts and cultural production while reclaiming public properties as long-term workspaces.

Despite the missed policy window, the negotiation process regarding Alte Münze underscores key points for broader discussions on how industrial heritage sites can be maintained in the long term as cultural clusters. First, it demonstrates the need for a supportive policy environment to transform a temporary "soft infrastructure of creativity" into a more permanent "hard infrastructure" (Andres & Golubchikov, 2016, p. 760). The agenda-setting phase successfully mobilised stakeholders from Senate departments (Culture, Finance, Planning), political parties in the parliament, and art and public organisations, thus facilitating critical junctures in the policy process. However, the policy window closed when the Senate exercised its decision-making power to adopt a different concept with financial backing from the federal government. Yet until then, there was no lack of political commitment; instead, there was a lack of experience in steering such a capital project and a lack of appropriate instruments to support the development. There was a notable willingness among stakeholders to learn, negotiate, and cooperate to find viable solutions to the site challenges. Despite differing views on the cultural activities at Alte Münze, there was a consensus that non-commercial cultural production should be supported. Thus, a supportive policy environment requires an openness to alternative solutions, transparent and structured stakeholder engagement, and the creation of necessary frameworks and instruments (e.g., financial and organisational) to facilitate and implement these new solutions.

Second, stakeholders preferred policy solutions that oppose neoliberal logic and support "collective and anti-speculative infrastructures that counter mainstream urban development" (van Heur et al., 2023, p. 1). There was consensus among stakeholders on reinvesting in long-term, publicly-owned workplace infrastructures and promoting collective forms of shared ownership (Borchi, 2018; Ross, 2022) and

public-civic cooperation (Russell et al., 2023). While the planning process was successfully leveraged to develop suitable governance and funding models, ensuring collective use and joint decision-making, the financial costs for renovation, operation, and maintenance eventually led the government to discontinue the stakeholder negotiations after the planning process.

Third, the collectively organised artists (AG Alte Münze, IG Jazz) have been vocal stakeholders who have contributed ideas and knowledge to the agenda-setting process. In contrast, the lack of collective organisation among the CCI actors resulted in weak representation. A prior process of collective empowerment and political mobilisation among artists enabled them to become potent policy entrepreneurs equipped with knowledge, expertise, and political connections to advocate specific policy solutions and to form robust alliances to mobilise support for their interests and increase their bargaining power (Landau, 2019). Their commitment stresses that "artists can have a more lasting (both temporally and spatially) strategic place-making role to play within urban development processes in post-industrial cities" (Bain, 2018, p. 864). Nevertheless, the negotiation process also underlines the deep-seated policy conflicts in Berlin's cultural politics (Landau, 2019, 2021), which evolve around the meanings and values attached to the role of art and culture, the material needs of artists, and suitable policy support. The negotiations were not just about (work)space as a scarce resource but also about artistic hierarchies (who is entitled to such prime inner-city locations and why?), cultural needs in cities (what type of cultural activities should receive support?), and the role of common goods in the city.

8. Conclusion: A New Productive Turn for Cultural Clusters at Industrial Heritage Sites?

This article has analysed the multi-stakeholder negotiations surrounding Alte Münze, a publicly owned former mint in central Berlin, and the efforts to secure the site for cultural workspaces under public ownership. Berlin's surplus of disused industrial heritage sites has offered affordable and suitable workspaces for artists and cultural workers for decades. However, many of these sites have been lost to competing land uses, posing a significant threat to the city's cultural ecosystem and creating a need for new long-term public policy solutions.

The case of Alte Münze sits at the intersection of two supportive policy shifts: an ambitious artists' workspace program introduced in 2016 and new land-use policies that have reshaped Berlin's use and sale of public properties since 2010. Despite its unique context, the negotiations and public planning process mark an initial effort to enhance artists' spatial and material conditions, countering the market-driven and often marginalising logic associated with investor-led developments of cultural clusters at industrial sites (Mathews, 2014; Pollio et al., 2021). In contrast, Alte Münze was already under public ownership, and the project involved a variety of potential users in a participatory planning process, resulting in a novel mixed-use concept with sustainable funding and a collaborative governance structure with joint decision-making that could inform a new approach to maintaining cultural workspaces. While this case had the potential to create an "alternative urban space" (Fisker et al., 2019) and manifest the new cultural infrastructure agenda with a highly symbolic project, shifting the focus from temporary to permanent solutions at industrial heritage sites (Boswinkel & van Meerkerk, 2023), this potential was interrupted when the new conservative government withdrew support and, eventually, suggested a commercial events-based use.

While the methodological approach is limited and needs to be substantiated with more qualitative data to explore motives and meaning-making among the diverse stakeholders in future research, documents

provided a rich data set to trace the negotiations and agenda setting and to identify both supportive conditions and challenges. The recent political shift underlines the crucial role of supportive policies and political commitment in providing the necessary instruments and resources to facilitate secure, affordable, and long-term workspaces for artists and cultural workers in cities. There is a need to create supportive regulations at the intersection of cultural policy and urban planning to safeguard such spaces and to facilitate collaborative planning approaches with artists and civil society stakeholders, as well as suitable governance structures with joint decision-making (Borchi, 2018; Borén & Young, 2017; Cossu, 2022; Russell et al., 2023) to overcome the uncertainty of many temporary bottom-up cultural clusters (Boswinkel & van Meerkerk, 2023). The artists' collective and engagement showed their willingness to commit to developing and managing the site to maintain it as a public property for non-commercial cultural uses.

In conclusion, given the size and location of the site, the case exemplifies that cultural clusters can be more than "liminal spaces of the post-industrial city in the margins of both, the built environment and the social imaginary" (Gainza, 2018, p. 794) if an enabling and supportive policy environment exists. The negotiations provided a rich conceptual space to rethink the development trajectories of industrial heritage sites as cultural clusters and contemporary workspace typologies for cultural production. While the case discussed here focuses on cultural workspace provision at a publicly-owned industrial heritage site, the research has broader implications for sustaining workspaces for small manufacturers facing similar spatial struggles and displacements under current urban development dynamics (Ferm et al., 2021; Martin & Grodach, 2023).

Acknowledgments

The author would like to thank the editor and the anonymous reviewers for their helpful and constructive comments and acknowledge support from the Open Access Publication Fund of TU Berlin.

Conflict of Interests

The author declares no conflict of interests.

References

Aalbers, M. B. (2019). Introduction to the forum: From third to fifth-wave gentrification. *Tijdschrift voor economische en sociale geografie*, *110*(1), 1–11. https://doi.org/10.1111/tesg.12332

Abgeordnetenhaus Berlin. (2018a). *Alte Münze—als Kulturkreativstandort sichern. Drucksachen 18/0869 und 18/1042*. https://www.parlament-berlin.de/ados/18/IIIPlen/vorgang/d18-1261.pdf

Abgeordnetenhaus Berlin. (2018b). *Beschluss Alte Münze—als Kulturstandort sichern. Drucksache 18/1042*. https://www.berlin.de/alte-muenze/_assets/beschluss.pdf

Abgeordnetenhaus Berlin. (2019). *Inhaltsprotokoll. Ausschuss für Kulturelle Angelegenheiten 18/40*. https://www.parlament-berlin.de/ados/18/Kult/protokoll/k18-040-wp.pdf

Abgeordnetenhaus Berlin. (2020). *Inhaltsprotokoll. Ausschuss für Kulturelle Angelegenheiten 18/45*. https://pardok.parlament-berlin.de/starweb/adis/citat/VT/18/AusschussPr/k/k18-045-ip.pdf

Abgeordnetenhaus Berlin. (2024). *Wortprotokoll. Ausschuss für Kultur, Engagement und Demokratieförderung 19/32*. https://www.parlament-berlin.de/ados/19/KultEnDe/protokoll/k19-032-wp.pdf

Anderson, R. (1996). Working at home in artists' housing cooperatives: Negotiating social and spatial boundaries. *Canadian Journal of Urban Research*, *5*(1), 51–72. http://www.jstor.org/stable/44320943

Andres, L., & Golubchikov, O. (2016). The limits to artist-led regeneration: Creative brownfields in the cities of high culture. *International Journal of Urban and Regional Research*, *40*(4), 757–775. https://doi.org/10.1111/1468-2427.12412

Andres, L., & Grésillon, B. (2013). Cultural brownfields in European cities: A new mainstream object for cultural and urban policies. *International Journal of Cultural Policy*, *19*(1), 40–62. https://doi.org/10.1080/10286632.2011.625416

Bain, A. L. (2018). Artists as property owners and small-scale developers. *Urban Geography*, *39*(6), 844–867. https://doi.org/10.1080/02723638.2017.1405687

Bain, A. L., & March, L. (2019). Urban redevelopment, cultural philanthropy and the commodification of artistic authenticity in Toronto. *City & Community*, *18*(1), 173–194. https://doi.org/10.1111/cico.12359

BBK Kulturwerk. (2023). *Basisdaten 2023. Zur Bedarfserhebung der Ateliersituation Bildender Künstler*Innen in Berlin*. https://www.bbk-kulturwerk.de/sites/default/files/2023-06/Basisdaten_Bedarfserhebung_Ateliersituation_2023.pdf

Berg, N. (2019). The accidental planners. *Places Journal*. https://placesjournal.org/article/the-accidental-planners/?cn-reloaded=1

Berlin Visit. (2014). *Koalition der Freien Szene Berlin*. http://www.berlinvisit.org

Bingham-Hall, J., & Kaasa, A. (2018). *Making cultural infrastructure: Designing conditions for culture*. Theatrum Mundi. https://theatrum-mundi.org/library/makingculturalinfrastructure

BMWK. (2022). *Monitoringbericht Kultur—und Kreativwirtschaft 2021*. https://www.kultur-kreativ-wirtschaft.de/KUK/Redaktion/DE/Publikationen/2022/monitoringbericht-kultur-und-kreativwirtschaft-2021.pdf?__blob=publicationFile&v=4

BOP. (2018). *Making space for culture*.

Borchi, A. (2018). Culture as commons: Theoretical challenges and empirical evidence from occupied cultural spaces in Italy. *Cultural Trends*, *27*(1), 33–45. https://doi.org/10.1080/09548963.2018.1415410

Borén, T., & Young, C. (2017). Artists and creative city policy: Resistance, the mundane and engagement in Stockholm, Sweden. *City, Culture and Society*, *8*, 21–26. https://doi.org/10.1016/j.ccs.2016.05.002

Boswinkel, K., & van Meerkerk, E. (2023). Creative hubs: An anomaly in cultural policy? *International Journal of Cultural Policy*, *29*(6), 767–785. https://doi.org/10.1080/10286632.2022.2107636

Cairney, P., & Jones, M. D. (2016). Kingdon's multiple streams approach: What is the empirical impact of this universal theory? *Policy Studies Journal*, *44*(1), 37–58. https://doi.org/10.1111/psj.12111

Chapain, C., & Sagot-Duvauroux, D. (2020). Cultural and creative clusters—A systematic literature review and a renewed research agenda. *Urban Research & Practice*, *13*(8), 300–329. https://doi.org/10.1080/17535069.2018.1545141

Colomb, C. (2012). Pushing the urban frontier: Temporary uses of space, city marketing, and the creative city discourse in 2000s Berlin. *Journal of Urban Affairs*, *34*(2), 131–152. https://doi.org/10.1111/j.1467-9906.2012.00607.x

Cossu, A. (2022). *Autonomous art institutions: Artists disrupting the creative city*. Rowman & Littlefield.

Creative Land Trust. (2020). *Welcome to Creative Land Trust*. https://creativelandtrust.org

Curran, W. (2010). In defense of old industrial spaces: Manufacturing, creativity and innovation in Williamsburg, Brooklyn. *International Journal of Urban and Regional Research*, *34*(4), 871–885. https://doi.org/10.1111/j.1468-2427.2010.00915.x

d'Ovidio, M., & Cossu, A. (2017). Culture is reclaiming the creative city: The case of Macao in Milan, Italy. *City, Culture and Society*, *8*, 7–12. https://doi.org/10.1016/j.ccs.2016.04.001

Der Regierende Bürgermeister von Berlin. (2014). *Ergebnisse der Umfrage zur Arbeitsraumsituation von Berliner Künstlerinnen und Künstlern*. https://www.berlin.de/sen/kultur/foerderung/foerderprogramme/arbeitsraeume/2020neu_raumumfrage_2014.pdf

Dewey Muller. (2020). *Studie zur Integration von Kreativräumen und kulturellen Raumbedarfen in die Stadtplanung*. Stadt Köln Kulturamt.

Farías, I., & Wilkie, A. (Eds.). (2016). *Studio studies: Operations, topologies & displacements*. Routledge.

Ferm, J., Panayotopoulos-Tsiros, D., & Griffiths, S. (2021). Planning urban manufacturing, industrial building typologies, and built environments: Lessons from Inner London. *Urban Planning*, *6*(3), 350–367. https://doi.org/10.17645/up.v6i3.4357

Ferm, J., Sendra, P., Martins, J., Ceinar, I. M., & Ilie, E. (2022). *Understanding the value of artists' studios*. ACME. https://acme.org.uk/assets/originals/Understanding-the-Value-of-Artists-Studios-UCL-parternship-report.pdf

Fisker, J. K., Chiappini, L., Pugalis, L., & Bruzzese, A. (Eds.). (2019). *The production of alternative urban spaces. An international dialogue*. Routledge.

Gainza, X. (2018). Industrial spaces for grassroots creative production: Spatial, social and planning facets. *European Planning Studies*, *26*(4), 792–811. https://doi.org/10.1080/09654313.2018.1425377

GLA. (2019). *Cultural infrastructure plan. A call to action*. https://www.london.gov.uk/sites/default/files/cultural_infrastructure_plan_online.pdf

Grésillon, B. (1999). Berlin, cultural metropolis: Changes in the cultural geography of Berlin since reunification. *Cultural Geographies*, *6*(3), 284–294. https://doi.org/10.1177/096746089900600303

Herweg, N., Zahariadis, N., & Zohlnhöfer, R. (2018). The multiple streams framework: Foundations, refinements, and empirical applications. In C. Weible & P. A. Sabatier (Eds.), *Theories of the policy process* (pp. 17–34). Routledge.

Hilbrandt, H. (2017). Insurgent participation: Consensus and contestation in planning the redevelopment of Berlin-Tempelhof airport. *Urban Geography*, *38*(4), 537–556. https://doi.org/10.1080/02723638.2016.1168569

Hoe, S. F. (2020). Laden with great expectations: (Re)mapping the arts housing policy as urban cultural policy in Singapore. *City, Culture and Society*, *21*, Article 100339. https://doi.org/https://doi.org/10.1016/j.ccs.2020.100339

Hutton, T. A. (2006). Spatiality, built form, and creative industry development in the inner city. *Environment and Planning A*, *38*(10), 1819–1841. https://doi.org/10.1068/a37285

Karimnia, E., & Kostourou, F. (2023). Cultural backstages as urban creative ecologies: The case of Glasgow. *European Urban and Regional Studies*, *30*(4), 343–361. https://doi.org/10.1177/09697764231186745

Kingdon, J. W. (1984). *Agendas, alternatives, and public policies* (2nd ed.). Longman.

Krivý, M. (2013). Don't plan! The use of the notion of "culture" in transforming obsolete industrial space. *International Journal of Urban and Regional Research*, *37*(5), 1724–1746. https://doi.org/10.1111/j.1468-2427.2012.01178.x

Kuckartz, U. (2018). *Qualitative Inhaltsanalyse. Methoden, Praxis, Computerunterstützung. 4. Auflage*. Beltz Juventa.

Landau, F. (2019). *Agonistic articulations in the "creative" city: On new actors and activism in Berlin's cultural politics*. Routledge.

Landau, F. (2021). Agonistic failures: Following policy conflicts in Berlin's urban cultural politics. *Urban Studies*, *58*(12), 2531–2548. https://doi.org/10.1177/00420980209490

Landau, F., & Merkel, J. (2019). Mobilizing alternative modes of cultural governance in Berlin. In J. K. Fisker, L. Chiappini, L. Pugalis, & A. Bruzzese (Eds.), *Enabling urban alternatives* (pp. 109–132). Springer.

Lidegaard, C., Nuccio, M., & Bille, T. (2018). Fostering and planning urban regeneration: The governance of cultural districts in Copenhagen. *European Planning Studies*, *26*(1), 1–19. https://doi.org/10.1080/09654313.2017.1364352

March, L. (2020). DIY: Making space in Toronto's "creative city." In S. Bunce, N. Livingstone, L. March, S. Moore,

& A. Walks (Eds.), *Critical dialogues of urban governance, development and activism: London and Toronto* (pp. 219–232). University College London.

Marguin, S. (2015). Project spaces in the Berlin art field. In D. Albrecht, A. Schmid, & M. Zoit (Eds.), *Dreams of art spaces* collected (pp. 152–174). Revolver Publishing.

Marguin, S., Pelger, D., Schinagl, M., & Wegewitz, M. (2023). *Bedarfserhebung Arbeitsräume Freie Szene Berlin 2022 Teil 1, Zusammenfassung*. Coopdisco. https://coopdisco.net/projects/bedarfserhebung-arbeitsraeume-freie-szene-berlin-2022

Marquardt, S., & Hübgen, S. (2021). *Auswertung der Umfrage zu den Auswirkungen der Coronakrise auf die Akteur:innen der Freien Szene in Berlin sowie zu den Perspektiven und Forderungen der Betroffenen*. Koalition der Freien Szene. https://www.koalition-der-freien-szene-berlin.de/wp-content/uploads/2021/04/210408-Auswertung-Umfrage-Freie-Szene-web-03.pdf

Martin, D., & Grodach, C. (2023). Resilience and adaptation in gentrifying urban industrial districts: The experience of cultural manufacturers in San Francisco and Melbourne. *International Journal of Urban and Regional Research*, *47*(4), 625–644. https://doi.org/10.1111/1468-2427.13175

Mathews, V. (2014). Incoherence and tension in culture-led redevelopment. *International Journal of Urban and Regional Research*, *38*(3), 1019–1036. https://doi.org/10.1111/1468-2427.12108

Merkel, J. (2015). *Berliner Kulturpolitik in international vergleichender Perspektive*. Hertie School of Governance.

Merkel, J. (2023). Ausgepreist: Zur Bedeutung von Proberäumen in der musikalischen Produktion und deren strukturellen Verknappung in Städten. *Standort*, *47*, 120–126. https://doi.org/10.1007/s00548-023-00868-9

Moore, A., & Smart, A. (2015). *Making room: Cultural production in occupied spaces*. Other Forms.

Moreton, S. (2013). The promise of the affordable artist's studio: Governing creative spaces in London. *Environment and Planning A: Economy and Space*, *45*(2), 421–437. https://doi.org/10.1068/a4459

Mould, O., & Comunian, R. (2015). Hung, drawn and cultural quartered: Rethinking cultural quarter development policy in the UK. *European Planning Studies*, *23*(12), 2356–2369. https://doi.org/10.1080/09654313.2014.988923

Musicboard Berlin. (2021). *Berliner Proberaum Umfrage. Ergebnisse und Auswertungen*. https://www.musicboard-berlin.de/wp-content/uploads/2021/03/MBB_Berliner-Proberaum-Umfrage_Ergebnisse-Auswertung_D.pdf

Novy, J., & Colomb, C. (2013). Struggling for the right to the (creative) city in Berlin and Hamburg: New urban social movements, new "spaces of hope"? *International Journal of Urban and Regional Research*, *37*(5), 1816–1838. https://doi.org/10.1111/j.1468-2427.2012.01115.x

PCP. (2017). *The People's Cultural Plan for working artists and communities in New York City*. https://www.peoplesculturalplan.org

Pollio, A., Ang, I., Rowe, D., Stevenson, D., & Magee, L. (2018). *Cultural creation and production in the Inner West LGA: A case-study needs analysis*. Western Sydney University. https://culturalinfrastructure.org/wp-content/uploads/2019/09/report_10261835c2d65d7031bf_print.pdf

Pollio, A., Magee, L., Ang, I., Rowe, D., Stevenson, D., Swist, T., & Wong, A. (2021). Surviving supergentrification in inner city Sydney: Adaptive spaces and makeshift economies of cultural production. *International Journal of Urban and Regional Research*, *45*(5), 778–794. https://doi.org/0.1111/1468-2427.13015

Pratt, A. (2008). Creative cities: The cultural industries and the creative class. *Geografiska Annaler: Series B, Human Geography*, *90*(2), 107–117. https://doi.org/10.1111/j.1468-0467.2008.00281.x

Prior, L. (2003). *Using documents in social research*. Sage.

Pruijt, H. (2013). Culture wars, revanchism, moral panics and the creative city. A reconstruction of a decline

of tolerant public policy: The case of Dutch anti-squatting legislation. *Urban Studies*, *50*(6), 1114–1129. https://doi.org/10.1177/0042098012460732

Rich, M. A., & Tsitsos, W. (2016). Avoiding the "SoHo effect" in Baltimore: Neighborhood revitalization and arts and entertainment districts. *International Journal of Urban and Regional Research*, *40*(4), 736–756. https://doi.org/10.1111/1468-2427.12376

Ross, S. (2022). Resisting renoviction and displacement through cultural land trusts: Art and performance spaces, pop-ups, DIYs, and protest raves in Vancouver. *Yale Journal of Law and the Humanities*, *33*(1), 92–124. https://ssrn.com/abstract=3847500

Russell, B., Milburn, K., & Heron, K. (2023). Strategies for a new municipalism: Public–common partnerships against the new enclosures. *Urban Studies*, *60*(11), 2133–2157. https://doi.org/10.1177/00420980221094700

Schwegmann, M., Kotowski, B., & Haberer, M. (2021). *Weissbuch II. Atelierförderung*. BBK. https://www.bbk-berlin.de/sites/default/files/2021-09/Weissbuch-II-Atelierfoerderung-2021.pdf

Scott, R. (2022). *Artists' workspace consultation report*. King's College London. https://creativelandtrust.org/wp-content/uploads/2022/07/KCL_ArtistsWorkspaceConsultationReport_June2022.pdf

Senatskanzlei. (2023). *Koalitionsvertrag 2023–2026*. https://www.berlin.de/rbmskzl/_assets/dokumentation/koalitionsvertrag_2023-2026_.pdf?ts=1684996989

SenFin. (2018). *SIWANA IV*. https://www.berlin.de/sen/finanzen/haushalt/siwa/siwana-iv-2017/siwana-iv-898812.php

SenKultGZ. (2024a). *Entwicklung und Nutzung der für eine kulturelle Nutzung im SODA vorgesehenen Immobilien gemäß Auflage B. 65—Drucksache 19/1350 zum Haushalt 2024/25*. https://www.parlament-berlin.de/adosservice/19/Haupt/vorgang/h19-1602-v.pdf

SenKultGZ. (2024b). *Kulturinfrastruktur*. https://www.berlin.de/sen/kultur/infrastruktur

SenKultGZ. (2024c). *Versprochen—gehalten: Berliner Uferhallen für ansässige Künstlerinnen und Künstler gerettet*. https://www.berlin.de/sen/kultgz/aktuelles/pressemitteilungen/2024/pressemitteilung.1403580.php

SenStadt. (2019). *StEP Wirtschaft 2030*. https://www.berlin.de/sen/stadtentwicklung/_assets/planung/stadtentwicklungplaene/step_wirtschaft_2030_online.pdf?ts=1705104078

Shaw, K. (2013). Independent creative subcultures and why they matter. *International Journal of Cultural Policy*, *19*(3), 333–352. https://doi.org/10.1080/10286632.2013.788162

Shkuda, A. (2015). The artist as developer and advocate: Real estate and public policy in SoHo, New York. *Journal of Urban History*, *41*(6), 999–1016. https://doi.org/10.1177/0096144215602008

Silomon-Pflug, F., & Heeg, S. (2013). Neoliberale Neuordnung städtischer Verwaltungen am Beispiel des Liegenschaftsfonds Berlin. *Geographische Zeitschrift*, *101*(3/4), 184–200. https://www.jstor.org/stable/24576975

SPD. (2016). *Koalitionsvereinbarung für die Legislaturperiode 2016-2021*. https://www.berlin.de/rbmskzl/_assets/rbm/161116-koalitionsvertrag-final.pdf

Sprague, M., & Rantisi, N. M. (2019). Productive gentrification in the Mile-Ex neighbourhood of Montreal, Canada: Exploring the role of the state in remaking urban industrial clusters. *Urban Research & Practice*, *12*(4), 301–321. https://doi.org/10.1080/17535069.2018.1448109

Stake, R. E. (2005). Qualitative case studies. In N. K. Denzin & Y. S. Lincoln (Eds.), *The Sage handbook of qualitative* research (3rd ed., pp. 443–466). Sage.

Strom, E. (2010). Artist garret as growth machine? Local policy and artist housing in U.S. Cities. *Journal of Planning Education and Research*, *29*(3), 367–378. https://doi.org/10.1177/0739456X09358560

Swain, J., & King, B. (2022). Using informal conversations in qualitative research. *International Journal of Qualitative Methods*. Advance online publication. https://doi.org/10.1177/16094069221085056

Toronto Arts Foundation. (2019). *Arts stats 2019: Going without: Artists and arts workers in our creative city*. https://torontoartsfoundation.org/tac/media/taf/Research/2019-TAF-Arts-Stats-booklet-FINAL-web.pdf

Urban Catalyst. (2020). *Documentation. Alte Münze participation procedure. February to June 2019*. https://www.berlin.de/sen/kultur/infrastruktur/alte-muenze/ort/documentation_participation_process_-_alte_munze_-_english.pdf

van Heur, B., Silvrants-Barclay, E., & Agha, M. (2023). Collective cultural infrastructures: Ownership, architecture, governance. *Cultural Trends*, *32*(5), 569–575. https://doi.org/10.1080/09548963.2022.2103646

Vivant, E. (2022). From margins to capital: The integration of spaces of artistic critique within capitalist urbanism. *Journal of Urban Affairs*, *44*(4/5), 490–503. https://doi.org/10.1080/07352166.2020.1811115

Weber-Newth, F. (2019). *The game of urban regeneration: Culture & community in London 2012 and Berlin's Mediaspree*. transcript Verlag.

Wijngaarden, Y., & Hracs, B. J. (2024). "We are continuing an industrial revolution here": Assembling, experiencing and leveraging the affective atmospheres of post-industrial workspaces. *Geoforum*, *148*, Article 103944. https://doi.org/10.1016/j.geoforum.2024.103944

Williams, G. (2019, April 25). As rents rise, artists are reviving the idea of the medieval guild. *The New York Times*. https://www.nytimes.com/2019/04/25/t-magazine/craft-guild-la-friche-zaventem-ateliers.html

Williams, J. (1993). *The artist in the changing city*. British American Arts Association.

Woolf, V. (2002). *A room of one's own*. Penguin Classics. (Original work published 1929)

Zielke, P., & Waibel, M. (2015). Creative spaces and the local state in China: The case of Guangzhou's Redtory Art + Design Factory. *City, Culture and Society*, *6*(2), 27–35. https://doi.org/10.1016/j.ccs.2015.03.005

Zukin, S. (1982). *Loft living. Culture and capital in urban change*. Rutgers University Press.

About the Authors

Janet Merkel (PhD) is a senior researcher at the Institute of Urban and Regional Planning at Technische Universität Berlin. As an urban sociologist, her research interests include the social and spatial organisation of independent modes of work (e.g., coworking), culture and creative industries, and creative labour. She also works on urban cultural policies and cultural planning. She recently co-edited a book on *Coworking Spaces: Alternative Topologies and Transformative Potentials* (2023). Photo: © David Ausserhofer.

Urban Planning
2024 • Volume 9 • Article 8220
https://doi.org/10.17645/up.8220

cogitatio

ARTICLE

Open Access Journal

Industrial Heritage and Citizen Participation: The UNESCO World Heritage Site of Ivrea, Italy

Matilde Ferrero [1], Martha Friel [2], Erica Meneghin [3], and Mariangela Lavanga [4]

[1] Department of Law, Economics and Sociology, Magna Græcia University of Catanzaro, Italy
[2] Faculty of Arts, Fashion and Tourism, IULM University Milan, Italy
[3] Fondazione Santagata for the Economics of Culture, Italy
[4] Erasmus School of History, Culture and Communication (ESHCC), Erasmus University Rotterdam, The Netherlands

Correspondence: Mariangela Lavanga (lavanga@eshcc.eur.nl)

Submitted: 2 February 2024 **Accepted:** 15 July 2024 **Published:** 23 September 2024

Issue: This article is part of the issue "Industrial Heritage and Cultural Clusters: More Than a Temporary Affair?" edited by Uwe Altrock (University of Kassel) and Janet Merkel (TU Berlin), fully open access at https://doi.org/10.17645/up.i341

Abstract

The article explores the dynamics of community involvement in managing the UNESCO World Heritage Site of Ivrea, Italy, designated as the "Industrial City of the 20th Century" in 2018. Ivrea is known for its historical connection to the Olivetti factory, whose existence shaped the town's material and immaterial identity. The UNESCO-designated area in the north of the city features a mix of diverse buildings from the 1930s to the 1960s, serving various purposes and a variety of cultural activities. The research, commissioned as part of a larger project for updating the Site Management Plan by the Municipality of Ivrea, the managing authority of the UNESCO Site, aims to critically employ participatory approaches in the Management Plans of industrial heritage sites, analyse their role in preserving industrial heritage, and identify a new future for the city where cultural and creative industries play a vital role, or, in other words, to develop the site of Ivrea as a permanent cultural cluster. By employing an action-research methodology rooted in multidisciplinary and participatory approaches, this study focuses on the key role of residents and their connection to the industrial cultural heritage and the city to envision the site's future. Initial findings from semi-structured interviews reveal a limited awareness of the Site Management Plan in the community and underscore the need for enhanced participatory governance. The article highlights how the collaborative efforts of stakeholders, particularly youth, yield innovative ideas, paving the way for social advancement, economic sustainability, and local promotion. Ultimately, this study envisions the UNESCO World Heritage Site as a central component of the city's identity and a catalyst for the well-being of the involved communities.

Keywords

conservation; industrial heritage; participatory heritage management; UNESCO World Heritage Site

1. Introduction

Over time, the cultural and creative development of urban areas has been profoundly influenced by the activities of companies that have developed within them or in the neighbouring areas, shaping their economic landscape and history, infrastructures, and institutional relationships. This influence extends beyond mere economic impact, and, sometimes, it leaves enduring material and immaterial imprints on the fabric of these urban spaces. Also, company towns such as New Lanark (founded in 1785) in Scotland, Crespi d'Adda (founded in 1878) in Italy, and Saltaire (founded in 1851) in England stand as tangible testaments to this phenomenon and, for this reason, are recognised as UNESCO World Heritage Sites, for their contribution to both industrial progress and the nurturing of vibrant worker communities. Today these places testify to the vestiges of industrialisation and worker communities, designed and developed as both places of work and centres for life, hosting schools, theatres, and other cultural and recreational facilities. Starting from the last decade of the twentieth century, there has been a growing interest in repurposing industrial brownfields into cultural districts and creative hubs, also supported by a growing academic and policy discussion on the revitalisation strategies of such spaces (Braun & Lavanga, 2007; Lavanga, 2013; Mommaas, 2004; van der Borg et al., 2005) and on their potential to catalyse economic and cultural growth (Andres & Grésillon, 2013; Lavanga, 2020). In this body of literature, a less analysed aspect is the role Management Plans associated with UNESCO World Heritage Site designations can play in participatory revitalisation processes. UNESCO designations aim to protect and preserve cultural heritage of outstanding value to humanity. Designations are symbolic and accompanied by rigorous management plans that focus on safeguarding cultural heritage and developing sustainable practices. The objectives include promoting cultural diversity, fostering community involvement, and encouraging educational and tourism opportunities that benefit the local population (UNESCO World Heritage Centre, n.d.).

Despite the limited representation of industrial heritage on the UNESCO list, we argue that the Management Plans associated with the UNESCO World Heritage List offer a window of opportunity to revitalise and reconnect the industrial past with contemporary creative processes, thus contributing to discourses on the development of cultural clusters. The role of the Management Plan is crucial for the effective and sustainable conservation of World Heritage Sites. It serves as an integrated planning and action concept, outlining goals and measures for these sites' protection, conservation, use, and development. The Management Plan is essential for ensuring the proper management of World Heritage Sites, and deficiencies in management systems or the absence of adequate management plans are significant factors affecting these properties globally (Ringbeck, 2018; UNESCO, 2015; UNESCO et al., 2023). Moreover, it is seen as a tool for promoting sustainability across economic, social, environmental, cultural, and governance dimensions. It emphasises the importance of sound governance principles such as openness, participation, accountability, effectiveness, coherence, and subsidiarity in ensuring the successful implementation of public policies and the active engagement of citizens in heritage conservation and management (Ripp & Rodwell, 2018). In this view, Management Plans are meant to safeguard the industrial heritage while redefining its role in promoting creativity and innovation in contemporary society. These plans have the potential to leverage the UNESCO World Heritage status towards the identification of new socio-economic prospects, redefining the position of these industrial sites within the global network of innovative regions. This means they require a multifaceted approach encompassing preservation efforts and strategic initiatives for adaptive reuse of industrial heritage. These plans should engage local stakeholders, businesses, artists, and creative industries, thus infusing these spaces with bottom-up ideas that ensure their relevance in

contemporary urban life. Therefore, revitalising historic industrial landscapes involves much more than simply transforming disused factories and warehouses into vibrant centres for creative expression, innovation, and cultural exchange. Strategies for connecting these sites with surrounding communities, enhancing accessibility, and establishing links with other cultural and economic hubs become central. This interconnectedness may reinforce the role of industrial heritage sites as catalysts for local development and contribute to the cultural vibrancy of the entire region.

Although there is considerable academic and policy interest in revitalising industrial brownfields into cultural districts and hubs for the creative industries, there is less focus on how industrial UNESCO World Heritage Sites are managed and the effectiveness of their Management Plans in achieving this transformation, reconnecting the industrial past with contemporary creative processes. While there is widespread academic and policy interest in the revitalisation of industrial brownfields and their transformation into cultural districts and hubs for the cultural and creative industries, there is less attention to the context of industrial UNESCO World Heritage Sites and the extent to which Management Plans associated with these sites effectively achieve this revitalisation and reconnection of the industrial past with contemporary creative processes. Additionally, the specific role of companies in this process, beyond their historical influence on the development of urban areas, requires further investigation. Understanding how companies can actively contribute to urban areas' cultural and creative development, particularly within the UNESCO World Heritage Sites framework, represents a significant gap in current literature and research. Therefore, studies need to explore approaches encompassing preservation efforts and strategic initiatives for the adaptive reuse of industrial heritage, focusing on engaging local stakeholders, businesses, artists, and creative industries. Such research would provide valuable insights into effectively leveraging industrial heritage sites as catalysts for local development and contributing to the cultural vibrancy of entire regions.

This article focuses on the case of Ivrea in Italy, a city known for its historic connection to the Olivetti factory and recognised as a UNESCO World Heritage Site in 2018 with the denomination "Industrial City of the 20th Century." It analyses participatory approaches in the Management Plans of industrial heritage sites and their role in preserving industrial heritage while identifying a new future for the city where cultural and creative industries play a vital role. In doing so, the article employs an action-research methodology where multidisciplinary and participatory approaches have been deployed to strengthen the connection among residents, industrial cultural heritage, and the city. This article is structured as follows. In Section 2, we emphasise industrial heritage's role in revitalising cities. Section 3 introduces the case of Ivrea. Section 4 highlights the methodology employed in our article. Section 5 discusses the results of our study, followed by conclusions and directions for future research.

2. The Role of Industrial Heritage in Contemporary Society

According to The International Committee for the Conservation of the Industrial Heritage (2003), industrial heritage encompasses the remnants of industrial civilisation that hold historical, technological, social, architectural, or scientific significance. These remnants include structures like buildings, machinery, workshops, mills, factories, mines, processing and refining sites, warehouses, energy generation facilities, transportation infrastructure, and spaces associated with social aspects of industrial life, such as residential areas, places of worship, or educational institutions. Industrial heritage represents a significant facet of cultural capital encompassing tangible and intangible dimensions. While its tangible elements embody

scientific and technological advancements and aesthetic qualities reflective of their historical significance, industrial heritage also encompasses intangible aspects such as preserving memories, traditions, and customs associated with industrial practices, which serve as invaluable records of societal and economic transformations, offering insights into the cultural fabric of communities and the evolution of industrial landscapes over time (Cossons, 2016). Thus, industrial heritage emerges as a multifaceted testament to human ingenuity, creativity, and the interplay between technological progress and cultural identity, which calls for preservation and valorisation (Fontana & Gritti, 2020).

However, the concentration of industrial heritage within urban areas gives rise to several challenges. The significance of this heritage in shaping the cultural development of cities extends beyond its historical context to encompass contemporary issues such as the reuse and the promotion of its multifaceted value, how reuse is designed and implemented (Andres & Grésillon, 2013; Konior & Pokojska, 2020; Scaffidi, 2022), and also the role of local communities and participatory governance of the revitalised heritage. These aspects represent dynamic and intricate fields of study, extensively explored in academic literature across various disciplines and perspectives (Douet, 2016). Furthermore, the tension between authenticity and commercialisation underscores the multifaceted nature of industrial heritage as both a site of historical significance and a potential engine for tourism and economic development (Hospers, 2002; Vargas-Sánchez, 2015).

In general, it is possible to isolate three main aspects of the impact of industrial heritage on cultural and economic urban landscapes on which academic literature in economic geography and management studies have focused. The first aspect concerns the long-lasting cultural imprints left by the industry on the urban fabric (Douet, 2016; Vecco, 2010). Studies such as those by Liu et al. (2018) have tried to examine and assess the cultural significance of industrial heritage, including technological, artistic, and social value. These values, incorporated into tangible and intangible components, also translate into economic benefits from active and passive use of this cultural capital, as shown, for example, by the study of Bertacchini and Frontuto (2024) on the demand for industrial heritage rehabilitation projects.

The second aspect is linked to the revitalisation strategies of abandoned historic industrial sites (Grecchi, 2022; Hermawan et al., 2020; Ifko, 2016; Ifko & Stokin, 2017; Kuzior et al., 2022; Tötzer & Gigler, 2005; van der Borg et al., 2005; Vaništa Lazarević et al., 2020). The adaptive reuse of these spaces into vibrant centres of artistic expression and innovation can reconnect industrial heritage and modern creativity (Douet, 2016; Friel & Lavanga, 2024; Lavanga, 2009; Robiglio, 2016; UNESCO, 2023). Revitalisation strategies that include adaptive reuse of heritage sites, community engagement, financial sustainability, securing adequate funding, and ongoing maintenance (Farr, 2011; Roberts & Sykes, 1999) can trigger a "creative atmosphere" (Bertacchini & Santagata, 2011; Bullen & Love, 2010; De la Torre & Mason, 2002), or, in other words, a critical mass of creative knowledge, production, and consumption, fostering local creative ecosystems. Revitalised industrial areas can connect historical industrial heritage with contemporary innovation processes and act as reservoirs of tacit knowledge (Bathelt et al., 2004; Bertacchini & Santagata, 2011). However, assessing residents' demand for revitalisation projects of industrial heritage present in their city is a complex process. The preferences of the resident communities for preserving specific attributes of their industrial heritage reveal a more nuanced connection between economic choices and attitudes toward cultural value (Bertacchini & Frontuto, 2024). Although many studies emphasise the importance of actively involving citizens in the decision-making process in the revitalisation strategies of industrial heritage and

brownfields, many concrete examples of inclusive practices highlight serious flaws in engaging the most vulnerable segments of the community, risking the perpetuation of inequalities (Ferilli et al., 2016). Moreover, the diversity of approaches and participatory practices has sparked a debate on the optimal conditions for achieving meaningful results (Savini, 2011). Within this dialectic, gentrification also emerges as a pivotal concern of many scholars (Sun & Chen, 2023), encapsulating broader debates over socioeconomic equity, cultural preservation, and community identity.

The third aspect, very much connected with the first two, is linked to the large and growing body of literature that explores the role of industrial heritage and manufacturing districts in the identity of a place and its branding, as well as in connection with tourist attractiveness. Authors delved into the intricate relationship between region branding and the ultimate prosperity of industrial heritage, underscoring how this connection intertwines with the strategic promotion of regions to foster economic sustainability and entice tourism (Wicke et al., 2018). This literature has focused on multiple aspects, ranging from governance issues (Bramwell & Rawding, 1994) to urban branding strategies (Asprogerakas & Mountanea, 2020; Liouris & Deffner, 2005) and tourist product development (Xie, 2006).

Overall, the three aspects highlight the multifaceted impact of industrial heritage on cultural and economic landscapes, underscoring the implications for heritage conservation and creative revitalisation within urban areas (De Gregorio et al., 2020; Jonsen-Verbeke, 1999). In this context, despite the growing interest of academic literature on the topic, little attention has been paid so far to the role that UNESCO World Heritage recognition may exert in this process of industrial heritage revitalisation, and, in particular, to what extent the Management Plans linked to that recognition play a role in drafting, implementing, and guiding such a process of industrial heritage revitalisation along with paying attention to the role of participatory and innovative perspectives in shaping the future of UNESCO Sites and promoting community well-being.

3. The Case of Ivrea and Its UNESCO World Heritage Status

The industrial city of Ivrea was founded by electrical engineer Camillo Olivetti in 1908 and further developed under his son, Adriano Olivetti. The Olivetti factory, initially specialising in typewriters and later expanding into mechanical calculators and computers, played a central role in shaping the city's identity. Ivrea became a model for the modern industrial city, adeptly responding to the challenges of the 20th century. Adriano Olivetti's leadership extended beyond traditional managerial roles. It revealed concern for the community, from the well-being of individual workers to the urban form and architectural identity of Ivrea and its cultural and social dynamics (Simone et al., 2021).

The process of designation of Ivrea was long and complex. A National Committee specifically established for the process was promoted by the Adriano Olivetti Foundation in collaboration with the Municipality of Ivrea and the University of Milan. Established by ministerial decree on March 20, 2008, it was funded by the Ministry of Cultural Heritage and Activities and Tourism (MiBACT), the Piedmont Region, and the Adriano Olivetti Foundation. Over the four years of its operation, the Committee discussed enhancing Ivrea's modern architectural heritage. With contributions from national and international experts, it worked on the plan to nominate Ivrea as the "Industrial City of the 20th Century" on the UNESCO World Heritage List. In 2009, the Municipality of Ivrea entrusted the Adriano Olivetti Foundation with the leadership for the initial phase of the nomination project. Working with MiBACT, they aimed to include Ivrea on Italy's

Tentative List of sites proposed for UNESCO heritage status. Following Ivrea's inclusion on the Tentative List, the MiBACT UNESCO Office formed a Coordination Group involving various ministerial departments, the City of Ivrea, the Piedmont Region, the Province of Turin (later Metropolitan City), the Adriano Olivetti Foundation, and the Guelpa Foundation. The Coordination Group appointed a Steering Committee to oversee the operational phases of the nomination process. In 2016, the Italian State submitted the Nomination Dossier and Management Plan to the UNESCO World Heritage Centre. Evaluation by ICOMOS, UNESCO's advisory body, began in 2017, followed by an Evaluation Mission in late September 2017, prompting requests for additional information. After discussions between Coordination Group representatives and ICOMOS representatives, further information was submitted by the end of February 2018. Finally, on July 1, 2018, during the World Heritage Committee Session in Manama, Bahrain, "Ivrea, Industrial City of the 20th Century" was inscribed on the World Heritage List (Ivrea Città Industriale, n.d.-a).

The UNESCO designation aligns with the emphasis on social and cultural values embedded in Olivetti's philosophy, vision, and practices. It requires the preservation of the cultural heritage of Ivrea, including its spatial plan, public buildings, and residential structures, along with its commitment to community engagement and integration of cultural elements into urban planning. The designated area in the north of the city showcases a mix of diverse buildings from the 1930s to the 1960s. According to Olivetti (2013, p. 26): "This new series of buildings, facing the factory…represents the idea that the man spending the long day in the factory does not seal his humanity in the work suit." These words, spoken by Adriano Olivetti in 1958, encapsulate the guiding vision that drove the production, centred on humanity and its needs rather than labour (Lunati, 2015). Directed by Adriano Olivetti, key figures of the Italian "Modern Movement" (Figini and Pollini, Gardella, Vittoria, Gabetti and Isola, Cappai and Mainardis, Sgrelli) designed the urban fabric and buildings between the 1930s and 1960s (Galuzzi, 2016). New manufacturing facilities, administrative buildings, social services, and residential areas were developed, reflecting the ideals of the *Movimento Comunità* (Community Movement). The movement was a social initiative launched by Olivetti to improve the quality of life and working conditions for the company's employees and their families. It was founded on social responsibility, community engagement, and humanistic values (Iglieri, 2020).

The Management Plan for Ivrea's UNESCO World Heritage Site was developed collaboratively following the city's nomination in 2016. It was a crucial component of the UNESCO heritage application process, crafted through cooperation between the Municipality of Ivrea, the Adriano Olivetti Foundation, regional authorities, and relevant national ministries, including the MiBACT. The Management Plan outlines strategies for sustainable preservation, community involvement, and the promotion of cultural heritage. It ensures that the management and preservation efforts are aligned with UNESCO's guidelines for World Heritage Sites (Ivrea Città Industriale, n.d.-a). Some of the criteria of the UNESCO designation highlight the following requirements:

> Criterion ii: to exhibit an important interchange of human values, over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental arts, town-planning and landscape design….Criterion iv: to be an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history….Criterion vi: to be directly or tangibly associated with events or living traditions, with ideas, or beliefs, with artistic and literary works of outstanding universal significance. (Ivrea Città Industriale, n.d.-a, p. 9)

The latter appears to be a fitting criterion for the city of Ivrea, the result of the talent of world-renowned Italian architects and designers of the 20th century and the influence of the ideas and beliefs of Olivetti on the social and political fabric of the city.

Even though Ivrea has a strong historical legacy of technological, economic, and social innovation, the city may not be as innovative as it used to be. The concept is intended here as social and institutional innovation (Czischke et al., 2015; European Commission, 2020; Mieg & Töpfer, 2013). It aims to underscore the extent to which local development activators can instigate social, cultural, and economic advancement, benefiting the underutilised resource and its surrounding environment (Scaffidi, 2022). The Ivrea Management Plan 2018–2022 (Ivrea Città Industriale, n.d.-a), which guided the UNESCO nomination, has the vision and ambition of redefining the position of Ivrea in the network of innovative urban areas internationally, along with the preservation and revitalisation of its industrial heritage. The slogan "from the innovative urban factory of innovative products to the urban factory of innovative enterprises" aims to attract SMEs who value industrial culture grounded in technological innovation and creativity. Aligned with the economic development plan of the area, the Management Plan strives to ensure tangible benefits for residents and businesses, supporting the restoration and repurposing of its architecture. It also envisions a "Social Laboratory on the Digitalisation of the Cultural Heritage of the Site" to bring the physical site into a virtual platform, experimenting with new forms of interpretation and presentation of heritage and new strategies for audience engagement. Furthermore, the Management Plan assigns a crucial role to the creation and exchange of knowledge and skills related to the cultural valorisation of the site, through training programs, and dialogues with research institutions and industrial heritage sites around the world.

4. Methods and Data

The study employs action research, a methodology embraced in the social sciences for instigating and analysing shifts in behaviour at the levels of groups, organisations, or society (Burnes, 2004). This approach addresses social issues through behavioural change within organisations or broader social contexts (Lewin, 1946). To engender change, action research must be a participatory and collaborative process involving all stakeholders. Scholars have employed this methodology within the field of cultural heritage and creativity to analyse the organisational processes that led to the implementation of sustainable accounting and accountability by a smart city (Magliacani, 2023), or to examine the role of evaluation in the conservation of architectural heritage in marginal areas (Rossitti & Torrieri, 2022). However, the methodology has not yet been used to critically analyse and guide the development of industrial World Heritage Sites.

This study embraces multidisciplinary and participatory approaches to address the complexity of the relationship between the local community, the industrial cultural heritage, and a historical and modern city (Bandarin & Van Oers, 2014; Court & Wijesuriya, 2015; UNESCO, 2013). In doing so, it employs action research to explore the role of participatory practices in strengthening the connection between residents and the industrial heritage, particularly in relation to the assessment of the Management Plan 2018–2022 for the UNESCO site of Ivrea. Moreover, it aims to identify future scenarios for bettering participation practices via interviews and a series of co-creation sessions with a diverse range of local stakeholders (i.e., site manager, key stakeholders, and the local community). In the action-research approach, the researcher is embedded within society, and knowledge is thus the product of interactions with stakeholders and their values, understandings, and experiences. In our study, action research facilitated the coproduction

of knowledge, the evaluation of management efficiency, and the level of stakeholder involvement, thereby focusing on changing community involvement practices (from mere usage to active participation in site management). Revitalising historic industrial landscapes encompasses more than merely transforming disused factories and warehouses into vibrant centres for creative expression, innovation, and cultural exchange. It should also involve exploring how communities engage and actively participate in this transformation process. In particular, UNESCO World Heritage Sites and the assessment of their associated Management Plans and their future design and implementation can offer a good opportunity to analyse participatory approaches that could be deployed to strengthen the connection between residents, industrial cultural heritage, and the city. We argue that this interconnectedness may reinforce the role of industrial heritage sites as catalysts for local development and contribute to the cultural vibrancy of the entire region.

The research was conducted as follows. First, 22 semi-structured interviews were conducted in January–March 2023 to get an in-depth understanding of the context, which allowed us to capture diverse perspectives and enrich our study. Interviewees were selected, in collaboration with the managing authority, the Municipality of Ivrea, based on their roles in the implementation of the Management Plan, thus including representatives from local authorities, universities and schools, local associations, partners in specific projects aimed at enhancing and promoting the World Heritage Site, funding bodies, and beneficiaries outlined in the Plan as targets of proposed interventions. This selection process was pivotal in capturing a broad spectrum of perspectives, enriching the study with diverse insights and experiences crucial for the site's effective stewardship. The interview guidelines gathered basic demographic data of the participants. This was followed by questions about their specific responsibilities within the Management Plan, allowing us to map the network of influence and accountability. The qualitative part of the interview probed the participants' subjective evaluations of actions taken, governance structures, and prospects of the site, revealing the nuanced interplay between policy, practice, and perception. A quantitative assessment complemented this, where participants rated aspects of the Management Plan on a Likert scale, providing a measurable dimension to their subjective insights. Participants were asked to rate various elements of the Management Plan on a scale from 0 (*insufficient*) to 5 (*excellent*), encompassing areas such as site management, conservation efforts, stakeholder competencies, community engagement, and site accessibility. This dual approach enriched our understanding of stakeholder satisfaction and highlighted areas for potential enhancement. The interviews concluded by exploring challenges and weaknesses, which are critical steps for any adaptive management strategy. By identifying these areas, we can propose targeted interventions that align with the dynamic needs of heritage conservation and management. This structured yet flexible interview format is emblematic of the iterative nature of research, allowing for both standardised data collection and the accommodation of individual narratives, thus providing a comprehensive understanding of the complex heritage management ecosystem.

Second, the insights gathered via the interviews were used as input to design two co-creation workshops to allow a more in-depth assessment of the Management Plan (Workshop 1: "Management Plan Assessment") and identify possible future scenarios (Workshop 2: "Future Scenarios"). Far from being isolated, the workshops represent a seamless extension of the dialogues initiated during the semi-structured interviews. Notably, they encompassed both participants from the initial interview cohort and newly identified actors who emerged during the Management Plan assessment process. By intentionally expanding the participant pool, we fostered a more inclusive dialogue—one that extended beyond administrative boundaries and embraced diverse perspectives. A total of 30 people were involved in the two workshops in March 2023:

18 participants in Workshop 1, and 12 participants in Workshop 2. The workshops were designed around the need to (a) involve local actors in UNESCO World Heritage Site management, (b) increase the awareness of the values and local resources for social and community growth and flourishing, and (c) collectively identify development opportunities related to the presence of a UNESCO Site (Canadian Commission for UNESCO & UK National Commission for UNESCO, 2022; UNESCO, 2019). These workshops, therefore, represent a pivotal step toward nurturing a sense of shared ownership and collective responsibility for Ivrea's industrial heritage—a legacy that transcends generations and resonates with the very essence of community identity.

Third, an extra workshop was specifically designed to target the younger generation. Fifty-three students participated in this innovative session, which was designed to foster a bottom-up reactivation of local development processes. The workshop's format diverged from the previous two, reflecting the distinct needs and perspectives of its youthful participants. This workshop integrated the participatory tools utilised in the first two workshops with methodologies adapted from hackathons and Design Sprint (Ferreira & Canedo, 2020; Jansen-Dings et al., 2017; Knapp et al., 2016; Lara & Lockwood, 2016; Medina Angarita & Nolte, 2020). Both formats are considered learning methods that originated in software engineering and later transferred to the economic and design domains. They are based on activating collaborative processes for the development of innovative ideas to solve complex problems in a short time. They aim to rapidly generate innovative solutions to complex challenges, leveraging young minds' creative and innovative potential through team competition, collaborative group work, and a hands-on approach. The workshop unfolded over five hours, during which the students engaged in a friendly competition to address challenges and identify opportunities related to the UNESCO Site of Ivrea. The methodology of the Design Sprint provided a structured framework with predefined rules, facilitating the active involvement of students, teachers, and external experts. The participants had a set space and time to develop new projects in response to recognised needs within the Site, articulated around specific topics.

The integration of methodologies between the first two workshops and the third was evident in the continuity of participatory tools and the emphasis on stakeholder engagement. However, the third workshop introduced additional elements, such as the use of "needs cards," which contained comments and reviews about the Site from various audience perspectives. This allowed participants to compare these external perceptions with their own, fostering a deeper understanding of the Site's needs and potential. In conclusion, the third workshop represented a methodological evolution tailored to the younger demographic, maintaining the participatory essence of the previous sessions while introducing new techniques to stimulate innovation and active learning. This approach not only engaged the students in managing the UNESCO Site but also empowered them to become proactive contributors to the sustainable development of their cultural heritage.

5. Findings: Evaluating UNESCO World Heritage Site Management Through Action Research

The analysis of the interviews and co-creation workshops yielded valuable insights into the management dynamics of the UNESCO World Heritage Site of Ivrea and the opportunity to increase community engagement to shape its future. First, the exploratory interviews conducted with key stakeholders in Ivrea enabled a comprehensive needs analysis linked to the management of the World Heritage Site. Participants, drawn from local authorities, universities and schools, local associations, partners in specific projects aimed

at enhancing and promoting the World Heritage Site, funding bodies, and beneficiaries, provided qualitative reflections on the implemented actions, governance, and future development perspectives.

A recurring theme from the interviews was the need for a governance structure that would be better able to steer private action towards the UNESCO Site's valorisation and maximising its properties' usability. One interviewee mentioned: "There is a necessity for governance that can direct private efforts in a way that truly benefits the heritage site and its accessibility." Another participant echoed this sentiment: "The actors involved in the Management Plan can influence this management by fostering shared governance practices between public and private entities."

The interviews revealed a critical knowledge gap among local actors regarding the Management Plan, and this limited the interviewees' ability to collaborate on collective projects, as highlighted by one participant: "The absence of a defined budget to support all the actions planned has made it complex for some stakeholders to develop articulated and shared project designs." This gap has been identified as a pivotal area for intervention, with targeted efforts needed to increase awareness and understanding of the Management Plan within the local community. Moreover, some participants highlighted the importance of involving schools and young individuals in the site's management: "Engaging schools and young people is undoubtedly an objective to pursue. The connection between education and heritage is crucial for fostering a sense of ownership and active participation." This perspective aligns with the broader goal of nurturing a new generation of heritage stewards who can contribute to the sustainable development of Ivrea's industrial legacy.

Additionally, the quantitative assessment of stakeholder satisfaction, conducted via a mini-survey questionnaire, highlighted varying levels of satisfaction (from 0 to 5) across the five actions of the Management Plan. The survey results, depicted in Table 1, indicate a correlation between stakeholders' familiarity with the plan and their level of satisfaction, suggesting that increased knowledge could lead to more effective engagement and implementation of the plan.

The intersection of qualitative and quantitative methods has provided insights into the management dynamics of Ivrea's UNESCO Site. The critical analysis of these findings points to the importance of governance, collaboration for project development, and the empowerment of local actors through education and increased plan awareness, setting a course for the Site's sustainable future.

Second, two co-creation workshops, "Management Plan Assessment" and "Future Scenarios," were conducted. Guided by the outcomes of the interviews, the workshops aimed at involving local actors in the management

Table 1. Satisfaction of interviewees (on a scale of 0 to 5) with regard to the five Actions Plans (A. Coordination, B. Protection, Conservation and Documentation, C. Capacity building, D. Communication and Education, E. Presentation) of the Management Plan of the UNESCO World Heritage Site of Ivrea.

Action Plan of the Site Management Plan	Level of satisfaction (from 0 to 5)
A. Coordination	3.59
B. Protection, Conservation and Documentation	3.53
C. Capacity building	3.47
D. Communication and Education	3.06
E. Presentation	2.85

of the UNESCO Site, raising awareness of the Site's values for social and community growth, and collectively identifying development opportunities. These workshops served as a collaborative platform to redesign the relationships between institutions and other stakeholders, ensuring sustainable development and heritage safeguarding. The collective intelligence of different stakeholders emerged as a vital resource for shaping the future of the UNESCO World Heritage Site.

Participants were divided into small groups in the first co-creation workshop dedicated to assessing the Management Plan. They were encouraged to (a) identify and reflect on the overall needs of the UNESCO World Heritage Site and (b) indicate specific actions to address those needs (see Figure 1). Starting by analysing the current situation, participants highlighted aspects that need to be addressed in the future. These include the enhancement of skills and capabilities, especially in the field of tourist hospitality, increased involvement of the local community beyond specialised audiences, the strengthening of international and national networks through the exchange of best practices, and the development and innovation of entrepreneurship based on past industrial experiences.

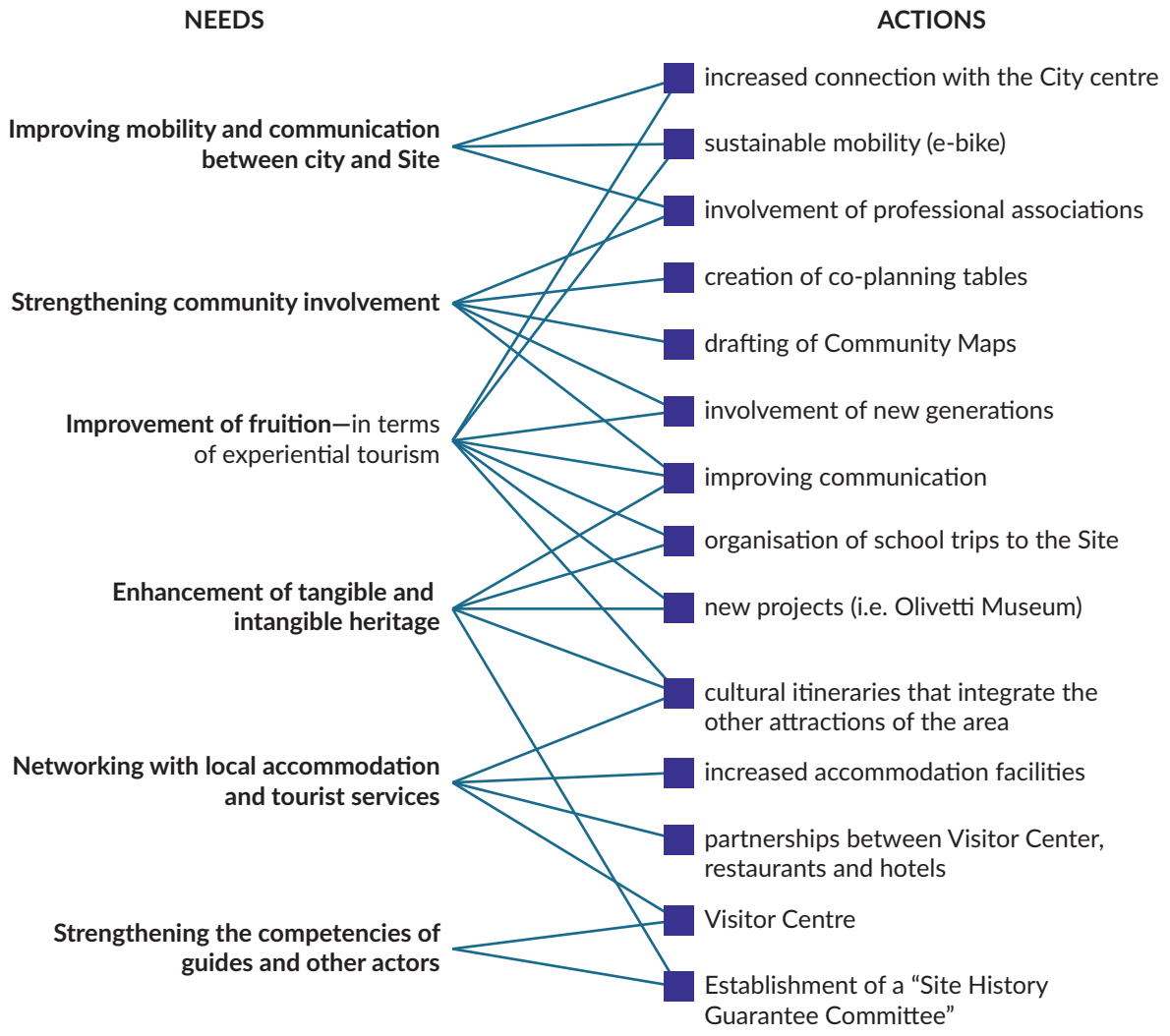


Figure 1. Needs and corresponding actions emerged in the first participatory workshop of the UNESCO World Heritage Site Management Plan of Ivrea.

Afterwards, the workshop facilitated a collective analysis of the impacts of the UNESCO designation on the local context, as perceived by the workshop participants (see Figure 2). The socio-cultural and economic impacts identified by the participants illustrate diversity in the roles and commitment of the different stakeholders and highlight key elements for the site's future development. Some participants highlighted among the impacts an increased knowledge of Olivetti's cultural heritage and, more generally, the raising of awareness of issues related to the UNESCO designation and industrial architecture, e.g., through increased access to the Olivetti historical archive or activities carried out in local schools. Other participants, especially those linked to local authorities, emphasise the activation of a process of safeguarding the 20th century industrial architecture heritage and the ongoing effort to reuse these buildings.

In the second co-creation workshop, participants were prompted to reflect on potential actions to align the new Management Plan (2024–2027) of the Site with the Agenda 2030 and, in particular, to the four Culture Indicators defined by UNESCO: Environment and Resilience, Prosperity and Livelihoods, Knowledge and Skills, Inclusion and Participation (see Figure 3). This futuring session aimed to incorporate sustainable development principles into the new Plan and align the management strategies with global cultural sustainability goals outlined by UNESCO. For instance, education and capacity building are to be considered central to the site's management, aiming to foster awareness and skills for enhancing both tangible and intangible heritage. Additionally, achieving economic growth under environmentally and socially sustainable conditions and promoting innovative industrial development are indirect objectives that characterise the strategic vision of the management of the site. Lastly, the field of environmental sustainability and the promotion of responsible production and consumption align with strategies for establishing environmentally

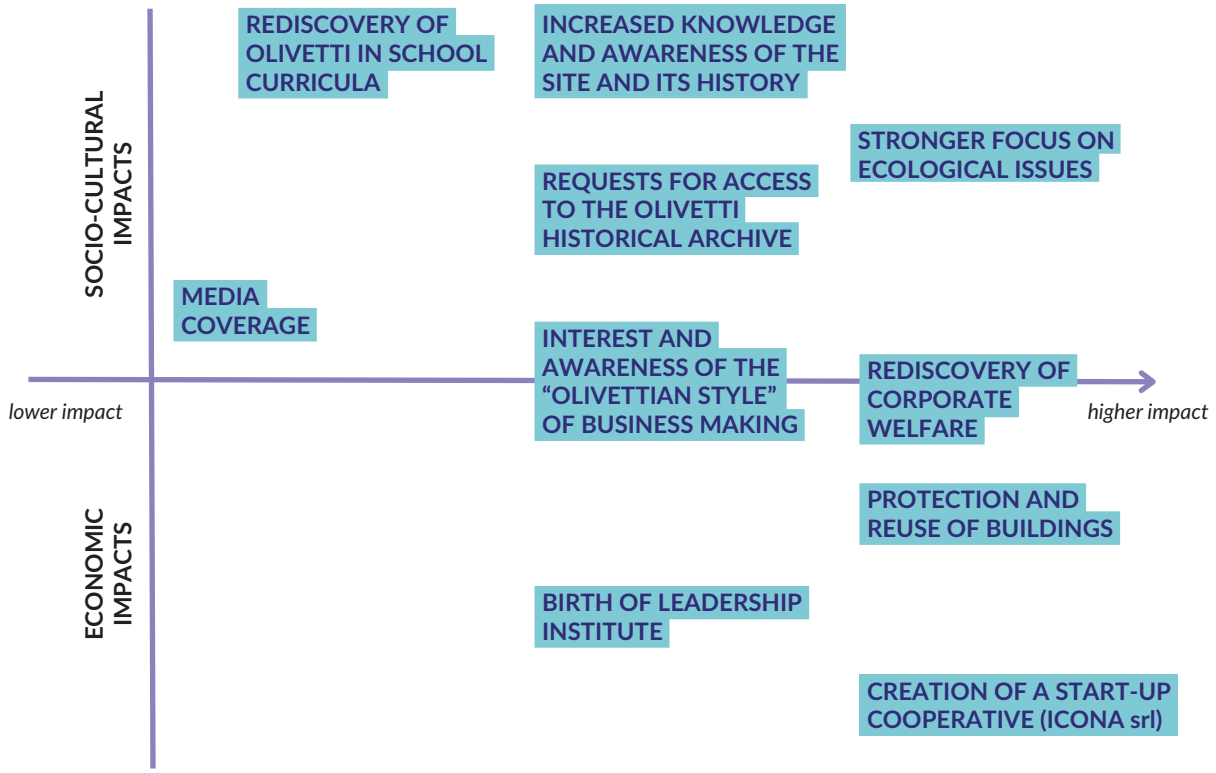


Figure 2. The economic and social impacts of the designation of Ivrea as a UNESCO World Heritage Site were observed by the participants in the first participatory workshop.

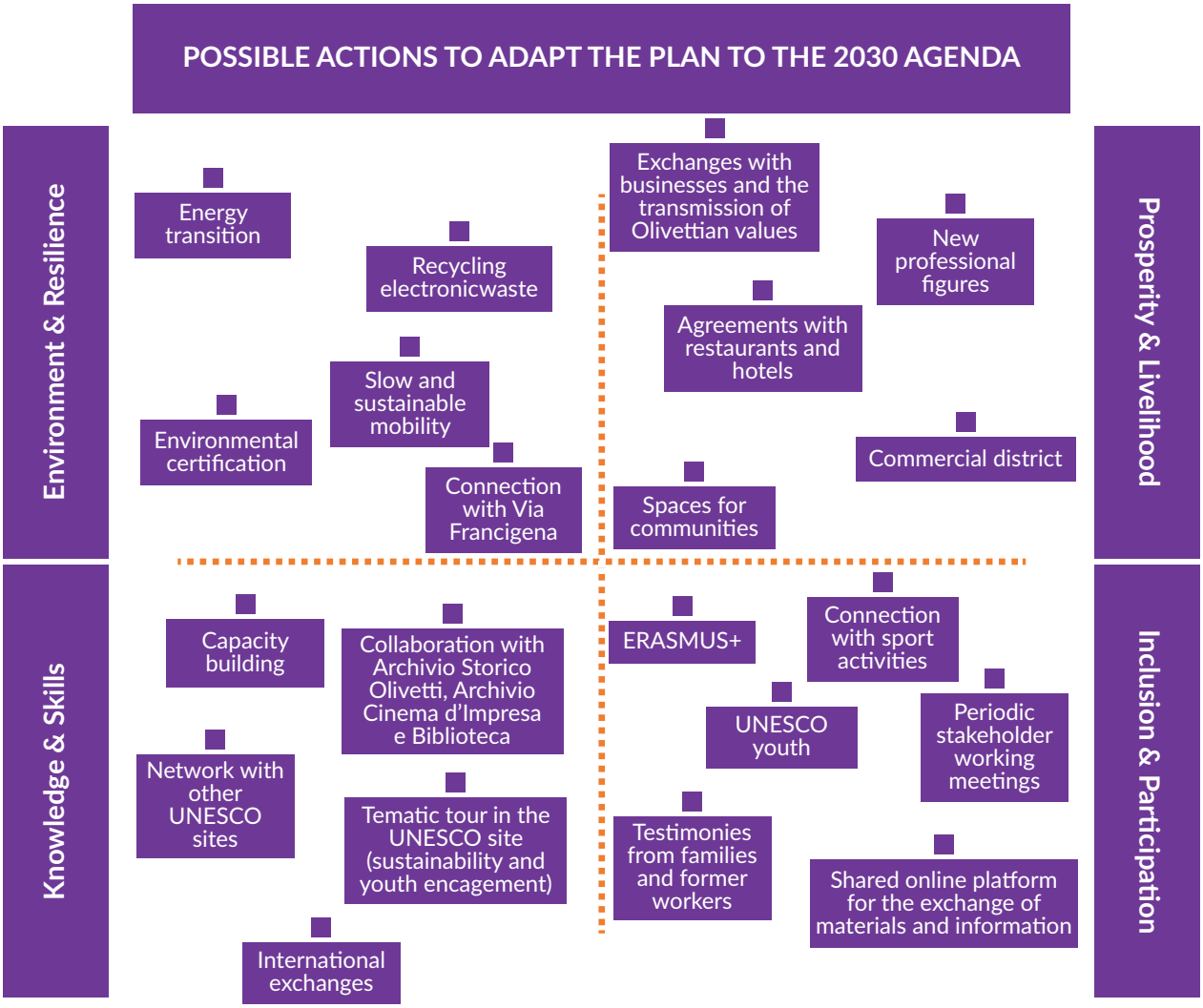


Figure 3. Possible actions to align the management of the Ivrea UNESCO World Heritage Site with the 2030 Sustainable Development Goals (SDGs), as identified by the participants in the second participatory workshop.

conscious businesses in the realm of sustainability within the territory. The two workshops contributed to a deeper understanding of the local perceptions and aspirations of the UNESCO World Heritage Site and can guide the formulation of more inclusive and forward-thinking strategies for the UNESCO World Heritage Site of Ivrea.

Third, we explored youth engagement in the third and last co-creation workshop, which was designed as a hackathon—an intensive, time-bound event that brings together diverse talents to creatively solve specific challenges through rapid prototyping and experimentation, thus fostering collaborative innovation. The workshop hosted a combination of presentations of the context of Ivrea, cultural professionals acting as mentors, and group work guided by design tools and supported by facilitators. A total of 53 students from two high schools in Ivrea actively participated in the hackathon. Several milestones were reached through the workshop:

- Increased awareness: The initiative contributed to the widespread awareness of the value, uniqueness, and cultural resources of the local area and the UNESCO-designated site.

- Direct engagement and mobilisation: The workshop successfully engaged and mobilised young individuals, inspiring them to define objectives and actions aimed at the sustainable development of the UNESCO Site.
- Information dissemination on site management: The workshop facilitated the dissemination of information about the Site Management Plan, easing the integration of young participants into the network of stakeholders who were actively involved as key contributors to the ongoing processes. The involvement of youth as protagonists in addressing the current needs and future challenges of the UNESCO Site was a significant achievement.

The hackathon approach can be considered an effective way for harnessing the creative potential of the younger generation. The workshop not only contributed to the identification of youth perspectives but also fostered a sense of ownership and connection towards their city's UNESCO World Heritage Site. Integrating innovative approaches to bridge the gap between tradition and innovation proved to be essential when ensuring the Site's relevance for future generations.

One important aspect that emerges through the analysis of the interviews and the workshops is the need to attract organisations that are able to share Olivetti's philosophy and values while at the same time making the UNESCO Site management system more dynamic, innovative, and forward-looking. To meet this need, several efforts were identified to leverage the international networks activated by the UNESCO designation and use the protected buildings to foster innovation. One example in this respect is Officine ICO, a manufacturing facility that was part of Camillo Olivetti's company expansion. Conceived initially as a manufacturing facility, Officine ICO has undergone extensive transformation through the years. Several building alterations and adaptations were made in the past to adapt the facilities to new production needs and regulatory requirements (Ivrea Città Industriale, n.d.-a, n.d.-b; Ministero della Cultura, n.d.). Officine ICO was bought recently by ICONA Srl, an organisation led by Andrea Ardissone and Alberto Zambolin, with the purpose of revitalising the industrial legacy of Olivetti. On November 9, 2017, ICONA Srl signed a preliminary agreement to acquire a segment of the Red Brick Factory, now known as Officine ICO (Ivrea Città Industriale, n.d.-b). The two founders convened a general assembly of 20 stakeholders who collectively embraced the vision of modernising industrial sites linked to Olivetti. Their shared mission was to interpret socio-economic shifts and anticipate future challenges. The project "The Future Is Back Home" is a notable brainchild of this collaborative effort. Envisioned as an innovation lab, this place is poised to test and refine new production models, pioneering new educational approaches and social initiatives. The proposed project positions the Red Brick Factory as a hub for innovation designed as an inclusive space beckoning the local community and the global stage alike. It aspires to be a platform for ideas, individuals, and enterprises, seamlessly bridging technology and societal issues, innovation and industrial heritage (Officine ICO, n.d.-b).

A second project within Officine ICO is Officine ICO•LAB. Orchestrated by CZA Architects, this project aims to craft a contemporary space harmonising business zone, public social hubs, services, training grounds, exhibition spaces, and laboratories. Drawing inspiration from Adriano Olivetti's vision of a tangible community, the initiative strives to forge a novel ecosystem that balances entrepreneurship, personal development, societal impact, and environmental considerations. Objectives encompass inclusivity, cultural production, local actors' empowerment, innovation promotion, and fostering social economy initiatives. The approach emphasises collaboration, multidisciplinary methodologies, strong community ties, creativity, and sustainability as a guiding principle (Officine ICO, n.d.-a).

To accelerate the revitalisation of Olivetti industrial areas, Ener2Crowd and Infinityhub have launched a crowdfunding campaign for Officine ICO in 2023. This month-long campaign sought to secure a portion of the resources required for the regeneration of some of the spaces of Officine ICO. The envisioned project encompasses the energy redevelopment of historic premises to transform an area of 30,000 square metres into production and prototyping zones for existing and new businesses (Ener2Crowd, n.d.).

Innovation manifests itself in Ivrea as a cluster of projects poised to reignite past architectural, cultural, and social innovation. To this regard, it becomes crucial to acknowledge that the economic landscape of Ivrea today differs significantly from the conditions that led to Olivetti's innovations. In this context, UNESCO can play a pivotal role as a catalyst to foster new paradigms in innovation. The adaptation sought goes beyond heritage preservation, as it extends to the creation of new directions for future development. The pivotal question remains whether the international network fostered by UNESCO, individual initiatives, and public-private funds will align and prove sufficient for breathing contemporary vitality into the legacy of Olivetti.

6. Conclusions

The analysis of Ivrea's UNESCO World Heritage Site management has provided insights into its current status and future development. The assessment of stakeholder satisfaction with the Management Plan uncovered a central challenge related to the nexus between the local community and Ivrea's industrial heritage. Community awareness, active participation, and the promotion of community education were identified as key priorities.

This study has three main implications. First, there are theoretical implications concerning the enhancement of community awareness and fostering active participation, particularly through innovative initiatives targeting different age groups. The exploration of youth involvement through dedicated workshops has highlighted the potential for fostering fresh perspectives and ensuring the relevance of heritage for future generations. Furthermore, innovative projects supported by private enterprises and crowdfunding campaigns emphasise the importance of aligning international networks and public-private funds to revamp the legacy of Olivetti's philosophy and values. As Ivrea navigates the intersection of tradition and innovation, the UNESCO designation stands as a catalyst, guiding the city's evolution towards the coexistence of its industrial heritage and contemporary dynamism. This research contributes to the broader discourse on participatory heritage management, offering valuable insights for academics, policymakers, and local stakeholders invested in the sustainable development of UNESCO-designated sites.

Second, the study advocates for the methodological merit of the action-research approach in exploring community engagement in the management of a UNESCO World Heritage Site. Carried out through co-creation workshops, action research engenders a dynamic and participatory investigative approach. The engagement of local actors facilitates a nuanced comprehension of their perspectives and aspirations, thereby leading to the formulation of inclusive and forward-thinking strategies for the UNESCO World Heritage Site.

Lastly, this study advocates for well-informed policy-making, recognising the inherent connection between tradition and innovation. The study underscores the importance of aligning public and private interests for innovative developmental initiatives in the context of heritage preservation. Significant aspects include the potential discrepancy between UNESCO Site designations, actual site usage, and the transient nature of

cultural clusters in industrial heritage. The inquiry into whether cultural clusters could become permanent features raises thought-provoking questions, including the role of a UNESCO designation as political legitimation for permanent cultural uses. While the study does not directly tackle the topic, it suggests directions for further investigation. Indeed, cultural uses are pivotal for future site utilisation, and while participatory workshops have touched upon this, deeper exploration is needed.

In conclusion, this investigation contributes to broadening theoretical paradigms, methodologies, and policy considerations essential for the sustainable development of UNESCO World Heritage Sites. The study may offer a blueprint or roadmap for reconciling tradition and innovation in managing and preserving cultural heritage. On the local level, raising awareness and facilitating active participation among local stakeholders lays the groundwork for fostering a deeper appreciation and understanding of Ivrea's industrial heritage, ensuring its continued relevance and significance for future generations.

Acknowledgments

The authors would like to thank all participants for sharing their time and experiences during the interviews and workshops. The authors are also grateful to the anonymous reviewers and the editors of this thematic issue for the constructive comments which have helped improve the quality of the article.

Funding

The empirical data of this article are based on the commissioned project that Fondazione Santagata conducted for the Municipality of Ivrea (analysis and adaptation of the Management Plan of the UNESCO Site "Ivrea, Industrial City of the 20th Century," along with a community development process). Mariangela Lavanga would also like to thank the European Union's Horizon Europe ongoing funded project "FABRIX – Fostering local, beautiful, and sustainably designed regenerative textile & clothing ecosystems," grant agreement No. 101135638, for the opportunity to develop further some of the ideas presented in this article (i.e., the future of a post-industrial city where cultural and creative industries play a vital role, as well the active engagement of stakeholders to envision such a future). Views and opinions expressed are however those of the authors only and do not necessarily reflect those of the European Union or the European Health and Digital Executive Agency – HaDEA. Neither the European Union nor the granting authority can be held responsible for them.

Conflict of Interests

Erica Meneghin from Fondazione Santagata reports that she worked on the commissioned project which received funding from the Municipality of Ivrea. The other co-authors declare they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this article.

References

Andres, L., & Grésillon, B. (2013). Cultural brownfields in European cities: A new mainstream object for cultural and urban policies. *International Journal of Cultural Policy*, *19*(1), 40–62. https://doi.org/10.1080/10286632.2011.625416

Asprogerakas, E., & Mountanea, K. (2020). Spatial strategies as a place branding tool in the region of Ruhr. *Place Branding and Public Diplomacy*, *16*(4), 336–347. https://doi.org/10.1057/s41254-020-00168-1

Bandarin, F., & Van Oers, R. (2014). *Reconnecting the city: The historic urban landscape approach and the future of urban heritage*. Wiley.

Bathelt, H., Malmberg, A., & Maskell, P. (2004). Clusters and knowledge: Local buzz, global pipelines and the process of knowledge creation. *Progress in Human Geography*, *28*(1), 31–56. https://doi.org/10.1191/0309132504ph469oa

Bertacchini, E., & Frontuto, V. (2024). Economic valuation of industrial heritage: A choice experiment on Shanghai Baosteel industrial site. *Journal of Cultural Heritage*, *66*, 215–228. https://doi.org/10.1016/j.culher.2023.11.016

Bertacchini, E., & Santagata, W. (2011). *Creative atmosphere: Cultural industries and local development* (Working paper series, 4). Department of Economics "S. Cognetti de Martiis." https://www.fondazionesantagata.it/pubblicazioni/creative-atmosphere-cultural-industries-and-local-development

Bramwell, B., & Rawding, L. (1994). Tourism marketing organisations in industrial cities: Organisations, objectives and urban governance. *Tourism Management*, *15*(6), 425–434. https://doi.org/10.1016/0261-5177(94)90063-9

Braun, E., & Lavanga, M. (2007). *An international comparative quick scan into national policies for creative industries*. European Institute for Comparative Urban Research. https://repub.eur.nl/pub/132461/2007-Braun-Lavanga-National-policies-for-creative-industries-quickscan.pdf

Bullen, P. A., & Love, P. E. (2010). The rhetoric of adaptive reuse or reality of demolition: Views from the field. *Cities*, *27*(4), 215–224. https://doi.org/10.1016/j.cities.2009.12.005

Burnes, B. (2004). Kurt Lewin and complexity theories: Back to the future? *Journal of Change Management*, *4*(4), 309–325. https://doi.org/10.1080/1469701042000303811

Canadian Commission for UNESCO, & UK National Commission for UNESCO. (2022). *Sites for sustainable development: Realising the potential of UNESCO designated sites to advance Agenda 2030*. UNESCO.

Cossons, N. (2016). Why preserve the industrial heritage? In J. Douet (Ed.), *Industrial heritage re-tooled: The TICCIH guide to industrial heritage conservation* (pp. 6–16). Routledge.

Court, S., & Wijesuriya, G. (2015). *People-centred approaches to the conservation of cultural heritage: Living heritage*. ICCROM.

Czischke, D. K., Scheffler, N., Moloney, C., & Turcu, C. (2015). *Sustainable regeneration in urban areas*. URBACT. https://archive.urbact.eu/sites/default/files/soa_04-final-03.pdf

De Gregorio, S., De Vita, M., De Berardinis, P., Palmero, L., & Risdonne, A. (2020). Designing the sustainable adaptive reuse of industrial heritage to enhance the local context. *Sustainability*, *12*(21), Article 9059. https://doi.org/10.3390/su12219059

De la Torre, M., & Mason, R. (2002). *Assessing the values of cultural heritage*. Getty Conservation Institute.

Douet, J. (Ed.). (2016). *Industrial heritage re-tooled: The TICCIH guide to industrial heritage conservation*. Routledge.

Ener2Crowd. (n.d.). *Ener2Crowd e Infinityhub per salvare le storiche Officine ICO Olivetti di Ivrea attraverso il crowdfunding*. https://blog.ener2crowd.com/ener2crowd-e-infinityhub-per-salvare-le-storiche-officine-ico-olivetti-di-ivrea-attraverso-il-crowdfunding

European Commission. (2020). *Innovating cities policy report for EU R&I sustainable urban development*. European Union Publication Office.

Farr, D. (2011). *Sustainable urbanism: Urban design with nature*. Wiley.

Ferilli, G., Sacco, P. L., & Blessi, G. T. (2016). Beyond the rhetoric of participation: New challenges and prospects for inclusive urban regeneration. *City, Culture and Society*, *7*(2), 95–100. https://doi.org/10.1016/j.ccs.2015.09.001

Ferreira, V. G., & Canedo, E. D. (2020). Design sprint in classroom: Exploring new active learning tools for project-based learning approach. *Journal of Ambient Intelligence and Humanized Computing*, *11*, 1191–1212. https://doi.org/10.1007/s12652-019-01285-3

Fontana, G. L., & Gritti, A. (2020). *Architecture at work. Towns and landscapes of industrial heritage*. Forma Edizioni.

Friel, M., & Lavanga, M. (2024). Cultural driver. Companies' role in shaping urban identity and heritage. In S. Romenti (Ed.), *Inside Nuvola Lavazza: A hub for strategic communication* (pp. 79–85). Bocconi University Press.

Galuzzi, P. (2016). Historical authenticity of modern architecture: Preservation and regeneration of Olivetti architecture in Ivrea. *TECHNE-Journal of Technology for Architecture and Environment*, *2016*(12), 122–128.

Grecchi, M. (2022). *Building renovation: How to retrofit and reuse existing buildings to save energy and respond to new needs*. Springer Nature.

Hermawan, F., Sani, K. K., & Purwanggono, B. (2020). Strategies for revitalisation of Semarang Heritage Area: A stakeholders perspective. *E3S Web of Conferences*, *202*, Article 06044.

Hospers, G. J. (2002). Industrial heritage tourism and regional restructuring in the European Union. *European Planning Studies*, *10*(3), 397–404. https://doi.org/10.1080/09654310220121112

Ifko, S. (2016). Comprehensive management of industrial heritage sites as a basis for sustainable regeneration. *Procedia Engineering*, *161*, 2040–2045. https://doi.org/10.1016/j.proeng.2016.08.800

Ifko, S., & Stokin, M. (2017). *Protection and reuse of industrial heritage: Dilemmas, problems, examples*. ICOMOS.

Iglieri, G. (2020). The Community Movement and the attempt at unification of Italian Socialist political forces (1956–1957). *Studi Storici*, *2020*(4), 1035–1060. https://www.rivisteweb.it/doi/10.7375/98837

Ivrea Città Industriale. (n.d.-a). *Management plan*. https://www.ivreacittaindustriale.it/dossier-di-candidatura

Ivrea Città Industriale. (n.d.-b). *Fabbrica dei Mattoni Rossi e Officine ICO*. https://www.ivreacittaindustriale.it/i-beni/officine-ico

Jansen-Dings, I., van Dijk, D., & van Westen, R. (2017). *Hacking culture. A how to guide for hackathons in the cultural sectors*. Waag Society.

Jonsen-Verbeke, M. (1999). Industrial heritage: A nexus for sustainable tourism development. *Tourism Geographies*, *1*(1), 70–85. https://doi.org/10.1080/14616689908721295

Knapp, J., Zeratsky, J., & Kowitz, B. (2016). *Sprint: How to solve big problems and test new ideas in just five days*. Simon & Schuster.

Konior, A., & Pokojska, W. (2020). Management of postindustrial heritage in urban revitalisation processes. *Sustainability*, *12*(12), Article 5034. https://doi.org/10.3390/su12125034

Kuzior, A., Grebski, W., Kwilinski, A., Krawczyk, D., & Grebski, M. E. (2022). Revitalisation of post-industrial facilities in economic and socio-cultural perspectives—A comparative study between Poland and the USA. *Sustainability*, *14*(17), Article 11011. https://doi.org/10.3390/su141711011

Lara, M., & Lockwood, K. (2016). Hackathons as community-based learning: A case study. *TechTrends*, *60*(5), pp. 486–495. https://doi.org/10.1007/s11528-016-0101-0

Lavanga, M. (2009). Culture and cities: Urban regeneration and sustainable urban redevelopment. In S. Ada (Ed.), *Cultural policy and management yearbook 2009* (pp. 63–75). Boekmanstudies.

Lavanga, M. (2013). Artists in urban regeneration processes: Use and abuse? *Territoire en mouvement*, *17/18*, 6–19. https://doi.org/10.4000/tem.1971

Lavanga, M. (2020). Cultural districts. In R. Towse & T. Navarrete Hernandez (Eds.), *Handbook of cultural economics* (3rd ed., pp. 174–182). Edward Elgar. https://doi.org/10.4337/9781788975803.00025

Lewin, K. (1946). Action research and minority problems. *Journal of Social Issues*, *2*(4), 34–46. https://doi.org/10.1111/j.1540-4560.1946.tb02295.x

Liouris, C., & Deffner, A. (2005, August 23–27). *City marketing—A significant planning tool for urban development in a globalised economy* [Paper presentation]. 45th Congress of the European Regional Science Association, Amsterdam, The Netherlands. https://hdl.handle.net/10419/117606

Liu, F., Zhao, Q., & Yang, Y. (2018). An approach to assess the value of industrial heritage based on Dempster-Shafer theory. *Journal of Cultural Heritage*, *32*, 210–220. https://doi.org/10.1016/j.culher.2018.01.011

Lunati, G. (2015). *Con Adriano Olivetti alle elezioni del 1958* (Vol. 5). Edizioni di Comunità.

Magliacani, M. (2023). How the sustainable development goals challenge public management. Action research on the cultural heritage of an Italian smart city. *Journal of Management and Governance*, *27*(3), 987–1015. https://doi.org/10.1007/s10997-022-09652-7

Medina Angarita, M. A., & Nolte, A. (2020). What do we know about hackathon outcomes and how to support them? A systematic literature review. In A. Nolte, C. Alvarez, R. Hishiyama, I. A. Chounta, M. Rodríguez-Triana, & T. Inoue (Eds.), *Collaboration technologies and social computing* (pp. 50–64). Springer. https://doi.org/10.1007/978-3-030-58157-2_4

Mieg, H. A., & Töpfer, K. (Eds.). (2013). *Institutional and social innovation for sustainable urban development*. Routledge.

Ministero della Cultura. (n.d.). *Officine Olivetti ICO di Ivrea*. Atlante dell'Architettura Contemporanea. https://atlantearchitetturacontemporanea.cultura.gov.it/officine-olivetti-ico-di-ivrea

Mommaas, H. J. T. (2004). Cultural clusters and the post-industrial city: Towards a remapping of urban cultural governance. *Urban Studies*, *41*(3), 507–532. https://doi.org/10.1080/0042098042000178663

Olivetti, A. (2013). *Il mondo che nasce* (Vol. 1). Edizioni di comunità.

Officine ICO. (n.d.-a). *Il progetto*. https://lab.officineico.it/progetto

Officine ICO. (n.d.-b). *The future is back home*. https://www.thefutureisbackhome.com

Ringbeck, B. (2018). The World Heritage convention and its management concept. In S. Makuvaza (Ed.), *Aspects of management planning for cultural World Heritage Sites. Principles, approaches and practice* (pp. 15–24). Springer.

Ripp, M., & Rodwell, D. (2018). Governance in UNESCO World Heritage Sites: Reframing the role of Management Plans as a tool to improve community engagement. In S. Makuvaza (Ed.), *Aspects of management planning for cultural World Heritage Sites. Principles, approaches and practice* (pp. 241–253). Springer.

Roberts, P., & Sykes, H. (Eds.). (1999). *Urban regeneration: A handbook*. Sage.

Robiglio, M. (2016). *The Adaptive Reuse Toolkit. How cities can turn their industrial legacy into infrastructure for innovation and growth*. The German Marshall Fund of the United States.

Rossitti, M., & Torrieri, F. (2022). Action research for the conservation of architectural heritage in marginal areas: The role of evaluation. *Valori e Valutazioni*, *30*, 3–42. https://hdl.handle.net/11311/1231254

Savini, F. (2011). The endowment of community participation: Institutional settings in two urban regeneration projects. *International Journal of Urban and Regional Research*, *35*(5), 949–968. https://doi.org/10.1111/j.1468-2427.2010.00997.x

Scaffidi, F. (2022). Ecosystems of innovation: Socially-innovative practices in brownfields reactivation. In C. Perrone, F. Giallorenzo, & M. Rossi (Eds.), *Social and institutional innovation in self-organising cities* (pp. 89–95). Firenze University Press.

Simone, C., Sala, A. L., & Conti, M. E. (2021). From company town to "reversed" company town: The firm's role in shaping the urban landscape—The case of Ivrea (Italy). *International Journal of Environment and Health*, *10*(3/4), 179–194. https://doi.org/10.1504/IJENVH.2021.122300

Sun, M., & Chen, C. (2023). Renovation of industrial heritage sites and sustainable urban regeneration in post-industrial Shanghai. *Journal of Urban Affairs*, *45*(4), 729–752. https://doi.org/10.1080/07352166.2021.1881404

The International Committee for the Conservation of the Industrial Heritage. (2003). *The Nizhny Tagil Charter for the Industrial Heritage*. https://ticcih.org/wp-content/uploads/2013/04/NTagilCharter.pdf

Tötzer, T., & Gigler, U. (2005, August 23–27). *Managing urban dynamics in old industrial cities—Lessons learned on revitalising inner-city industrial sites in six European case studies* [Paper presentation]. 45th Congress of the European Regional Science Association, Amsterdam, The Netherlands. https://hdl.handle.net/10419/117761

UNESCO. (2013). *Managing cultural world heritage*.

UNESCO. (2015). *Policy for the integration of a sustainable development perspective into the processes of the World Heritage Convention*.

UNESCO. (2019). *Culture | 2030 indicators*.

UNESCO. (2023). *Urban heritage for resilience. Consolidated results of the implementation of the 2011 Recommendation on the Historic Urban Landscape*.

UNESCO, ICCROM, ICOMOS, & IUCN. (2023). *Enhancing Our Heritage Toolkit 2.0. Assessing management effectiveness of World Heritage properties and other heritage places*.

UNESCO World Heritage Centre. (n.d.). *About World Heritage*. https://whc.unesco.org/en/about

van der Borg, J., Russo, A. P., Lavanga, M., & Mingardo, G. (2005). *The impacts of culture on the economic development of cities*. European Institute for Comparative Urban Research.

VanHoose, K., Hoekstra, M., & Bontje, M. (2021). Marketing the unmarketable: Place branding in a postindustrial medium-sized town. *Cities*, *114*, Article 103216. https://doi.org/10.1016/j.cities.2021.103216

Vaništa Lazarević, E., Jelena, M., & Barać, M. (2020). Industrial brownfields as restorative environments: The possibility of transformation and reactivation of the abandoned industrial heritage. In M. Schrenk, V. V. Popovich, P. Zeile, P. Elisei, C. Beyer, J. Ryser, C. Reicher, & C. ÇeliK (Eds.), *Proceedings of 25th International Conference on Urban Planning, Regional Development and Information Society* (2nd ed., pp. 1231–1238). CORP – Competence Center of Urban and Regional Planning. https://raf.arh.bg.ac.rs/bitstream/id/6041/bitstream_6041.pdf

Vargas-Sánchez, A. (2015). Industrial heritage and tourism: A review of the literature. In E. Waterton & S. Watson (Eds.), *The Palgrave handbook of contemporary heritage research* (pp. 219–233). Palgrave Macmillan.

Vecco, M. (2010). A definition of cultural heritage: From the tangible to the intangible. *Journal of Cultural Heritage*, *11*(3), 321–324. https://doi.org/10.1016/j.culher.2010.01.006

Wicke, C., Berger, S., Golombek, J., & Routledge, G. (Eds.). (2018). *Industrial heritage and regional identities*. Routledge.

Xie, P. F. (2006). Developing industrial heritage tourism: A case study of the proposed jeep museum in Toledo, Ohio. *Tourism Management*, *27*(6), 1321–1330. https://doi.org/10.1016/j.tourman.2005.06.010

About the Authors

Matilde Ferrero is currently a PhD candidate at Magna Græcia University of Catanzaro (Italy). In 2023 she was a visiting PhD researcher at Erasmus University Rotterdam (The Netherlands). Her PhD research project explores how contemporary artists realise values between the art market and communities in urban contexts. Matilde holds a bachelor's degree in cultural heritage (University of Turin) and a master's degree in innovation and organisation of culture and arts (Alma Mater Studiorum – University of Bologna).

Martha Friel (PhD) is assistant professor of economics and business management in the Faculty of Arts, Fashion and Tourism at IULM University, Milan (Italy). Her research and teaching activities cover the economics and management of culture, creative industries, and tourism. She has published extensively and taught at major universities in Italy and abroad. She is senior fellow of the Fondazione Santagata for the Economy of Culture (Italy).

Erica Meneghin (PhD) is an architect and has a PhD in architectural and landscape heritage from the Politecnico di Torino and an MA in natural heritage management. She is currently serving as director of the Heritage Area at the Fondazione Santagata for the Economics of Culture, and is also acting as technical consultant for European projects and local development. She has experience as a researcher in the field of cultural heritage, having contributed to the development of management and strategic plans for cultural institutions and UNESCO sites.

Mariangela Lavanga (PhD) is associate professor of cultural economics and entrepreneurship at Erasmus University Rotterdam. Mariangela is the academic lead on fashion sustainability transition at the Design Impact Transition (DIT) platform, academic coordinator of the MA in cultural economics and entrepreneurship as well as co-founder and coordinator of the Minor Fashion Industry. She researches and teaches on cultural and creative industries and sustainable urban development. In particular, she focuses on the sustainability transition in the fashion and textile industry.

Urban Planning
2024 • Volume 9 • Article 7976
https://doi.org/10.17645/up.7976

cogitatio

ARTICLE

Open Access Journal

Assessing Industrial Heritage Through Collaborative Counter-Mapping: A Case Study of Salts Mill, UK

Wenyan Jin [1,†] **and Jiayi Jin** [2,†]

[1] School of Architecture and Urban Planning, Shandong Jianzhu University, China
[2] Architecture and Built Environment, Northumbria University, UK

Correspondence: Jiayi Jin (jiayi.jin@northumbria.ac.uk)

† The authors contributed equally to this work

Submitted: 11 December 2023 **Accepted:** 12 August 2024 **Published:** 19 September 2024

Issue: This article is part of the issue "Industrial Heritage and Cultural Clusters: More Than a Temporary Affair?" edited by Uwe Altrock (University of Kassel) and Janet Merkel (TU Berlin), fully open access at https://doi.org/10.17645/up.i341

Abstract

The decline of Britain's traditional manufacturing economy has resulted in an increase in abandoned factories and industrial structures, signifying a crucial turning point for local communities historically anchored in these industries. This research centres on the Salts Mill complex, a former textile factory that has undergone a remarkable transformation into a versatile space in the heart of Saltaire Village in Shipley, West Yorkshire, England. It delves into the revitalisation of Salts Mill, focusing on the intersection of industry and art. This approach uniquely highlights the socio-cultural and intangible elements embedded in the regeneration process, exploring strategies crafted to inject vitality into local communities intricately connected to this industrial site. Counter-mapping served as the primary participatory method, allowing insights from both rational observers (experts) and the involved users (local communities) to be integrated into three main areas of inquiry: the embodied experiences of Salts Mill, the essence of the locale as reflected in the building, and the everyday life interactions facilitated by arts-led regeneration. The authors argue that these components are indispensable for achieving comprehensive understandings and insights crucial to pioneering research on industrial heritage buildings. Moreover, reimagining the transformation of old factory structures through innovative arts-led initiatives can significantly bolster long-term sustainability and nurture resilient community development. This highlights the importance of prioritising community and broader context over merely focusing on the assessment and conservation of collections and buildings within post-industrial cities and towns.

Keywords

arts-led regeneration; collective memories; counter-mapping; industrial heritage; Saltaire industrial village; spirit of place

1. Introduction

As the traditional manufacturing economy undergoes substantial changes, the prevalence of abandoned factories and industrial structures has become commonplace across the globe. This marks a crucial juncture in the evolution of local communities deeply ingrained in these regions—residents are increasingly resistant to the idea of leaving their communities in pursuit of opportunities elsewhere (Riger & Lavrakas, 1981). Consequently, local governments and agencies are facing a pressing challenge to rejuvenate these regions. Conventional approaches to industrial tourism, commonly characterised by heritage conservation and presentation, prove inadequate for industrial heritage settlements with varied circumstances. These encompass inadequate incorporation of local values and attitudes; restricted engagement with broader local, national, and global trends; narrowly defined set of objectives; weak development of performance indicators; as well as constrained collaboration with stakeholders (Landorf, 2009a).

In the meanwhile, there has been a notable surge in the consideration of socio-cultural or intangible factors within heritage preservation and regeneration activities in recent decades (Simeon & Martone, 2014). The focus has shifted from solely emphasising the physical context to a broader perspective that centres on "the narrative conveyed by the object or the experiences it generates" (Bazelmans, 2013, p. 89). This shift in attention towards different forms of value stems from a range of interconnected political, administrative, and societal trends. Consequently, in response to this societal shift, personal narratives, which may not necessarily originate from experts or scientific sources, have gained significance in the appraisal of heritage and its adaptive reuse and revitalisation. Adopting this approach enables heritage sites to maintain a robust connection between the old factories and their residents, fostering a lasting sense of place that serves as a driving force for the sustainable development of the community.

This study is centred around Salts Mill located in the heart of the Saltaire, Shipley, England. Saltaire achieved UNESCO World Heritage Site status in 2001 and the village is recognised as a model industrial village that significantly influenced global town planning. Salts Mill as the main factory of the village falls under the category of "textile industry complexes" as defined in Oevermann's book *Urban Textile Mills* (Oevermann, 2021, p. 14), representing the cornerstone of the village's heritage buildings. Its architectural structure holds a rich history, brimming with captivating narratives and cherished memories, each carrying a unique spirit that has evolved through the ages. Consequently, the refurbishment of Salts Mill holds considerable implications for the community; it has undergone a progressive series of renovations led by the entrepreneur Jonathan Silver in collaboration with the renowned British artist David Hockney, transforming the old factory building into a focal point for art-inspired, design-centric, and community-oriented galleries. The Department for Culture, Media and Sport in the UK apprised the transformation of Salts Mill and said it transcends mere emotional resonance; it narrates the origins of an industrial past, defines the identity of the place, and mirrors its ongoing evolution (Bradford Council, 2015). In this investigation, the authors delved into the transformation of intangible aspects of industrial heritage into tangible forms, employing a collaborative counter-mapping methodology to elevate the socio-cultural and intangible components of architectural heritage. Aligned with the prevailing societal shift, the counter-mapping specifically focuses on three aspects of inquiries: the embodied experiences, the representation of the locale's essence, and the everyday life interactions through the regeneration. The methodology adeptly reconnects the data acquired through counter-mapping of the present to the spatial (physical) elements of the building, serving as a fresh addition to the established heritage valuation guidelines. These collective endeavours contribute to a deeper

understanding of how arts and culture significantly influence the revitalisation process of industrial heritage and cultural clusters within local communities.

2. Theoretical Framework

2.1. Embodied Experience and Perception of Heritage Buildings

In the realm of architectural heritage discourse, there is an increasing acknowledgment that our understanding of the environment goes beyond words, as it is shaped by a range of tangible experiences and perceptions. Cognitive and experiential worlds, including significant engagements with spaces, are profoundly moulded by our physical engagements with the built environment. According to Jelić and Staničić (2020), architecture has a dual purpose. Firstly, it acts as a tangible manifestation of culture, impacting individuals' physical interactions and behaviours within its spaces. It then serves as a framework for our memories and personal narratives, shaping both our individual and collective identities. This underscores heritage buildings and sites, especially industrial buildings which encompass not only their physical attributes but also socio-cultural and intangible elements, like shared memories, collective experiences, and the sense of identity they cultivate, all of which architecture supports and reflects.

Many heritage experts emphasise the significance of shaping our own understanding of heritage through the potentialities inherent in embodied memory (Waterton, 2014). This process is intricately linked to "sensuous dispositions" that are influenced by cultural, economic, political, and historical, factors, as highlighted by Hayes-Conroy and Hayes-Conroy (2010). Bazelmans (2013, pp. 89–96) further argues that the realm of embodied emotions and sensations can be best explored by non-experts, implying that the assessment of our architectural heritage should encompass not only the viewpoint of the rational observer (the expert) but also that of the involved user. Schofield (2016, pp. 7–10) further expands on this idea, asserting that heritage extends beyond mere perception. In line with Bazelmans' perspective, Schofield (2016) suggests that while heritage experts excel at handling the former, it is often local communities who possess expertise in that specific context. This misalignment in local stakeholder value perspectives highlights the necessity for participatory approaches that address the underlying motivations and value frameworks (Azzopardi et al., 2023).

In the meanwhile, heritage conservation in the UK has increasingly recognised these socio-cultural and intangible elements (Aydın et al., 2022; Djabarouti, 2021). The focus has expanded to encompass the stories it conveys and the experiences it evokes. This societal shift indicates that in the future, the socio-cultural and intangible "experiential value" of our heritage rooted in sensory interactions will become increasingly important. However, despite the term "experiential value" (Korsmeyer, 2018) capturing the sensory aspects of how we perceive heritage through our senses of touch, smell, sight, and hearing, there still remains a need for further clarity regarding its precise definition and implications.

2.2. Socio-Cultural Links Between Industrial Heritage and Local Communities

This research primarily concentrates on intangible aspects associated with the preservation of industrial heritage buildings, which often receive insufficient attention during the valuation process, leading to significant uncertainty and a lack of understanding in this emerging field. Within the terminology used, there

exist several closely related terms and definitions that warrant consideration. For example, Carman (2009) defines the immaterial values of built heritage as encompassing "the essence of a place" tied to the foundational concepts of a specific design or the associations that have evolved over time within a particular location. Similarly, the literature also introduces the concept of non-tangible elements within the realm of built heritage. According to Clarke et al. (2020, p. 871), these elements encompass "spatial qualities, the spirit of place, or other (socio-)cultural associations." This definition explicitly includes the notion of "spirit of the place" (Markevičienė, 2012) or "genius loci" (Norberg-Schulz, 2019; Vecco, 2020), a concept grounded in human perception that pertains to the unique and cherished ambience of a location. This often intertwines with the intangible facets of a location, such as memories, beliefs, local traditions, and similar aspects (Kuipers & De Jonge, 2017). In this context, this definition notably underscores the experiential and socio-cultural dimensions intertwined with built heritage and local communities.

It is important to recognise that socio-cultural aspects are most prominently evident in the realm of social values (Santos-Martín et al., 2017). For instance, Jones highlights the concept of social values, which are shaped by lived experiences and ongoing practices. These values highlight the significance of historical context for contemporary communities, encompassing elements such as individuals' sense of identity, belonging, their connection to a place, and the myriad forms of memory and spiritual associations (Jones, 2017). Consequently, the definition closely aligns with earlier discussions of the less tangible aspects of heritage, particularly emphasising the social and human dimensions. In the context of industrial heritage sites, intangible values have consistently been intertwined with the collective identities of the local people. These values have influenced the formulation of physical, visual, and perceived boundaries, impacting not only neighbourhoods but also entire regions (Jigyasu, 2015). As a result, community involvement in cultural heritage preservation is essential for creating and sustaining local communities' identities and social fabrics, in addition to helping to preserve the past.

In light of these recent advancements in knowledge, an increasing number of researchers advocate for a more comprehensive, expansive, and participatory approach to heritage valuation and preservation (Avrami et al., 2019; Tengberg et al., 2012). This approach, for instance, involves the active engagement of non-professional stakeholders, such as local residents and visitors, in the valuation process of heritage. Likewise, as mentioned earlier, Schofield (2016) also underscores the necessity for a fresh and more inclusive, people-centred approach in the care of heritage. Building upon this theoretical foundation and aligning with these contemporary developments, this study aims to contribute to the advancement of knowledge in promoting a participatory approach with the local communities to the assessment of architectural heritage.

2.3. A Collective and Alternative Practice Through Counter-Mapping

Presently, the procedures involving the selection, designation, and development of heritage areas often neglect the significance of intangible values. What is lacking is a greater recognition of the emotional, associative, and affective aspects of cultural attachment, encompassing the means by which individuals and communities establish bonds with buildings and places (Alcindor et al., 2021; Byrne, 2008). Forging this connection requires narratives about heritage that strike a chord with the intended audience, preferably stemming from that very audience. To effectively nurture these connections, it is crucial to transition toward an approach that is context-driven and flexible, rather than solely fixated on the creation, assessment, and

conservation of collections, buildings, and the place. Thus, the heritage sector must shift away from a defensive and unchanging stance and instead adopt more proactive, adaptable, and inclusive mindsets.

There is uncertainty and limited exploration in knowledge transfer between experts and the community, particularly in applying insights to develop a comprehensive heritage valuation system. Despite multi-criteria and holistic UK heritage assessment approaches (Donovan, 2013), uncertainties and knowledge gaps persist. Considering past, present, and future scenarios, this study advocates mental mapping or counter-mapping to expand knowledge of socio-cultural and intangible heritage values. Jones (2017) suggests these techniques are suited for evaluating socio-cultural values and should be integrated with community participatory approaches to understand the dynamic processes in valuing the historic environment. These collaborative-mapping or counter-mapping methods usually involve the integration of archival resources, like maps and aerial photographs, with various qualitative research techniques such as location-based oral interviews, site walks with community members, and the use of audio-visual recordings (Harrison, 2011; Thomas & Ross, 2013). Mental mapping methods, on the other hand, are more focused on intuitively sketching a personal, often individual, mental representation of the environment. This can be done either by hand on a blank canvas or by utilising an existing map as a reference point (Brennan-Horley, 2010; Lee et al., 2018).

Both mapping techniques share a common feature in their ability to promote a more participatory approach within the heritage sector, aligning with the fundamental purpose of this research. Verstijnen et al. (1998) highlight that mental mapping can serve as an engaging and enriching participatory method to imbue the social value of heritage with greater significance and influence. In contrast, counter-mapping and other related mapping methods diverge somewhat from mental mapping and often emerge in contexts that are more action-oriented and/or politically charged (Halder et al., 2020). This is because counter-maps or counter-cartographies stem from a longstanding tradition of post-colonial mapping practices that seek to reclaim agency, particularly for indigenous communities. In terms of terminology, counter-mapping, unlike methods such as mental mapping, places a stronger emphasis on mapping and drawing attention to what is typically left uncharted. This aligns with the main objective of this study, which is to work with the local post-industrial communities to co-render the intangible aspects of architectural heritage tangible and accord them a more prominent position in heritage care. This study embraces the methodology and definition of counter-mapping due to its inherently critical nature and its potential to establish a fresh and inclusive approach with local communities, distinct from the current evaluation methods within the heritage sector.

3. Methods

This research centres on the case study Salts Mill complex, which possesses a profound heritage history and holds significant socio-cultural value as the core of the Saltaire community. In order to achieve a comprehensive understanding, this study employs a multi-layered methodological approach including desk research and participatory counter-mapping to provide a comprehensive understanding of both the tangible and intangible aspects of the site, thereby giving them greater prominence in the evaluation and revitalisation processes. The initial phase involves desk research and archival analysis, including the collection of collecting historical articles and critical reviews about Salts Mill and Saltaire Village from sources such as the local community library, Google Scholar, and the British Newspaper Archive. To discover pertinent articles addressing the intangible aspects of the Salts Mill, terms like “memory,” “meaning,”

"opinion," "feeling," and "atmosphere" were employed in conjunction with the Salts Mill or David Hockney's Gallery to find the social-cultural value of this regeneration project.

In the second phase, 30 in-depth architectural and regeneration reviews were carefully selected from the desk research. These reviews, spanning from 1992 to 2023, served as the foundation for an architectural critique of Salts Mill and Saltaire, drawing on the perspectives of rational observers (the experts; Bazelmans, 2013, pp. 89–96). Professional judgment and expert opinions are commonly utilised methodologies in heritage impact assessments, as evidenced by studies such as the "Study of the Visual Impacts of the Proposed Expansion of the Port of Budva in Montenegro on Cultural Heritage" (Ashrafi et al., 2022). In such circumstances, impacts are primarily recognised and projected using experts' expertise, experience, and data gathered through fieldwork, interviews, workshops, historical maps, photographs, and documents (McCabe & Sadler, 2002). In addition, Sharp (2005) eloquently discusses the importance of architectural criticism in evaluating a building, artefact, work, or idea, emphasising the necessity for objectivity. He argues that a critic must possess keen judgment, sagacity, and the ability to resist the influence of mass cultural values. The contributors to these articles were all professionals, including heritage experts, architects, urban planners, and historians. Their insights on the Salts Mill project were gathered and analysed in Section 4.1.

In the final phase of this study, we focused on exploring local users' perspectives on revitalising this industrial heritage site; the study employed the previously mentioned counter-mapping methodology as a strategic enhancement to existing heritage site valuation guidelines. This approach enabled the public to actively participate in the valuation process by gathering input from 30 participants, who marked their perceptions and provided comments on various areas within the Salts Mill complex. This effort led to the creation of three collective counter-maps of Salts Mill, each focusing on distinct themes. The initiative aimed to foster a more inclusive, community-centred, and participatory approach to heritage management, aligning with the broader societal trend towards greater community involvement. Participants were recruited through physical posters placed inside the Salts Mill complex and via various online platforms. The final group comprised 30 participants: 15 residents from Saltaire or neighbouring villages in Shipley, five on-site Salts Mill staff, and 10 diverse visitors who were either exploring the building or were invited by employees to participate. The careful selection of these varied target groups, each with distinct backgrounds and levels of engagement, ensured a comprehensive representation of perspectives.

Each registered participant received an envelope containing two research components: (a) a concise survey regarding the intangible aspects and functional spaces of Salts Mill (1 A4 page) and (b) a counter-mapping exercise (explained on 1 A4 page), accompanied by a simplified A3 map of the current gallery complex, spanning from ground to top floors, along with a set of feeling stickers (Smile—Neutral—Sad). This package also included an A4 sheet with a brief study overview and ethical justification. This data collection method offered a discreet, accessible, and personalised means of gathering intangible aspects. Importantly, it allowed participants to contribute at their convenience, mitigating the need for scheduled group meetings, which could pose multiple challenges due to COVID-related protocols on-site. Participants were also permitted to complete the task during multiple visits, ensuring that the reflection and recording process was thoughtfully documented without haste.

This comprehensive methodological approach, combining desk research and archival analysis, architectural and regeneration reviews, as well as community engagement through counter-mapping, provides a robust

framework for evaluating the socio-cultural significance of Salts Mill. The initial phase of desk research and archival analysis uncovered a rich tapestry of historical and cultural narratives tied to Salts Mill and Saltaire Village. In the second phase, a critical analysis provided a detailed examination of Salts Mill's transformation from an industrial site to a cultural hub, with insights from heritage experts, architects, and historians playing key roles in evaluating the success of the site's regeneration. The final phase introduced a participatory counter-mapping approach, which allowed local users to contribute their perspectives on the revitalization of Salts Mill. This method offered a platform for the community to articulate their views on the site's intangible aspects, such as sensory, atmosphere, and emotional significance—elements that are often overlooked in traditional heritage assessments. The study underscores the importance of integrating local perspectives and historical context to better understand the long-term impacts of cultural clusters on industrial heritage sites, aligning with broader societal trends towards increased community involvement in cultural heritage conservation.

4. Research Findings and Discussion

4.1. Insights From the Experts

The findings from the desk research underscored the widely acknowledged importance of Saltaire's model, assessing the post-industrial transformative changes witnessed in recent decades (Dishman, 2020, pp. 60–63; Pande, 2011, pp. 16–20). This recognition was further emphasised in the World Heritage nomination document, describing it as an "outstanding, well-preserved 19th-century industrial town," highlighting its pivotal role in the economic and social development through the textile industry (UNESCO, 2001a, p. 60). In addition, the International Council on Monuments and Sites appraised that the textile mills are constructed in a "harmonious style of high architectural quality" tied to a local or regional identity through their style and choice of materials (UNESCO, 2001a, p. 60). These were also endorsed by experts consulted from the International Committee for the Conservation of the Industrial Heritage in both 2001 and 2019 (Walczak, 2019).

Recent evaluations have consistently yielded positive feedback for the Salts Mill project. In the most recent periodic assessment of Saltaire, experts offered favourable comments on the "social/cultural uses of heritage" and the "impacts of tourism/recreation" (UNESCO, 2013, p. 3). This report underscores that local residents can influence management decisions, significantly boosting community engagement, which is evidenced by the wide range of community interest groups, festivals, and lectures hosted at Salts Mill (UNESCO, 2013). It aligns with Landorf's (2009b) study on sustainable tourism at six world heritage sites that Saltaire stands out as the only plan that thoroughly delved into local community values and attitudes.

Moreover, experts highlight the transformation of past glory into the modern era, as demonstrated by comments on Jonathan Silver's art complex, recognising the revitalisation as a pioneering arts-led regeneration initiative (Stratton, 2003). Experts consistently discuss the recurring theme of synergy between arts-led regeneration, community engagement, and local value in their articles. Their conclusion emphasises that the more seamlessly these elements are integrated, the more robust and resilient the community's development becomes. The gradual process not only modernises the building to align with contemporary needs but also sparks a reinvention within the community through existing spaces. This synergy was highlighted by Ruth Gray (2023), who values both individuals and the built environment instead of

dismissing them. Similar sentiments echoed in local tourism contributions (Rodwell, 2002) and enhancing community well-being with Jonathan Silver's grand vision, transforming the old community into a new hive of life (Grizzard, 2008). Mahony's study (as cited in Greenhalf, 2007, para. 24) argued that:

> Jonathan Silver was incremental and pragmatic. He did what he could do at the time, that was the incremental part; and then he kept asking himself what he could do with Salts Mill. The only plan he had was in his head: what could he do to bring back Salts into full use? He did what was right at the right time. I suppose that's the key for regeneration.

Andy Coupland (1996) highlights Silver's efforts in enabling a mix of unlikely yet mutually supportive uses to evolve into a cohesive mixed-use scheme. The renowned British artist David Hockney's influence catalysed the Salts Mill art cluster, centred around the 1853 Gallery, and gradually transformed it into a cultural hub that integrates industrial heritage and art, including bookshops, cafes, and exhibitions. Despite Silver's passing, the cluster continues to thrive, indicating a sustainable growth model driven by art initiatives. Numerous architectural critics have observed Salts Mill's successful transformation into a mixed-use development; the presence of these enterprises not only sustains local employment but also enhances the economic vitality of the community, illustrating the vital dynamism essential for the Mill's ongoing survival and prosperity (Caignet, 2020; Grizzard, 2008). On the flip side, certain experts raise concerns about the overconsumption of this industrial heritage, when heritage is treated as a resource and commodity, potentially leading to a devaluation of its intrinsic worth (Walsh, 2002, p. 135). The potential detrimental effects of construction related to tourism development has become a focal point for community resistance to such initiatives (Vinter, 2022).

The aforementioned research delves into how experts examine the historical complexities of Saltaire, delving into areas such as regenerative planning with local stakeholders and evaluating the long-term benefits and challenges of integrating arts into the scheme. Many experts have commended the building, emphasising its significance in 19th-century industrial history, its community engagement, arts-led rejuvenation, and the pivotal role of local businesses, all contributing to local prosperity. The experts or academics focus predominantly centres on tangible aspects, frequently neglecting essential intangible elements like community identity, local pride, and community-driven regeneration, all integral aspects of Saltaire Industrial Village's essence. Despite Saltaire's distinctive ability to sustain vitality and promote development after achieving World Heritage status, its genuine uniqueness is rooted in the residents' perception of these intangible elements and their contribution to future development, and the authors believe this facet merits a more in-depth academic investigation.

4.2. Counter-Mapping the Industrial Heritage of Salts Mill With the Local Participants

Counter-maps were collected between January and July 2023 through coordination with the Salts Mill co-site management department and via postal methods. The authors initiated the data analysis process following the data collection; participants were categorised into three groups: Residents (R1–15), visitors (V1–10), and Salts Mill employees (E1–5). Identical comments from these groups were then combined and thematically grouped, as illustrated in Figure 1.

Participant	Comments	Theme	Theme
R-1	The Saltaire Sentinel played a significant role in Saltaire's community for 15 years and held a special place in our hearts. James Duncan and his creation, The Saltaire Sentinel, will always be remembered. We not only lost a cherished friend but also a culturally significant monthly treasure.	Spirit of place	Embodied experiences
R-1	Such a wonderful place, I could've quite happily spent a day here. Great art, books, art materials and home store.	Arts-led regeneration	Embodied experiences
R-2	The area was also utilized by Pace Electronics, a company specializing in television set-top boxes and other digital equipment. Subsequently, it was occupied by various manufacturers and retailers of a diverse range of goods who required the space.	Arts-led regeneration	
R-2	Very impressive modernised old mill!	Spirit of place	
R-3	For years, Saltaire villagers have tolerated limitations on improving their homes to preserve the distinctive Victorian heritage of Saltaire village, a crucial factor in its status as a world heritage site.	Spirit of place	Embodied experiences
R-3	It's the industrial heritage jewel.	Spirit of place	
R-4	Plenty of free parking and disabled parking near to the entrance. It is also a lovely walk along the canal if you fancy it.	Embodied experiences	Spirit of place
R-4	New buildings would be the "permanent stain" on the heritage site.	Spirit of place	
R-5	When I pushed open that heavy iron door, I could feel the industrial vibes of Salts Mill.	Embodied experiences	Spirit of place
R-5	In the Mill complex, the spaces are still referred to by their original intended purposes. Therefore, regardless of how the Spinning Mill, Weaving, and Wool-sorting sheds are currently utilized, the process of transforming wool into cloth remains a constant and enduring memory.	Embodied experiences	Spirit of place
R-6	An unique and 'very atmospheric' and 'calming' ambiance.	Embodied experiences	Arts-led regeneration
R-7	A fantastic family day out with lots to do and see. Even though it was a busy bank holiday weekend, it wasn't too crowded, and the atmosphere was wonderful with friendly and helpful staff. We enjoyed a delicious, fresh, and reasonably priced meal. There's also plenty to explore in the nearby area.	Embodied experiences	Arts-led regeneration
R-7	I am a big fan of David Hockney, the gallery is the Aladdin's cave for me.	Arts-led regeneration	Embodied experiences
R-8	This old textile factory needs a bigger and faster elevator, and maybe we need more accessible bathrooms.	Embodied experiences	Spirit of place
R-9	I was blown away with the gallery opening.	Arts-led regeneration	

Figure 1. Summary of participants' comments.

Participant	Comments	Theme	Theme
R-10	It is history and art combined in one place. In Salts Mill, most of the space is dedicated to artworks, while its industrial history exhibit is squeezed into a limited gallery on the third floor. The exhibition area doesn't quite match its historical significance.	Arts-led regeneration	Spirit of place
R-11	The contrast between the paintings and the indoor lighting is striking. Additionally, it was the juxtaposition of the grey roofs and vibrant walls that drew me to Salts Mill.	Arts-led regeneration	Embodied experiences
R-12	Layers of dull cream and blue paint were removed to reveal stunning stonework.	Arts-led regeneration	Embodied experiences
R-13	This place is truly one-of-a-kind. The comprehensive design of Salts Mills, from its selection of shops to its array of captivating products and top-notch restaurant, reflects the genius mind behind it all. Undoubtedly, it is all inspired by the exceptional creativity of Hockey himself.	Arts-led regeneration	
R-14	Salts Mill, with its exposed brick arches from the past, is truly remarkable. The atmosphere is special, and art is everywhere.	Arts-led regeneration	Embodied experiences
R-15	Great free gallery. Lots of things for sale in the way of books, antiques, outdoor clothing.	Arts-led regeneration	
V-1	The shop at the end of the corridor is easy to miss.	Embodied experiences	
V-2	The interior is spectacular, with dark blue scagliola pilasters.	Embodied experiences	
V-2	Not having enough time to visit!	Embodied experiences	
V-3	Great building. To be honest I preferred looking at the structure than most of the Hockney paintings.	Arts-led regeneration	Embodied experiences
V-4	Wonderful choice of books on art and other matters. Inspirational place. The art is amazing...the gallery space outstanding. Friendly helpful staff. We return annually for gifts, cards etc. And always will.	Arts-led regeneration	
V-5	It's an amazing gallery. The Hockney exhibits are beautiful, and his use of the iPad in the Year in Normandie exhibit fascinating.	Arts-led regeneration	Embodied experiences
V-6	We were staying in the nearby town of Bingley and chose to take a stroll along the Leeds Liverpool canal towpath, which turned out to be quite an interesting walk in its own right.	Arts-led regeneration	Embodied experiences
V-7	I'm in the latter category but I have to say the new exhibit at Salts Mill has very much impressed me.	Arts-led regeneration	Embodied experiences
V-8	Since you're in the mill, you can access other areas in the same building. It's lovely.	Arts-led regeneration	
V-9	This gallery offers a wide selection of books and drawing supplies at affordable prices without compromising on quality. Additionally, it features artworks by David, including my personal favorite, his captivating chair piece, which is a highlight of the gallery.	Arts-led regeneration	

Figure 1. (Cont.) Summary of participants' comments.

Participant	Comments	Theme	Theme
V-10	The food was excellent and the waitresses worked hard.	Embodied experiences	
E-1	Saltaire Mill operated from 1853 until 1986, and in that time it was home to thousands of workers.	Spirit of place	Embodied experiences
E-2	In Saltaire, there are a few individuals who recall the days when the Mill was actively producing. Their memories remain vivid, and they can still sense the aroma of raw wool, machine oil, and the hardworking sweat in the air.	Embodied experiences	Spirit of place
E-3	I love this building both for what it symbolized in 1853 and what it stands for today: hope. It embodies aspirations for a brighter future, for positive social transformation, and a steadfast belief in the influence of culture and creativity.	Spirit of place	Arts-led regeneration
E-3	The fragrance of lilies now fills the air, and the Mill serves as a space for both leisure and commerce. It is undeniably spacious enough for both to coexist successfully, and a shared sense of pride has grown over the past 25 years.	Arts-led regeneration	Embodied experiences
E-4	The Club's quarterly meetings are free for anyone to join. These gatherings usually feature discussions about Saltaire's history, updates on recent research, and additions to the Saltaire Collection. Refreshments are provided.	Spirit of place	Arts-led regeneration
E-4	Saltaire stands out as a globally renowned model village, boasting 96% of its structures in their original, unaltered state. Join us on a journey to discover some of its hidden gems.	Arts-led regeneration	Embodied experiences
E-5	In addition to featuring artists from various parts of the UK, we are proud to highlight a rich pool of local talent, with more than 120 artists and creators participating in total. We eagerly anticipate welcoming them, along with our visitors, this upcoming Spring bank holiday weekend.	Arts-led regeneration	Spirit of place
E-5	We are thrilled to offer a vibrant weekend filled with art and creative activities in and around Saltaire and Shipley.	Arts-led regeneration	Spirit of place

R = Resident, V = Frequent Visitor, E = Employee. There are 40 comments in total, 25 items related to embodied experience, 16 items related to spirt of place, 24 items related to arts-led regeneration.

Figure 1. (Cont.) Summary of participants' comments.

To maintain brevity and consistency across the comments and counter-maps, identical comments were consolidated thematically. These maps illuminated intricate connections between intangible aspects and tangible, physical elements of the industrial building. The findings were condensed into three overarching themes:

1) Exploring embodied experiences through sensory encounters within the space;

2) Capturing the essence of the locale by identifying the spirit of place within Salts Mill;

3) Articulating the effects of everyday life interactions through the lens of arts-led regeneration.

Based on participants' counter-mappings, three overarching counter-mapping diagrams were crafted in response to themes (refer to Figures 2–4). Researchers supplemented this information with background details and contextual images cited in participants' counter-mapping comments. To enhance the visualisation of survey results, connections between comments and architectural spaces, exhibited objects, indoor activities, and spatial-related historical events were depicted using connecting lines. The comments generated through counter-mapping were represented by the size of coloured areas on floor plans in diagrams, indicating their intensity, with emotions expressed through emotion stickers.

4.2.1. Delving Into Embodied Experiences

Residents and visitors to Salts Mill hold a profound appreciation for tangible experiences, often expressing fascination with how the physical remnants of the Mill seamlessly intertwine with intangible memories, emotions, and entertaining elements of the building. This connection is vividly illustrated in both counter-maps and participants' narratives, as evidenced by specific interactions identified (R-6, V-8, E-2). The sensory connection with physical elements is particularly highlighted, such as the architectural facade meticulously crafted from local sandstone adorned with hammer-dressed ashlar and rock-faced dressings, the industrial gate constructed from heavy steel, and the yellow slate floor and cast-iron pillars painted in blue and white. These elements provide opportunities for tactile interactions with the rich history of the site. Additionally, participants' attention is drawn to the roof (R-12, R-14, V-3), which is composed of cast-iron struts and wrought-iron rods. Unlike the floors below, eliminating the need for decorative cast-iron columns for support, this engineering achievement resulted in an expansive, undivided space, recognised as the world's largest at the time of its construction (UNESCO, 2001b). Nostalgia among residents revolves around the operational era of the Mill, evoking sensory memories of raw wool, machinery lubricants, and the tangible sensation of strenuous labour. In addition, the presence of remaining looms, weighing machines, and weaving shuttles in the industrial museum on the third floor serves as tangible reminders, eliciting memories of the textile mill (R-10, V-2, E-2).

Salts Mill has transformed into a pivotal micro-social hub of the community. Locals appreciate its current status as a memorial and leisure complex, describing it as possessing a distinctive, "very atmospheric," and "calming" ambience (R-6, R-14). Notably, certain residents, particularly art enthusiasts, liken the gallery to Aladdin's cave (R-7). The inclusion of artists' works, biographies, oral histories, and more creates a diverse and multi-faceted embodied experience of Salts Mill. This experience is especially notable concerning the subjects of the locally born artist David Hockney's artworks—the Mill itself and the Bradford landscape (V-5, V-7). His paintings inspire local pride and evoke nostalgic sentiments about the textile industry's past. Moreover, participants commonly integrate the surrounding environment into the identity of Salts Mill. Nearby locations such as Roberts Park and Canal play integral roles in this shared embodied experience during visits. Residents thoroughly enjoy observing landscape artworks inside the building, followed by a leisurely stroll along the "Saltaire Heritage Trail" (Visit Bradford, n.d.) along the canal, which passes through the park next to the Mill (R-7, V-6, V-8). These artistically depicted historical scenes and current vistas enable community residents to view their own history through the lens of art appreciation, enhancing their sense of identity and pride.

However, there are some unfavourable comments regarding the internal layout of Salts Mill. Criticisms include the presence of "the overlooked shop at the corridor's end" and concerns about "difficult navigation and limited accessibility facilities" (R-8, V-1, V-2). This indicates a necessity to improve indoor circulation and ensure clarity

in signage systems. Residents typically lean towards maintaining the original exterior while endorsing internal improvements for accessibility and restroom facilities (Figure 2).

4.2.2. Capturing the Essence of the Locale

Despite the architectural criticisms, the counter-mapping exercise reveals a considerable amount of local pride. Participants engaged with Salts Mill exhibit a robust local identity deeply connected to its historical textile production tradition. This connection, in turn, profoundly shapes how residents view the heritage regeneration project. The life stories of ordinary individuals from the past are preserved within an open-source archival system "Saltairevillage.info" (Saltaire Village, n.d.), enabling the linkage between individual lives and the local context of Saltaire (E-1). Most of these individuals were mill workers from the 1870s to the 1960s, with records also documenting female and child labourers (Saltaire Collection, n.d.). This faithful representation of how people experienced in their lives in Saltaire at the time is crucial for Salts Mill, as it seeks to uncover its unique history and the people who form the heart of the place. Local pride also encompasses positive sentiments associated with a specific location and its quality, constituting an intangible heritage passed down by industrial heritage to the community, thus embodying social sustainability (R-3, E-4). Some participants have highlighted the significance of the exhibition on Saltaire's industrial history, featuring a comprehensive building complex, sandbox model, fabric samples, and textile machinery. This exhibition provides individuals with a tangible understanding of the local textile industry and its working environment, making it particularly engaging (R-5, R-10).

In Saltaire, locals share collective memories and experiences from the prosperous era of the local textile industry during the Titus period. While tourists may admire the Italianate-style mill as a "very impressive modernised old mill" (R-2), for locals, it holds an even deeper significance. It is revered as a source of pride and cherished as an "industrial heritage jewel" (R-3, E-3). The building was praised for fully preserving the exterior and framework of the original factory structure, and most participants believe that the past and current exhibition programs remain relevant to the Mill's historical function. The significance of shared memories is evident in the preservation of industrial history across generations. The local history groups actively collect and share their community's heritage through websites, publications, and activities (R-1, E-4, E-5). In 2022, a significant celebration honoured original founders and custodians of the Mill—Sir Titus Salt. Salts Mill is deeply valued by the locals as a cultural treasure, and residents assume the responsibility to protect it, keeping a vigilant eye on its progress. They vigilantly observe developments at the site and there are concerns voiced about changes to the Mill's exterior and the introduction of new structures in its location (R-4, R-8; Figure 3).

4.2.3. Articulating the Effects of Everyday Life Interactions

The Salts Mill Complex has greatly enriched community life, a sentiment strongly resonating among the locals. They recognise this collective effort has cultivated a distinctive artistic community spirit in Saltaire. The shops and businesses focused on art within Salts Mill infuse local life and workplaces with vibrant energy (R-2, R-13, R-15, V-9, E-3). This recognition primarily stems from the outstanding exhibitions of David Hockney—one of the most influential living artists of the 20th century and the success of his related ventures. Many participants perceive Salts Mill as a hybrid of "history and art combined in one place" (R-9, R-10, V-4, V-5).

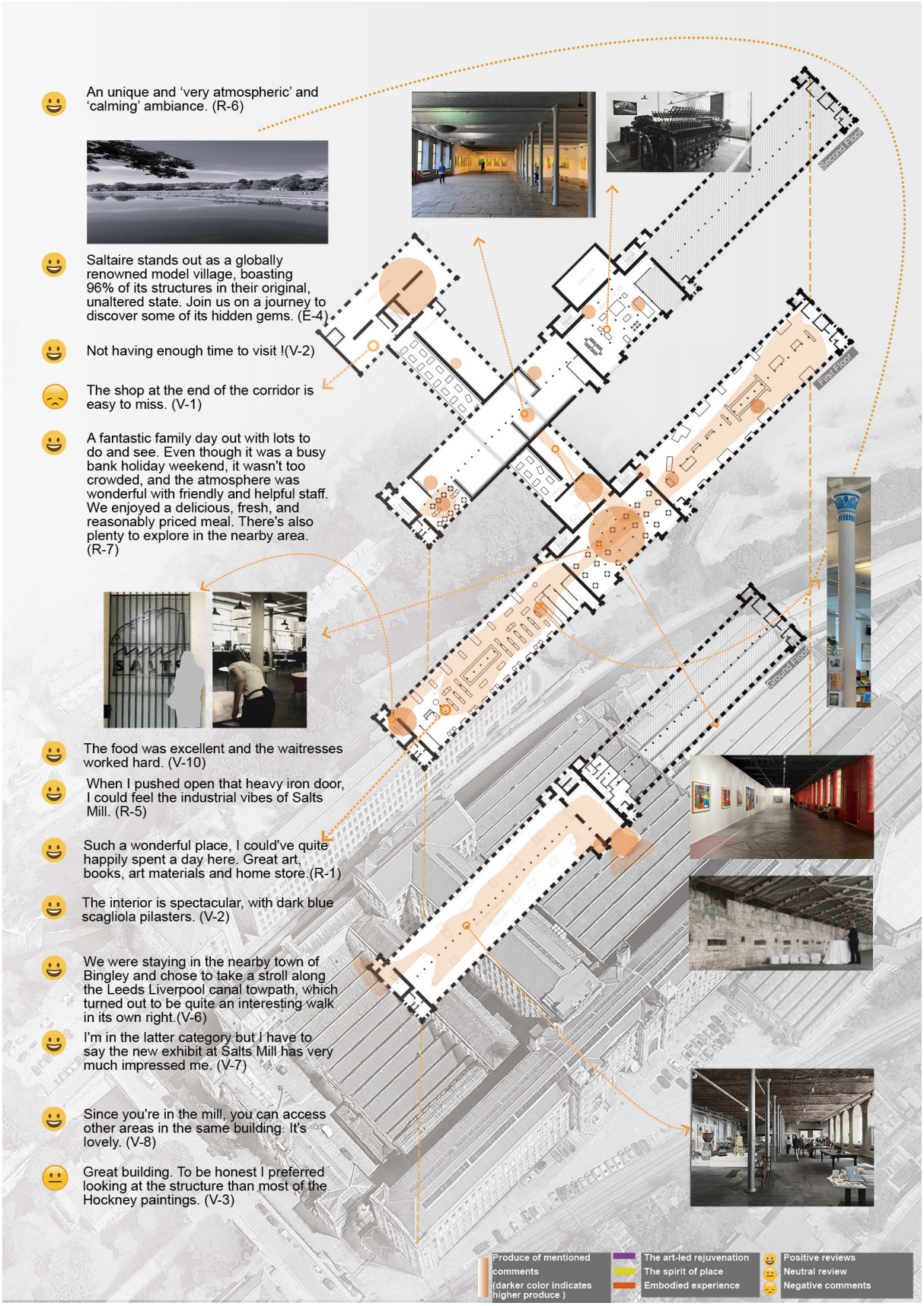


Figure 2. Delving into embodied experiences: Counter-map 1.

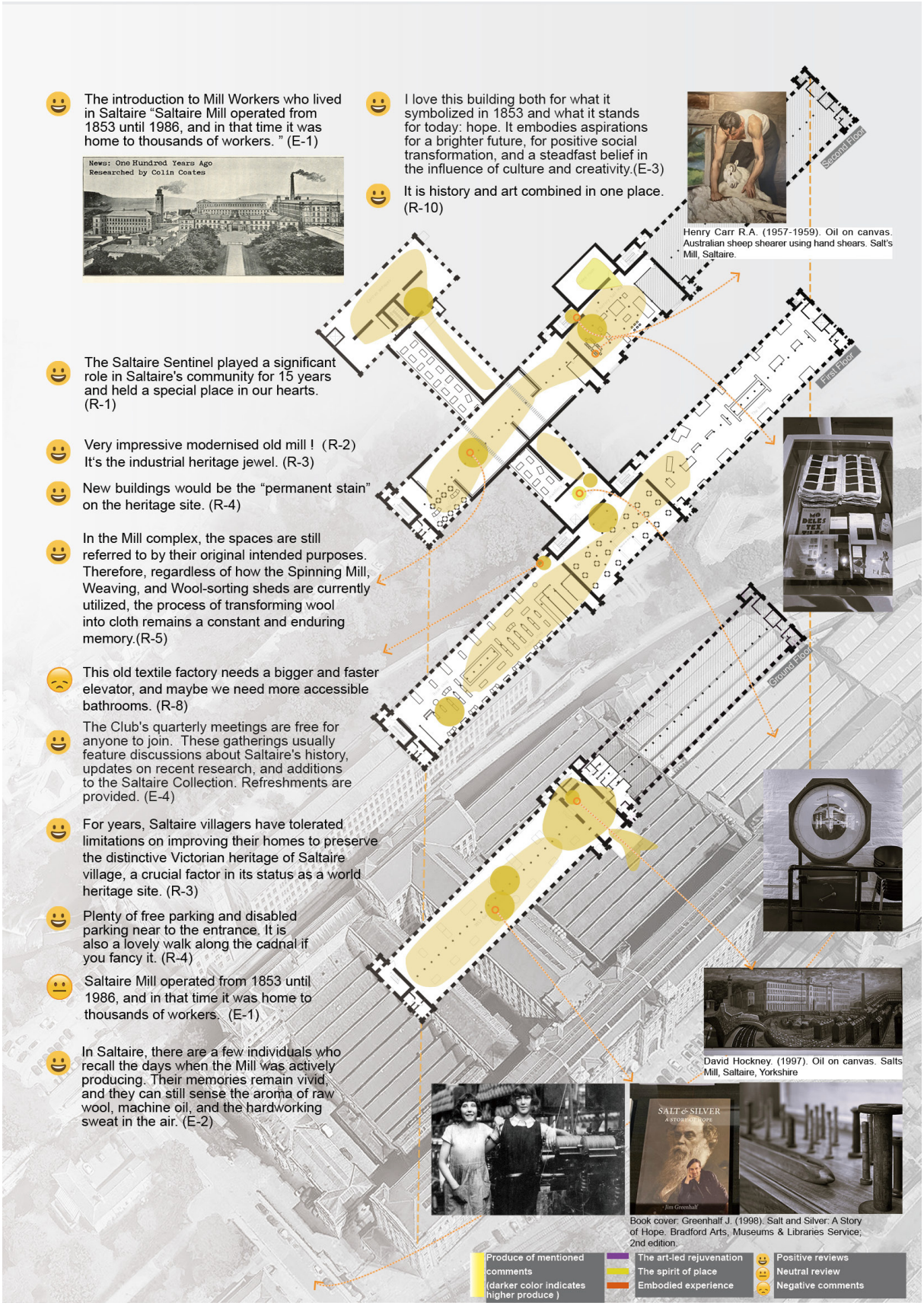


Figure 3. Capturing the essence of the locale: Counter-map 2.

The arts-led revitalisation, concerning spatial changes, primarily focuses on interior renovations to establish open and well-lit public areas. The juxtaposition of exhibition spaces with the industrial ambience creates distinctive lighting and textural features within Salts Mill with three gallery spaces. Local participants demonstrate a keen awareness of these characteristics, offering perceptive observations such as "the contrast between the paintings and the indoor lighting is striking," "the juxtaposition of the grey roofs and vibrant walls," and "exposed brick arches from the past." These observations articulate the architectural features and atmospheric distinctions between the galleries (R-11, R-14). Moreover, various architectural elements linked to Hockney's art hold significance. For example, the iconic character in a hat, from Hockney's designs for the 1981 production of Parade at the Metropolitan Opera Company, appears on curtains and posters. Additionally, the logo for Salts Diner is Hockney's signature dachshund sketch, which appears on numerous items within the restaurant and delights all visitors.

Simultaneously, initiatives driven by the arts have extended their reach beyond Salts Mill, actively involving the community, art colleges, and local artists in the region. This infusion of artistic energy imbues the place with a unique cultural essence, fostering a deep sense of heritage preservation. Noteworthy among these efforts are the regular festivals and fairs that play a pivotal role in boosting the local tourist economy. Events such as the Saltaire Arts Trail and Saltaire Makers Fair, organised by Saltaire Inspired (Saltaire Inspired, n.d.), enjoy enthusiastic support from residents and serve as platforms for showcasing artworks. Managed predominantly by registered charities and staffed by volunteers, these community-driven activities have successfully attracted both local residents and visitors every year. Through these events, people from diverse backgrounds come together to revel in the artistic charm of Saltaire, creating a shared celebration of this unique cultural hub (E-5; Figure 4).

4.3. Summary of Findings

The desk research and counter-mapping activities show that expert judgements in heritage assessment frequently prioritise material characteristics like architectural style and the exemplary significance of post-industrial buildings for future generations. As rational observers, these experts critically examine the adaptive reuse of heritage sites, questioning whether modifications and the utilisation of buildings and their surroundings could jeopardise preservation efforts. Additionally, the incorporation of contemporary urban objectives, such as urban regeneration, into heritage management has often brought planners into the decision-making process, working alongside heritage experts within the preservation discourse. In contrast, local community members tend to value the communal identity rooted in Salts Mill's textile history, cherishing both this heritage and the sense of belonging it fosters within the village. They appreciate the diverse, embodied experiences that connect them to the original mill, the scenic landscape, and the new leisure or cultural activities emerging from local regeneration efforts. These insights highlight the importance of a holistic approach to cultural heritage management that balances both tangible and intangible elements.

The research findings also indicate that the symbiotic relationship between heritage regeneration and the local community in Saltaire is both strong and enduring. The study revealed that residents had few complaints about disturbances in their daily lives caused by external factors such as tourism. This suggests that Salts Mill has effectively managed power imbalances arising from both external influences and internal community dynamics. The situation underscores the interconnectedness of Saltaire's industrial heritage, where the art complex and its surrounding community coexist in a mutually beneficial relationship.

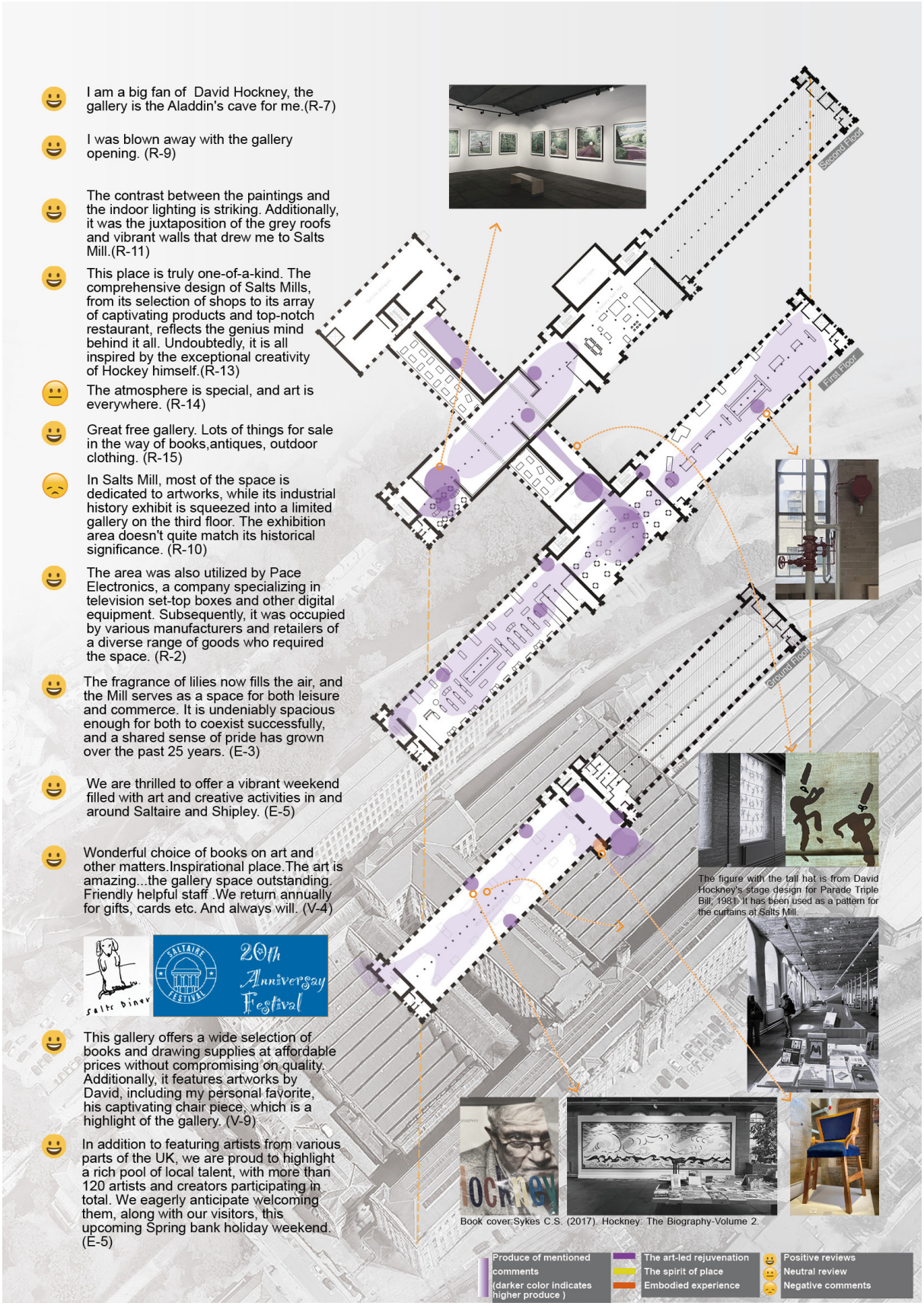


Figure 4. Articulating the effects of everyday life interactions: Counter-map 3.

It is important to mention that the participation of British artist David Hockney lends a distinctive touch. As a Bradford-born artist, Hockney has a wealth of works depicting local industrial and natural landscapes. These paintings and art films are well connected to the local area, making the transformed gallery spaces more appealing and promoting a sense of communal pride that integrates well with the community spirit. Additionally, the integrated programmes within the mill are finely attuned to the unique setting of the world heritage site, successfully creating a synergy between creative industries and the industrial heritage site. Last but not least, the local art community collaborates with various organisations and communities to inject energy into diverse, resident-centred, creativity-driven initiatives. This concerted, arts-led effort fosters a strong community bond with Salts Mill, commemorating historical highlights while promoting forward-looking regeneration infused with the arts, aligning with Saltaire's modern essence of the locale. As a result, Salts Mill itself became a highly concentrated art hub and cultural cluster. This participatory counter-mapping highlights the advantages of the creative bond between post-industrial communities and the buildings with modified roles, which play a crucial role in the sustainable preservation and revitalisation of historic sites.

5. Conclusion and Future Directions

Salts Mill exemplifies the ever-changing trajectory of an industrial site, marked by periods of prosperity, decline, and revival. The transformation of derelict buildings into a vibrant cultural cluster—featuring galleries, performance spaces, cinemas, and creative workspaces—represents a significant regeneration effort. This arts-led approach also distinguishes it from traditional heritage-focused models—the unique experiences, shaped by individual perspectives and shared memories within the Saltaire community, forge a deep connection to the industrial past. For nearly 50 years, the blending of creative industries with industrial heritage at Salts Mill has proven sustainable, becoming a vital part of local life. This heritage and cultural circle, which includes residents, cultural groups, and engaged property owners, has effectively promoted community cohesion and cultural vitality. The Salts Mill case highlights that successful creative industries depend on a profound relationship between their content, the essence of the industrial heritage site, and the evolving needs of community development.

In addition, this study effectively employed thematic counter-mapping as a key methodology to expand knowledge of socio-cultural and intangible heritage values, shining a spotlight on the voices of the locals. The approach incorporates embracing "spatial qualities," "spirit of place," and other "socio-cultural associations" within this industrial heritage setting. The resulting counter-maps reveal elements regarding collective memories, shared experiences and values, and local identity, which are often overlooked within the existing heritage value assessment framework. It opens up novel avenues for exploring both the constraints and possibilities within industrial heritage renewal initiatives, with a keen focus on locally rooted expressions. This effort proves invaluable for integrating comprehensive understandings and insights into transformative research for the future development of post-industrial sites, offering significant lessons for the sustainable development of industrial heritage and heritage communities.

Salts Mill has established itself as a vibrant cultural hub, celebrated for its extensive collection of works by artist David Hockney and a range of other exhibitions, making it a significant cultural landmark that draws in art and history enthusiasts. The site has seamlessly blended its commercial pursuits with cultural and community activities, ensuring that it remains accessible and appealing to a broad audience. By staying connected with

the local spirit and integrating into the daily lives of residents, it has avoided becoming solely profit-driven or merely a tourist attraction. The Saltaire World Heritage Steering Group, in partnership with local authorities, actively manages and oversees developments, ensuring that all changes and new initiatives are aligned with the long-term vision for the area.

Looking ahead, several strategic measures have been suggested by two contributions. First, combining expert knowledge with local insights is essential for a thorough heritage assessment. Second, policies should strike a balance between material conservation and community resource use, supporting development in a way that is culturally sensitive and gains community support (Landorf, 2009a). Finally, inclusive stakeholder participation and dialogue are vital for developing flexible and diverse opinions on revitalisation strategies, balancing various interests, and fostering effective conservation practices. Managers and policymakers should focus on identifying and reinforcing these elements to protect heritage effectively while promoting community involvement and economic development. This approach ensures that the needs of different stakeholders are balanced by using both scientific and inclusive mechanisms in regeneration processes.

However, it is important to acknowledge the limitations faced during this research. In addition to increasing the sample size, future research initiatives around counter-mapping could contemplate engaging a specialised intermediary with the capability to autonomously implement this inclusive and participatory methodology in an unbiased manner. Addressing participant selection bias, such as self-selection bias, which can lead to non-representative samples, researcher could introduce an additional identity descriptor tagging system. This system would clarify participant identities and data collection criteria while allowing participants to define their own identities. During the analysis, researchers could adjust participant identity attributes based on this tagging system to enhance accuracy. Additionally, employing combined phygital methods instead of manual approaches to organising and analysing the semantics and images involved in counter-mapping could significantly improve efficiency (Czepkiewicz et al., 2016). This modification would expedite the process and engage a wider range of local participants in the heritage assessment.

Acknowledgments

The authors would like to express their gratitude to all the participants involved in counter-mapping, the staff at Salts Mill, the historical research organisation, Saltaire History Club, the local history and tourism information website, Saltaire Village, and Saltaire Collection, the arts and cultural organisation, Saltaire Inspired, and the Saltaire Festival for their valuable support and collaboration in this study.

Funding

This study was supported by British Academy Project “Developing a Grassroots Sustainable Futures Platform: Collective Participation in Community-Based Cultural Organisations (CEoN)” (Grant Ref: SSF/210084) and Research Project “Participatory Neighbourhood Planning for the ‘Brown to Green’ Transition in Tyneside” (Grant Ref: AH/Y000250/1) funded by the Arts and Humanities Research Council (AHRC).

Conflict of Interests

The authors declare no conflict of interests.

Data Availability

The raw data were generated at Northumbria University, and the data supporting the findings of this study are included within the article and summarised in Figure 1.

References

Alcindor, M., Jackson, D., & Alcindor-Huelva, P. (2021). Heritage places and the place attachment of adolescents: The case of the Castelo of Vila Nova de Cerveira (Portugal). *Journal of Rural Studies*, *88*, 410–421.

Ashrafi, B., Neugebauer, C., & Kloos, M. (2022). A conceptual framework for heritage impact assessment: A review and perspective. *Sustainability*, *14*(1), Article 27. https://doi.org/10.3390/su14010027

Avrami, E., Macdonald, S., Mason, R., & Myers, D. (2019). Mapping the issue of values. In Values in heritage management: Emerging approaches and research directions (pp. 9–33). Getty Publications.

Aydın, E. Ö., Tepe, E., & Balcan, C. (2022). Identification of determinants during the registration process of industrial heritage using a regression analysis. *Journal of Cultural Heritage*, *58*, 23–32.

Azzopardi, E., Kenter, J. O., Young, J., Leakey, C., O'Connor, S., Martino, S., Flannery, W., Sousa, L., Mylona, D., Frangoudes, K., Béguier, I., Pafi, M., Silva, A., Ainscough, J., Koutrakis, M., Silva, M., & Pita, C. (2023). What are heritage values? Integrating natural and cultural heritage into environmental valuation. *People and Nature*, *5*(2), 368–383.

Bazelmans, J. (2013). Naar integratie en maatschappelijke verbreding in de waardestelling van erfgoed. In *Erfgoed: van wie, voor wie* (pp. 89–96). Boekmanstichting.

Bradford Council. (2015). *Saltaire World Heritage site management plan 2014*. https://www.bradford.gov.uk/media/3341/saltaire-world-heritage-site-management-plan2014-v2.pdf

Brennan-Horley, C. (2010). Mental mapping the "creative city." *Journal of Maps*, *6*(1), 250–259.

Byrne, D. (2008). Heritage as social action. In G. J. Fairclough, R. Harrison, J. H. Jameson, & J. Schofield (Eds.), *The Heritage Reader*, (pp. 149–173). Routledge.

Caignet, A. (2020). Reinventing and promoting Northern industrial heritage: Regeneration in the textile sites of Ancoats and Saltaire. *Revue Française de Civilisation Britannique*, *XXV*(2). https://doi.org/10.4000/rfcb.5401

Carman, J. (2009). Where the value lies: The importance of materiality to the immaterial aspects of heritage. In L. Smith & E. Waterton (Eds.), *Taking archaeology out of heritage* (pp. 192–208). Cambridge Scholars Publishing.

Clarke, N., Kuipers, M., & Stroux, S. (2020). Embedding built heritage values in architectural design education. *International Journal of Technology and Design Education*, *30*, 867–883.

Coates, C. (2024). *The big list of biographies of Saltaire people: Names in alphabetical order*. Saltaire Village. https://saltairevillage.info/database/Saltaire_biographies_by_Colin_Coates.pdf

Coupland, A. (1996). Why developer build mixed use schemes. In A. Coupland (Ed.), *Reclaiming the city: Mixed use development* (pp. 227–248). Routledge.

Czepkiewicz, M., Jankowski, P., & Młodkowski, M. (2016). Geo-questionnaires in urban planning: Recruitment methods, participant engagement, and data quality. *Cartography and Geographic Information Science*, *44*(6), 551–567. https://doi.org/10.1080/15230406.2016.1230520

Dishman, A. (2020). *Seeking the "hidden histories" of the Victorian child-millworker as offspring, worker and pupil in Saltaire, West Yorkshire 1853–1878* [Unpublished doctoral dissertation]. University of Sheffield.

Djabarouti, J. (2021). Stories of feelings and things: Intangible heritage from within the built heritage paradigm in the UK. *International Journal of Heritage Studies*, *27*(4), 391–406.

Donovan, C. (2013). *A holistic approach to valuing our culture*. Department for Culture Media and Sport.

Gray, R. (2023). *Positive ownership makes for post industrial opportunities—Salt Mill leads by example*. Planning Design. https://www.planningdesign.co.uk/post-industrial-opportunities-salt-mill

Greenhalf, J. (2007, July 30). Legacy showed the way ahead for regeneration. *Telegraph & Argus*. https://www.thetelegraphandargus.co.uk/news/1581186.legacy-showed-the-way-ahead-for-regeneration

Grizzard, N. (2008, June 17). Run of the mill they're not. *The Guardian*. https://www.theguardian.com/society/2008/jun/17/mill.regeneration

Halder, S., Michel, B., & Schweizer, P. (2020). Is *This Is Not an Atlas* an atlas? On the pitfalls of editing a global collection of counter-cartographies. *Cartographica: The International Journal for Geographic Information and Geovisualization*, *55*(3), 207–214.

Harrison, R. (2011). *"Counter-mapping" heritage, communities and places in Australia and the UK*. Routledge.

Hayes-Conroy, J., & Hayes-Conroy, A. (2010). Visceral geographies: Mattering, relating and defying. *Geography Compass*, *4*(9), 1273–1283.

Jelić, A., & Staničić, A. (2020). The memory in bodily and architectural making: Reflections from embodied cognitive science. In *Affective architectures: More-than-representational geographies of heritage* (pp. 187–203). Routledge.

Jigyasu, R. (2015). The intangible dimension of urban heritage. In F. Bandarin & R. van Oers (Eds.), *Reconnecting the city* (pp. 129–159). Wiley.

Jones, S. (2017). Wrestling with the social value of heritage: Problems, dilemmas and opportunities. *Journal of Community Archaeology & Heritage*, *4*(1), 21–37.

Korsmeyer, C. (2018). *Things: In touch with the past*. Oxford University Press.

Kuipers, M., & De Jonge, W. (2017). *Designing from heritage*. TU Delft.

Landorf, C. (2009a). A framework for sustainable heritage management: A study of UK industrial heritage sites. *International Journal of Heritage Studies*, *15*(6), 494–510.

Landorf, C. (2009b). Managing for sustainable tourism: A review of six cultural world heritage sites. *Journal of Sustainable Tourism*, *17*(1), 53–70. https://doi.org/10.1080/09669580802159719

Lee, M. Y., Hitchcock, M., & Lei, J. W. (2018). Mental mapping and heritage visitors' spatial perceptions. *Journal of Heritage Tourism*, *13*(4), 305–319.

Markevičienė, J. (2012). The spirit of the place–The problem of (re) creating. *Journal of Architecture and Urbanism*, *36*(1), 73–81.

McCabe, M., & Sadler, B. (Eds.). (2002). *Environmental impact assessment training resource manual* (Vol. 1). Conran Octopus.

Norberg-Schulz, C. (2019). Genius loci: Towards a phenomenology of architecture (1979). In J. Cody & F. Siravo (Eds.), *Historic cities: Issues in urban conservation* (pp. 31–33). Getty Publications.

Oevermann, H. (2021). *Urban textile mills: Conservation and conversion*. BeBra Wissenschaft.

Pande, P. (2011). *Creation of educational 3D visualisations of a cultural World Heritage site: Saltaire case study* [Unpublished doctoral dissertation]. University of Huddersfield.

Riger, S., & Lavrakas, P. J. (1981). Community ties: Patterns of attachment and social interaction in urban neighborhoods. *American Journal of Community Psychology*, *9*(1), 55–66.

Rodwell, D. (2002). The World Heritage Convention and the exemplary management of complex heritage sites. *Journal of Architectural Conservation*, *8*(3), 40–60. https://doi.org/10.1080/13556207.2002.10785326

Saltaire Collection. (n.d.). *Personal histories: Residents of Saltaire*. https://www.saltairecollection.org/story-of-saltaire/residents

Saltaire Inspired. (n.d.). *Home*. https://saltaireinspired.org.uk

Saltaire Village. (n.d.). *Home*. https://saltairevillage.info

Santos-Martín, F., Kelemen, E., García-Llorente, M., Jacobs, S., Oteros-Rozas, E., Barton, D. N., Palomo, I., Hevia, V., & Martín-López, B. (2017). Socio-cultural valuation approaches. In B. Burkhard & J. Maes (Eds.), *Mapping ecosystem services* (pp. 102–112). Pensoft Publishers.

Schofield, J. (Ed.). (2016). *Who needs experts? Counter-mapping cultural heritage*. Routledge.

Sharp, D. (2005). Architectural criticism: History, context and role. In M. Al-Asad & M. Musa (Eds.), *Architectural criticism and journalism: Global perspectives* (pp. 30–34). Allemandi Editore.

Simeon, M. I., & Martone, A. (2014). Relationships between heritage, intangible capital and cultural and creative industries in Italy: A framework analysis for urban regeneration and territorial development. In C. Bevilacqua, F. Calabrò & L. D. Spina (Eds.), *Advanced engineering forum* (Vol. 11, pp. 149–156). Trans Tech Publications Ltd.

Stratton, M. (2003). *Industrial buildings: Conservation and regeneration*. Taylor & Francis.

Tengberg, A., Fredholm, S., Eliasson, I., Knez, I., Saltzman, K., & Wetterberg, O. (2012). Cultural ecosystem services provided by landscapes: Assessment of heritage values and identity. *Ecosystem Services*, *2*, 14–26.

Thomas, E. J., & Ross, A. (2013). Mapping an archaeology of the present: Counter-mapping at the Gummingurru stone arrangement site, southeast Queensland, Australia. *Journal of Social Archaeology*, *13*(2), 220–241.

UNESCO. (2001a). *Saltaire. Documents: Nomination 1028 (inscribed)*. http://whc.unesco.org/en/list/1028/documents

UNESCO. (2001b). *Saltaire. Document: Advisory Body evaluation (ICOMOS)*. http://whc.unesco.org/en/list/1028/documents

UNESCO. (2013). *Saltaire. Document: Periodic reporting Cycle 2, Section II*. http://whc.unesco.org/en/list/1028/documents

Vecco, M. (2020). Genius loci as a meta-concept. *Journal of Cultural Heritage*, *41*, 225–231.

Verstijnen, I. M., van Leeuwen, C., Goldschmidt, G., Hamel, R., & Hennessey, J. M. (1998). Sketching and creative discovery. *Design Studies*, *19*(4), 519–546.

Vinter, R. (2022, December 5). Plans for visitor centre in Saltaire draw residents' ire. *The Guardian*. https://www.theguardian.com/culture/2022/dec/05/plans-for-visitor-centre-in-saltaire-draws-residents-ire

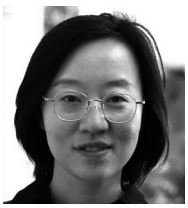
Visit Bradford. (n.d.). *Saltaire Village heritage trail*. https://www.visitbradford.com/things-to-do/saltaire-village-heritage-trail-p1787301

Walczak, B. (2019). For housing or for managing? Textile company towns in Europe. *TICCIH Bulletin*, *86*, 13–17.

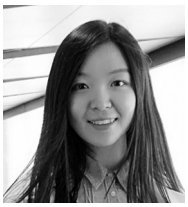
Walsh, K. (2002). *The representation of the past: Museums and heritage in the post-modern world*. Routledge.

Waterton, E. (2014). A more-than-representational understanding of heritage? The "past" and the politics of affect. *Geography Compass*, *8*(11), 823–833.

About the Authors



Wenyan Jin is an associate professor in the School of Architecture and Urban Planning at Shandong Jianzhu University (China) and was a visiting scholar at Northumbria University. Her research and teaching are primarily concentrated on heritage conservation and urban renewal with a special emphasis on the revitalisation and reuse of industrial heritage. She has published across a variety of fields, including industrial heritage, railway heritage, and conservation. Her latest book is titled *Workers' Memories and the Rebirth of Heritage* (Jinan, 2022).



Jiayi Jin is an assistant professor of architecture and urban studies at Northumbria University. She has led several British Academy and Arts and Humanities Research Council (AHRC) projects with studies that primarily explore creative participation for transition, with a strong emphasis on bottom-up approaches that empower local communities to shape their environments. Through these initiatives, she advocates for inclusive spatial practices that consider the diverse needs and voices within urban spaces.

Urban Planning
2024 • Volume 9 • Article 8072
https://doi.org/10.17645/up.8072

cogitatio

ARTICLE

Open Access Journal

Industrial Heritage and Pathways for Cultural-Creative Development in Bamberg, Germany

Heike Oevermann [1], Even Smith Wergeland [2], and Susanne Hanika [3]

[1] Institut für Kunstgeschichte, Bauforschung und Denkmalpflege, TU Wien, Austria
[2] Institute of Architecture, Oslo School of Architecture and Design, Norway
[3] Kunsthistorisches Institut, University of Cologne, Germany

Correspondence: Heike Oevermann (heike.oevermann@tuwien.ac.at)

Submitted: 17 January 2024 **Accepted:** 18 June 2024 **Published:** 2 August 2024

Issue: This article is part of the issue "Industrial Heritage and Cultural Clusters: More Than a Temporary Affair?" edited by Uwe Altrock (University of Kassel) and Janet Merkel (TU Berlin), fully open access at https://doi.org/10.17645/up.i341

Abstract

This article contributes to the ongoing authorized heritage discourse, following recent heritage concepts such as open heritage, and examines the industrial heritage and pathways for cultural-creative development in the city of Bamberg, Germany. Bamberg is a UNESCO World Heritage Site, but not on account of its industrial heritage, although some former industrial sites are located within the borders of the current World Heritage Site. We describe three adaptively reused sites that have slightly differing forms of protected status (listed building and ensemble) and show that authorized listing helps to ensure the survival of buildings and material structures over time as documents of an industrial past. However, other industrial sites need the engagement of locals, and refer to what Laurajane Smith describes as heritage as a cultural process. Diverse concepts and cultural-creative developments are evident in the reuse of industrial sites in Bamberg, but these contribute little to urban development strategies. When industrial heritage assets feature in the city's development strategy, they are seemingly leveraged to drive real estate projects, such as at the former Erba textile site. Additionally, the Otto-Friedrich University (through its Am Zwinger building), and an engaged bottom-up initiative to reuse a former boiler house, enable slightly different development pathways—knowledge-based versus art-based, respectively. The university has a long-term perspective and promising impulses for heritage uses, whereas the Kunstraum (Art House) initiative still struggles to secure support for its medium-term prospects. We argue that the industrial heritage sites need authorized support *and* agency through engagement, to ensure long-term perspectives for cultural-creative uses.

Keywords

art; Bamberg; industrial heritage; reuse path dependency; UNESCO World Heritage; university

1. Introduction

Industrial heritage may appear to be a clear concept, but it is not. We struggle with inaccuracies and overlapping of concepts, policies, and practices between heritage and monuments respectively listed buildings. Translation issues in the international field of the UNESCO World Heritage Programme are an additional aspect. (The English–German translation suggests *Kulturerbe* for heritage, which is protected by federal or national laws on monument preservation: Denkmalschutzgesetze). The work of Laurajane Smith is highly influential in demonstrating that heritage value is not inherent to objects, but instead derives from cultural *processes* through which local people (re)use, appropriate, and give meaning to a place and its physical structures (Smith, 2006; see also Harrison, 2012). She and subsequent scholars counteracted the so-called authorized heritage discourse, which in her view was closely connected to the formal and exclusive procedures of implemented policies, regulations, and laws such as the Denkmalschutzgesetz—defined by national and federal state institutions and, as such, "authorized." Industrial heritage was criticized if this only considered the most beautiful, monumental, and representative buildings of a heritage site while overlooking the facilities serving production, labourers' housing, or infrastructure. The light shines brighter and more frequently on company directors than on the workers who generated the added value of industrial empires. This highlights the importance of recognizing the politics of class in industrial heritage discourses (Smith & Campbell, 2017). Other scholars pointed out that "industrial heritage is not only about identity and memory, traditions, and labor movements; it belongs to cities, sites, and their transformations. Beyond being cultural heritage, industrial heritage is an issue in planning" (Oevermann & Mieg, 2015, p. 3). Other scholars, such as Meier and Steiner (2018), worked on differentiating the concepts of monument (*Denkmal*) and heritage, and highlight:

> To be sure, these two alternative positions interact in multiple ways, and it is precisely this that makes the distinction, and Lowenthal's presentation of it as a thesis for discussion, so fruitful for conservation: the affirmative, present-oriented and accessible "heritage object" versus the academically-validated, historically-contextualized Denkmal, which is different from it and for that reason may also prove difficult or unwieldy. (Meier & Steiner, 2018, p. 20)

Pendlebury (2013) integrates both perspectives and describes heritage as an assemblage of objects, regulations, and practices. From a theoretical point of view, Euler-Rolle (2022) points out that heritage conservation considers and includes multi-perspectives within institutionalized frameworks. Open heritage (Oevermann, Polyák, et al., 2023) is one recent conceptualization that integrates places and their physical structures with the importance of people and their doings. This integrated, actor-related focus allows us to understand creative agents as part of the actor constellation in defining, securing, and reusing industrial heritage sites, not the least in revitalization processes.

Creative quarters in capital cities or metropolitan regions, such as in Berlin, Oslo, or Marseille (Bergsli, 2015), are often associated with revitalization; however, resulting increased real estate values and gentrification may limit long-term options for—and ultimately displace—creative agents. Furthermore, the role of intermediaries and brokers, cluster, and network managers for the innovative and creative scene is recognized for large cities such as Berlin (Merkel & Suwala, 2021); but what about "small cities" that have an industrial history but are not known for cultural clusters and creative industries, nor for their industrial heritage? We address small cities here not in a geographical understanding, but in the understanding of open heritage, which took an

intensive look at small heritage places. They are small in the sense of being neglected through poor awareness of heritage assets and their value for urban development strategies, or the lack of integrating community stakeholders within them (Oevermann & Szemző, 2023). The article addresses the research question: What kinds of cultural and creative agents are active in such places, how do they understand and use industrial heritage, and what roles do municipalities play in supporting them?

Bamberg (Germany) is a UNESCO World Cultural Heritage city with a significant industrial past. Industries were located along waterway sites that are now attractive for urban development. However, we hypothesize that Bamberg largely overlooks its industrial history and heritage, except in horticulture and brewing, as well as the actors who are engaging in adaptive heritage reuse of these sites. Rather, Bamberg is framed as a historic medieval and baroque city with an exceptional built heritage of residential quarters, churches, and a centre with a historic town hall.

Somewhat at odds with Bamberg's image as a historic medieval and baroque city, all three of our analysed industrial sites have protected status and two are located within the boundaries of the historic city: The remaining buildings of the former Erba textile factory are listed (German: *Denkmale*), whereas the two sites Am Zwinger 4 & 6 and the former Kesselhaus (boiler house) located on Untere Sandstraße are—due to their location—both within the Historic City of Bamberg, but are not themselves listed as elements of that ensemble (Bayerisches Landesamt für Denkmalpflege, 2024). Although the article does not analyse the interdependency of heritage status and the survival of industrial buildings, we assume that protected status has helped to secure these built structures: Notably, in the case of the former Erba complex, only the listed buildings were conserved and adaptively reused, whereas the other structures were demolished. In the field of heritage conservation, we speak about the longue durée, which are the long-term historical structures of a place and building, as a value.

Many towns were shaped through industrial heritage sites and have gained protected status. A specific type is the industrial town, such as Rjukan in Norway, which—in contrast to Bamberg—was granted UNESCO World Heritage status specifically for its industrial heritage with its garden city (UNESCO, 2015; Wergeland, 2022). This type of small city would also be of interest for examining how the confluence of industrial heritage and cultural clusters might become more than a temporary arrangement.

The concepts of cultural clusters, creative industries, and tourism all include creative agents, artists, and institutions of art, culture, or higher education, although these agents are somewhat diverse. The main arguments concerning the "Creative City" (Laundry, 2000), "Cities and Creative Class" (Florida, 2005), "Cultural Quarters" (Legnér & Ponzini, 2009), or culture-creative-orientated development (known from the Ruhr area of Germany; Behr et al., 1990) and many more all overlap, but are not synonymous in their understandings of creativity, innovation, and creative agents. We are unable to analyse those concepts here, but consider in more detail three creative-innovative agents and their slightly different functions within the heritage (re)use and urban development: museums as drivers of culture-led development (Aspen, 2013; Bergsli, 2015); the role of universities in generating knowledge and innovation (Mieg & Töpfer, 2013); and places for the arts, which are created through community-driven processes of locally based, often marginalized, small-scale urban developments with potential for sustainability and communing (Szemző et al., 2023). In this article, we examine the reuse of industrial sites and buildings in Bamberg by the municipality and Otto-Friedrich University as an agent of higher education and driver of economic development; as

well as a bottom-up initiative by artists to adapt and reuse the Bamberg Kesselhaus (boiler house of the former hospital).

We aim to shed light on the relationship between industrial heritage and urban development, which is affected by long-term processes, persistent built environments, and perceptions about what constitutes the heritage of a place (Oevermann, 2019). There is broad awareness of how industries have shaped European cities over the last two or even three centuries. Schott (2014, p. 14) uses the concept of path dependency to explain not only the long-lasting processes of urban development but also the dependencies within development paths. This concept is based on an understanding of cities as built entities, with focus on the long lifetimes of physical and built structures and their traces: They might be adapted, extended, or transformed, but still shape urban layouts, sites, and uses. With a set of political-administrative regulations and laws, together with perceptions and practices, this material and immaterial inheritance inevitably moulds the development processes of cities and locations. In the field of heritage conservation, we talk about the longue durée (Braudel, 1977) of a place, and thus connect past, present, and future. Research on the rediscovery of industrial heritage sites in Berlin (Hoppe & Oevermann, 2020) shows a longue durée that includes changes to the places, functions, and—most importantly—the agents involved.

The introduction in this article to Bamberg gives the impression that its industrial past is neglected in favour of the more glorious and appealing baroque period, and that industrial remains are demolished due to a process of homogenization as a historic (baroque) city. This argument is somewhat evident, but even here our in-depth analysis reveals a more complex picture. Some extant industrial structures, especially buildings and their adaptive reuses, still provide evidence of Bamberg's industrial past and offer space for higher education and artistic initiatives that support cultural-creative agents and cultural-creative-oriented development.

2. Material and Methods

In order to pursue our research question, we conducted a case study of Bamberg to examine adaptive reuse, the role of creative agents, and public–private cooperation. We generally followed a mixed-methods research approach.

First of all, we follow the methods of heritage conservation and art history as they are used to identify heritage assets and values through description. These methods are part of the authorized, or to put it in other words, institutionalized heritage discourse and practices. In the authorized heritage discourse, buildings and sites are given value because of their historic, artistic, or cultural meanings that are manifested in substance, material, and visual integrity (Euler-Rolle, 2022). The laws protect the latter, but not cultural processes. Therefore, we look at the historic urban development of Bamberg in describing the substance, material, and visual integrity of the industrial sites and their urban settings, informed by maps, material from the city archives, as well as site visits. A building mostly includes different layers of time and also maintains descriptive characteristics over time. We employ methods commonly used in the field to understand historic architecture (Cramer & Breitling, 2012) and historic towns (Gunzelmann, 2017), and to analyse the development of urban environments and industrial heritage over time, including conservation and conversion (Oevermann, 2021).

The analysis of historic maps and archive material provides findings on path dependencies (Schott, 2014) and the longue durée of a place (Braudel, 1977) and its built structures, and tells us about its constitution as a

heritage site. Prior protection status is another and important indication of a heritage site, and also informs us about one aspect of official support. The federal state (for Bavaria, the Bayerisches Amt für Denkmalpflege), together with the municipalities (the Untere Denkmalschutzbehörde), define and support heritage protection in Germany. We assume, as already mentioned, that official listing was a precondition for the adaptive reuses of our cases; without this, these structures might have been lost like so many others. On this basis, we select three cases of industrial heritage reuse of buildings and sites, which are introduced and discussed in detail.

The analysis is informed by 12 informal interviews (November 2021–July 2022) with staff of diverse municipal institutions, such as the Bamberg World Heritage Visitor Centre and the planning department, with persons engaged in civic heritage initiatives, and with university faculty and staff, to understand the role of heritage in the discourse and practices of the municipalities. The guiding question in the interviews was how to understand the potential and challenges of conserving built heritage while also facilitating Bamberg's urban development. This includes the industrial heritage sites and the agents involved in their (re)use.

At first, the informal interviews were intended to inform research hypotheses. However, these informal interviews allowed access to interviewees and argumentations that otherwise tend to avoid frank discussion due to their professional role and function. Furthermore, they also provided in-depth information about our Am Zwinger 4 & 6 case study. In some of these interviews with university faculty and staff we discussed knowledge about the professional careers of the alumni and reflected on innovation and job opportunities (November 2021–May 2022). A mapping initiative, which was in preparation at that time and is now online, allowed us to provide some indication in understanding the role of universities in generating knowledge and innovation (Mieg & Töpfer, 2013). Two of the three current authors have studied and taught, respectively, in the buildings at Am Zwinger 4 & 6 for at least one year.

We examine recent urban developments, as well as strategies for the future, through analysing municipal documents referring to Bamberg's urban development. Following a general survey, we chose two central documents for our research question, which we reviewed using a document analysis method (Mieg & Oevermann, 2015, pp. 61–71). The document analysis helped us to understand the (non) supporting role of the municipalities.

Additionally, one expert interview (Mieg & Näf, 2006) with the chair of the Kunstraum (English: Art House) initiative (October 2022, Bamberg Kesselhaus case study) was conducted to better understand ongoing processes in this case. This expert interview explicitly addressed the aforementioned creative-innovative agent that, on the one hand, creates a museum space and asks whether this kind of museum is a driver of culture-led development (Aspen, 2013; Bergsli, 2015); and on the other hand, the same agent adaptively reuses places for art through community-driven processes of locally based, small-scale urban developments with potential for sustainability and communing (Szemző et al., 2023). These methods (interviews and document analysis) allow us to determine the cultural and creative agents reusing the site; how, by doing so, these agents come to understand "their" industrial heritage; and how far they are supported by the municipality.

3. Small Industrial Heritage Cities: Municipalities, Heritage Sites, and Creative Agents

The informal interviews revealed both the specific situation of Bamberg and also some differences compared with acknowledged industrial heritage cities. We used this information to formulate two assumptions. Both are based on the observation that, from a general perspective, Bamberg does not suffer from urban development problems such as budget deficit, shrinkage, segregation, or neglected quarters. Bamberg and its university do not face major financial challenges (due not least to Bavaria having one of Europe's strongest economies). However, only some branches are seen as important for future urban development—namely tourism, the university, and a few companies of importance to the automotive supply chain. Furthermore, the city of Bamberg specifically acknowledges the university as an agent in future development:

> In view of the general expert discussion about "creative cities" and "knowledge-based urban development" there should still be some inspiration to be gained here. A detailed analysis of the potential of universities could provide a number of starting points and impulses for the (economic) development of Bamberg to come to light. (Stadt Bamberg, 2011, p. 27, own translation)

The field of heritage conservation is explicitly addressed: "co-operations, especially in smaller regional projects in the field of business informatics, for example, but also in the context of world heritage, heritage conservation and conservation renewal, which certainly offers further potential" (Stadt Bamberg, 2011, p. 27, own translation). However, industrial heritage barely features; instead, the city is defined as such:

> Bamberg is known beyond the city boundaries for its culture: World Heritage Site, Philharmonic Orchestra, E.T.A.-Hoffmann theatre and—since the end of the 1990s—the Villa Concordia. Bamberg advertises itself with the slogan "Cultural City of Bamberg—Experience World Heritage." (Stadt Bamberg, 2011, p. 28, own translation)

We argue that Bamberg largely overlooks its industrial history and heritage, as well as the actors engaging in adaptive heritage reuse of these sites. Our first assumption is that Bamberg's municipalities lack awareness about their own industrial heritage sites and their potential contribution to urban development such as is evident in Berlin (cf. the introduced rediscovery of industrial heritage; Hoppe & Oevermann, 2020). Heritage and heritage institutions—be they part of authorities, city-related institutions, or civic initiatives—conduct research, identify, value, conserve, and mediate mainly the historic medieval and baroque city. Industrial sites or post-war architecture are undervalued, including: the Kesselhaus (industrial); one of the Regnitz bridges; and a post-war 1960s office building located close to the main station, which is under threat of demolition and might be substituted by a newly reconstructed building of a "more historic" appearance. In contrast, the assets designated as part of the World Heritage Site are maintained in excellent condition.

Our second assumption is that there is community engagement in this town, working on conservation and adaptive reuse of industrial sites to meet the local need for art and art production. Bamberg's residents express differing perspectives, including through their interest in and engagement with particular heritage sites and dimensions of the city. Overall, few Bamberg residents are engaged in creative fields, and are thus poorly represented compared with the extensive creative constellations present in cities such as Berlin. Therefore, we do not expect to find creative clusters in Bamberg. Instead, we use the approach to identify creative-innovative

agents (as previously introduced) and their contribution to the reuse of industrial heritage sites and to urban development. Conversely, we examine how municipalities support these agents and their activities. If such support mechanisms are transient, as this thematic issue asks, we answer with two argumentations. Firstly, built structures that have survived with the help of heritage listing for more than 50 or 70 years are already one aspect of a long-lasting arrangement; but, secondly—and more importantly for this thematic issue—the present reuses of these structures by creative agents might be threatened by a lack of municipal support.

4. Bamberg

The town of Bamberg retains a layout and architecture dating from the medieval and baroque periods and that constitute its Word Heritage status. The status is based on an in-depth inventory (*Großinventar*) and informed conservation. This continuity is well documented, starting with the first inventory in 1834 and based on early provision for protection from 1899 (Gunzelmann, 2012b, pp. 721–722). In stark contrast, Bamberg also has many manufacturing and industrial buildings/sites. Shipping, brewery, horticulture, textiles, and engineering were important branches of its urban history. In 1900, larger industrial sites such as the Erba textile factory were located at the edge of the city, which provided space for their huge structures. In the small plots of land dating from the medieval-baroque urban layout and built structure, we see small factories that gradually expanded across several plots to meet their needs for additional space (Gunzelmann, 2012a, map number 11). In consequence, and different to industrial towns such as Rjukan, Bamberg has never had a dominant industrial urban morphology.

The larger buildings and structures, such as the Erba textile factory and the Bamberger metal goods factory, which were mostly located at the urban fringes of their time, were mainly demolished in the 20th century. Manufacturing and industries that were located within and part of the historic urban layout have been more lightly adapted, reused, maintained, and partly demolished (in the case of chimneys). Nevertheless, the industrial history of these buildings is nearly unrecognizable (Gunzelmann, 2012b, map numbers 11, 12, 13, 23, 24). Generally speaking, manufacturing and industrial heritage (except the culture of brewing) have been lost over time, a trend that is today well documented (Gunzelmann, 2012a, pp. 1650–1651, 2012b, pp. 553–692).

Today in the 21st century, some factories and industries remain active, mostly related to brewing, horticulture, and mechanical engineering. Of note is the Weyermann malt factory, founded in 1888. The family business (Malzfabrik Mich. Weyermann GmbH & Co. KG) expanded to become the global leader in speciality malts and still operates from a historical 19th-century malthouse. Although these agents are not part of any culture-creative-orientated development, they are in themselves innovative. External challenges facing industry mean that only those businesses that re-innovate their own heritage may survive, as shown by research on horticulture in Bamberg (Oevermann, Keech, et al., 2023).

4.1. Adaptive Reuses of Heritage Industrial Buildings

Traces of the urban past can be found in the adaptive reuse of buildings, and here the agents of culture-creative-orientated development come into play. Bamberg provides early examples of adaptive reuse of industrial buildings: Since 1988, the VHS (institute for public education) has been located at the city's former power station. From 1993, most of the industrial buildings at the Kaliko factory site (former

Bleicherei, Färberei und Appreturanstalt 1864) were demolished to construct a concert and congress hall (Gunzelmann, 2012a, map numbers 12, 24), with the former weaving shed repurposed to host small events and a restaurant. The conservation and transformation of three sites and their respective buildings are discussed in more detail.

4.1.1. New Developments: Erba

The Erba textile factory (former Mechanische Baumwoll-Spinnerei und Weberei; mechanical cotton spinning and weaving mill) is located in northwest Bamberg in the immediate vicinity of the city's harbour at the Main–Donau Canal (see Figure 1). In earlier times—while the factory was operational—it was separated from the baroque old town by a now filled-in section of the left arm of the river Regnitz and was accessed via bridges. Many of the residential buildings remaining near the textile factory originally accommodated its workers.

The textile factory was founded in 1858 in the small town of Gaustadt, which was later incorporated into Bamberg. The weaving looms were water-powered up to 1861 when a steam engine was installed. In 1927 the factory merged with the Erlanger Baumwollspinnerei (cotton mill) AG and was subsequently known as Erba. Subsequent extensions resulted in a factory complex of enormous dimensions, forming an urban contrast to Bamberg's small-scale and popular tourist centre. Erba closed due to bankruptcy in 1993 (Dornheim et al., 2012).

Figure 1. The Erba textile factory, 1962. Source: Luftbildverlag Bertram (Memmingen) (1962).

Bamberg's urban development concept highlights the importance of education as a developmental factor and acknowledges Otto-Friedrich University as an agent of a creative city. However, the overall message of the concept is to create a prime location with high-quality housing at the Erba location (Stadt Bamberg, 2011, p. 27). Consequently, the transformation of the industrial site (approximately 20 hectares) followed the rationale of brownfield development, characterized by extensive demolition and utilizing few heritage assets. Furthermore, the site's landscape was revitalized in the context of the 2012 Bamberger landscape exhibition (*Landesgartenschau*). Most of the factory buildings have been lost except for the most characteristic historic building at this site, the multi-storey former weaving and spinning mill, a former water tower, a chimney, and the water-power infrastructure which is still running. The multi-storey weaving mill was reused as a student dormitory until 2016, after which the accommodation was sold on the public housing market. Today the area also includes new university facilities such as a library and lecture halls. The history of the site is not presented publicly to residents, students, citizens, or tourists who now use the area, but one can recognize the historical buildings as parts of Bamberg's textile factory. Workers' issues relating to the site's productive period or present-day urban development are not addressed.

The Erba case shows that significant buildings located at the edge of the city are acknowledged as industrial heritage and an anchor point and as key to the attractiveness of further development. These sites are not part of the historic city ensemble, but Erba's water-power infrastructure, multi-storey buildings, the director's villa, and some workers' housing have protected status (Bayerisches Landesamt für Denkmalpflege, 2024). However, the heritage approach is limited, as its implementation concentrates on a small part of the site rather than understanding the whole factory as a built resource (Oevermann & Mieg, 2016), and this approach does not offer space for bottom-up approaches which are seen as important for creative-culture-oriented development (Oevermann, Polyák et al., 2023). The historic structures function as flagship architecture for the construction of new, premium housing and follow the path dependency common to many edge sites and cities: demolition and re-invention over relatively short time periods.

We assume that—in contrast to Berlin, where a protest culture against demolition is established, although only sometimes successful—Bamberg's small size might have reduced the potential to create a strong lobby for its neglected industrial heritage; however, further research is needed on this question. The findings of the several informal interviews provide one rationale: The urban heritage of Bamberg is what constitutes the UNESCO World Heritage site; here, the municipality, including the heritage authorities and tourism branch, concentrate their efforts on the integration of heritage conservation and urban development, whereas other forms of urban heritage are less acknowledged.

4.1.2. University Function: Am Zwinger 4 & 6

The properties at Am Zwinger numbers 4 & 6 are located near the Hainviertel district at the southern end of Bamberg's old town, whose residential neighbourhoods are characterized by prestigious villas. The so-called Hollergraben, fed by the left branch of the river Regnitz, runs directly west of the factory. From the mid-19th century until the 1920s, the property opposite (Am Zwinger 15) housed a water-powered veneer sawmill and a workshop that manufactured grinders, turbines, and specialist machinery for sawmills and hop-processing (Flussparadies Franken, n.d.).

The Rupp & Hubrach optical company was founded in 1922 by Max Rupp sen. and Carl Hubrach sen. After its first production facility, the so-called Stelzer'sche Mühle, was bombed during the final days of World War II,

the company relocated in 1945 to two rented properties (Am Zwinger 4 & 6) close to the river Regnitz in southwest Bamberg. The properties were already under roof, and production was restarted in 1946. One of the properties, Am Zwinger 4, was a residential building comprising six flats that were converted into living spaces for the company owners and their families, giving rise to the name "Fabrikantenvilla" (Factory owner's villa). The second property, Am Zwinger 6, was a former storage building that was reused as a production facility and modernized in 1955. The company continued as a family business until becoming part of the BBGR/Essilor-group in 2003 (Haas, 2015).

Following the sale of the company, the Fabrikantenvilla and production facility were reused as the in-house printing press of the Office for Rural Development (Amt für Ländliche Entwicklung). Otto-Friedrich University took over the properties in 2014 as its need for space increased, and the buildings now host the departments, labs, and lecture rooms for the Master Studies in Heritage Conservation and the Centre for Heritage Conservation Studies and Technologies (Kompetenzzentrum für Denkmalwissenschaften und Denkmaltechnologien). Today, Am Zwinger 6 is occupied by a modern structure that indicates its former use as a glass-cutting workshop through its internal spatial organization and atmosphere. In contrast, the neighbouring Fabrikantenvilla has retained its historical character in parts, which is particularly evident in its interiors featuring stucco-decorated ceilings and a wooden staircase (see Figure 2).

It would be difficult to measure the effects of higher education institutes on urban development, but the connection between access to knowledge and economic prosperity in university towns is much clearer (Heßler, 2007, pp. 19–20). One indication of the relevance of higher education in Bamberg for innovation and employment is the over-representation of offices and firms in Bamberg and the Franconia region. Bamberg hosts six enterprises providing specific services for heritage conservation sciences, mostly researchers and surveyors of historic buildings (*Bauforscher:innen*), with a further four within Franconia, among approximately 70–80 such enterprises in Germany as a whole (Breitling et al., 2022).

Figure 2. Current view of the building Am Zwinger 6. The premises of the Centre for Heritage Conservation Studies and Technologies are located on the ground floor. Photo courtesy of © L. Hans, 2024.

The industrial heritage site is a space of opportunities (Siebel, 2002, pp. 39–40); accordingly, the university created a small and limited environment to connect higher education in the field of heritage conservation and foster the settlement of specific enterprises. The support of the university and its growing student numbers, courses offered, and research labs such as the Centre for Heritage Conservation Studies and Technologies form part of the long-term strategies by the federal government strategy of Bavaria and the municipality of Bamberg (Stadt Bamberg, 2011, 2014). However, being part of the university ourselves for at least one year (2001–2002), it is evident that computer sciences and management (rather than the field of heritage conservation) are the main subjects supported within the university, as they are acknowledged to be part of promising future industries.

In the case of the heritage conservation research lab and, more obvious, the computer sciences and management, the university has expanded its range of courses and opportunities for research, and attracts and educates upcoming professionals, or "talents" as Florida (2005) puts it. In sum, spaces of opportunity are needed by creative agents (which in this case are knowledge-orientated agents)—not only in large cities but also in smaller towns. The difference seems to be in the function of the intermediaries, brokers, or managers for networking and creative-knowledge environments. In Bamberg, the university's actors connect directly *and* within the university to generate networks and the exchange of ideas.

Due to the smallness of the city, personal contact is the main way of exchanging ideas and developing products. As with any university, there is a certain turnover of scholars and staff, producing a flux of minds and knowledge as fertile ground for innovation; furthermore, the institution provides space and other hardware such as labs for knowledge production. In contrast, the city lacks so-called third places for which Berlin and other big cities such as Barcelona are known, in which individuals might meet, connect, and negotiate project-related business between many creative branches.

4.1.3. Art Space: Boiler House (Kesselhaus)

The boiler house of the former hospital is located directly west of Bamberg's old town on the so-called Leinritt, the riverside path along the left bank of the Regnitz arm. The modern, functional building (constructed 1961–1963 to plans by Hans Rothenburger, Bamberg's town planning director) at the northern end of the hospital site consists of a boiler room around 7 metres high, a shed-roof hall adjoining to the south, and basement rooms that were once used by the pathology department (see Figures 3 and 4).

Notably, this former boiler house has both the appearance of an industrial heritage site and fulfilled a technical infrastructure function—albeit of a hospital rather than an industrial (production) site. Nevertheless, it is not commonly acknowledged as either a listed building or a space of opportunity. Further research would be needed to determine whether this perception is attributable to its history as part of a former hospital.

In 1984, the boiler house was decommissioned when the hospital relocated, and stood empty until being rediscovered as an exhibition space in 2011 (Kunstraum JETZT! e.V., n.d.). The initiative for the gradual appropriation of the Kesselhaus was taken by Architekturtreff Bamberg, Kunstverein Bamberg, and BBK Oberfranken (Berufsverband Bildender Künstlerinnen u. Künstler Oberfranken e.V.), all organizations of creative agents. Since 2013, the newly founded association Kunstraum JETZT! e.V. (Art House NOW!) has been a utilization contract partner of the city. However, this has always been for a limited term, and while

Figure 3. The former Kesselhaus in its use as art house. Photo by © H. Oevermann, 2022.

Figure 4. Art House in the Kesselhaus, showing the interplay of the raw building and its use as a space for art exhibitions. Photo by © H. Oevermann, 2022. Further images of the space and activities can be found at https://kunstraum-jetzt.de/?page_id=24,%2012.10.2023

this arrangement has not yet diminished the personal commitment of the association members, it nevertheless formally precludes long-term planning.

The Kesselhaus is currently primarily used for contemporary art exhibitions and is therefore unique in Bamberg, apart from the Villa Dessauer city gallery that allows similar use to a lesser extent. The exhibitions are popular not only within sections of Bamberg's population: The Kesselhaus also generates lively interest beyond the region and attracts visitors from all over Germany. Since its founding in 2013, the Kunstraum JETZT! association has constantly endeavoured to gain broader political and social support for the Kesselhaus as an ideal exhibition venue for contemporary art and culture close to the city. So far, this commitment has often been met with criticism due to its need for maintenance and its incongruous appearance as a 1960s factory building in a historic town morphology. Consequently, there is a lack of financial interest on the part of municipal stakeholders.

The Kunstraum association itself has long since produced drafts, models, and utilization concepts to ensure the long-term use of the Kesselhaus as an art space. Only recently, a feasibility study was also carried out by the city to examine possible future uses for the building, but the results are yet to be presented (personal communication, October 30, 2022). However, the 2011 and 2014 SEKs (*Gesamtstädtisches Entwicklungskonzept*; English: overall urban development concept) lack any definitions or long-term perspectives on creative uses of the Kesselhaus. These strategy papers and others present a 20-year urban development perspective but make no mention at all of this industrial heritage site (Stadt Bamberg, 2011, 2014).

One person involved in the initiative states in regard to the future:

> Yes, since it was founded in 2013, the Kunstraum JETZT! association has been working tirelessly to gain broader political and social support for the Kesselhaus and Shedhalle as an ideal exhibition venue for contemporary art and culture close to the city centre, a commitment that has been met with more or less incessant criticism and a refusal of financial backing on the part of the city authorities. (interview October 30, 2022; translation by the authors)

This quotation and other statements in informal and expert interviews show that the municipality lacks awareness not only of industrial heritage (except for breweries and horticulture), but also of its potential function as driver for urban development that integrates industrial sites as a built resource (Oevermann & Mieg, 2016) and its potential to provide space for people and their needs, such as art and other creative industries (Oevermann, Keech, et al., 2023); not to mention the contribution to sustainability and social impact (Szemző et al., 2023). Whether and how the initiatives generate sufficient power and an adequate financial basis to ensure a long-term perspective without the support of Bamberg's municipality or other state institutions will only become apparent in future years.

5. Discussion

This contribution elaborates on how smaller cities revitalize derelict industrial sites and consider the effects of regeneration initiatives. The article shows that there are different cultural and creative agents active, with effects on urban development and industrial heritage conservation; and shows that (and how) industrial

heritage and creative uses become more than temporary arrangements. Furthermore, all three examples show that the authorized listing of buildings and zones is an important regulative; the documents of a neglected history would be further diminished without it.

Our research in Bamberg did not reveal creative clusters in the understanding of "Creative Quarters" (Legnér & Ponzini, 2009); no institutionalized museums as drivers of culture-led development (Aspen, 2013; Bergsli, 2015); nor an innovative and creative scene as is recognized in large cities such as Berlin (Merkel & Suwala, 2021), but instead agents—the university and civic initiatives—that foster innovation and creative branches on a small scale. The universities and the supportive role of the municipality and the federal state can be understood as a contribution to "Cities and Creative Class" (Florida, 2005); and the initiatives reusing the former boiler house as a place for art could be understood as agents of a "Creative City" (Laundry, 2000). However, there are limitations.

The three Bamberg case studies show that the city's manufacturing and industrial history are not generally part of the mainstream perception of Bamberg's heritage acknowledged by UNESCO, and do not feature in urban development strategies (Stadt Bamberg, 2011, 2014). This is despite the significant influence of urban industry in the city's history, as shown in the work of Gunzelmann (2012a, 2012b). However, the three sites at least benefit from protected heritage status, and through this have a long-term perspective for their built structures.

A more detailed view shows that the main characteristic, tangible elements of former factories such as the Erba textile factory are conserved and reused. However, the city has designated most of the site as a brownfield housing development. Thus, the university function at the Erba site contributes only modestly to a relationship between industrial heritage, its conservation, and knowledge-based institutions.

More promising is the university function located in the former production site at Am Zwinger 4 & 6. Here the building is conserved and carefully adapted to retain the atmosphere of production, innovation, and a specific place. A stable and long-term perspective of the knowledge-based institutions is strengthened through the urban development strategy (Stadt Bamberg, 2011, 2014) in which the "Creative Cities" approach and knowledge-based urban development are brought together with heritage conservation and their industries (Stadt Bamberg, 2011, p. 27). In that sense, we argue that in this case the confluence of industrial heritage—and more precisely, knowledge-based clusters—and creative agents is much more than a temporary arrangement.

The Kesselhaus case shows how industrial heritage sites may be reused by artists in small cities. The built infrastructure is appropriated and adapted by civil society initiatives, and as such contributes to broadening urban activities. However, the present arrangement of stakeholder constellation, rental contracts, and urban development objectives is fragile and might ultimately prove only temporary. The rediscovery of this heritage does not feature in local urban development strategies, nor has a role within or impact on the main perception of the historical World Heritage medieval and baroque city. Consequently, this art space attracts very little city tourism compared with the visitor numbers in the central part of the small city, such as the historic town hall and the Regnitz bridges. On a positive note, we can assume that its neglected position might at least limit gentrification effects.

The three case studies show different pathways for cultural-creative developments in small towns: It seems that the top-down development of the Erba site uses the industrial heritage as an urban attractor (Bergsli,

2015), but the overall branding as a historic medieval and baroque city overshadows its possible effects. Am Zwinger 4 & 6 contributes to knowledge production and small-scale economies, whereas the Kesselhaus locates bottom-up initiatives for contemporary art. All three approaches understand the built heritage as a resource (Oevermann & Mieg, 2016); furthermore, the Kesselhaus integrates local communities and serves their needs (Szemző et al., 2023), but the latter might ultimately prove to be only a temporary arrangement.

6. Conclusion

The conclusions indicate that "history and heritage" (Meier & Steiner, 2018) matters when we examine "Industrial Heritage and Cultural Clusters: More Than a Temporary Affair," as done in this thematic issue. Bamberg's vision of its history and heritage lacks understanding of its industrial heritage, even though their manifestations in built structures are thoroughly described by Gunzelmann (2012a, 2012b) and some are still part of the urban landscape. Cultural-creative agents often help in small and insecure settings, as they have the ability to envision, invent, and enfold perspectives with only modest funding and support, as the open heritage concept and cases have shown (Oevermann, Polyák, et al., 2023). However, authorized cultural-creative urban development strategies—such as that of Bamberg, utilizing the slogan "Cultural City of Bamberg—Experience World Heritage"—narrow the understanding of its own urban history and become small in regard to its industrial heritage. We argue, slightly differently from Smith (2006), that industrial heritage sites need authorized support through listing.

The Bamberg case studies show that long-term perspectives for industrial heritage sites need protection status, and thus instruments of the authorized heritage discourse—otherwise these documents (Euler-Rolle, 2022), built resources (Oevermann & Mieg, 2016), and spaces of opportunities (Oevermann, Keech, et al., 2023) disappear—in addition to agency by cultural-creative communities that understand heritage as a cultural process of use and appropriation, as Smith (2006) suggests. We have found an assemblage (Pendlebury, 2013) of objects, regulations, and practices in all three cases. However, municipal support mechanisms—which can be understood as a (democratically) authorized agent—are transient in the sense that built structures have survived with the help of heritage listing whereas the present reuse of the former Kesselhaus by creative agents is threatened by a lack of municipal support. For the former Kesselhaus, the need for authorized support is explained by its double smallness: due both to Bamberg's generally poor acknowledgement of industrial heritage and a particular municipal indifference to its initiative-driven activities. The three Bamberg cases indicate the opportunities related to industrial heritage conservation and development; thus, municipalities of small cities should not only support the local agency for industrial heritage but also initiate on their own awareness and valuing processes.

Funding

Funding for open access is provided by Open Access TU Wien.

Conflict of Interests

The authors declare no conflict of interests.

References

Aspen, J. (2013). Oslo—The triumph of zombie urbanism. In E. Robbins & E. El-Khoury (Eds.), *Shaping the city: Studies in history, theory and urban design* (pp. 182–209). Routledge.

Bayerisches Landesamt für Denkmalpflege. (2024). *DenkmalAtlas Bayern*. https://geoportal.bayern.de/denkmalatlas/searchResult.html?koid=108603&objtyp=bau&top=1

Behr, V., Gnad, F., & Kunzmann, K. (1990). *Kulturwirtschaft in der Stad*t. IRPUD Institut für Raumplanung.

Bergsli, H. (2015). *Urban attractiveness and competitive policies in Oslo and Marseille. The waterfront as an object of restructuring, culture-led redevelopment and negotiation processes* [Unpublished doctoral dissertation]. University of Oslo.

Braudel, F. (1977). Geschichte und Sozialwissenschaften. Die longue durée. In M. Bloch, F. Braudel, L. Febvre, & C. Honegger (Eds.), *Schrift und Materie der Geschichte. Vorschläge zu einer systematischen Aneignung historischer Prozesse* (pp. 47–85). Suhrkamp.

Breitling, S., Schalk, C., & Salzer, L. (2022). *Karte der Bauforschung—Büros*. Bauforschung Bamberg Büros. https://www.bauforschung-bamberg.de/b%C3%BCros

Cramer, J., & Breitling, S. (2012). *Architecture in existing fabric: Planning, design, building*. Birkhäuser.

Dornheim, A., Gierse, S., & Kießling, S. (2012). *Erba—verwobene Geschichte*. Edition Hübscher.

Euler-Rolle, B. (2022). Denkmalpflege als Erbepraxis. In S. Bogner, M. Karpf, & H. R. Meier (Eds.), *Praktiken des Erbens. Metaphern, Materialisierung, Machtkonstellationen* (pp. 96–109). Bauhaus Universitätsverlag.

Florida, R. (2005). *Cities and the creative class*. Routledge.

Flussparadies Franken. (n.d.). *Historische Turbine am Zwinger*. https://www.flussparadies-franken.de/projekte/flusspfad-bamberg

Gunzelmann, T. (2012a). *Die Kunstdenkmäler von Bayern. Bamberg. Stadtdenkmal und Denkmallandschaft. Das Stadtdenkmal* (Volume 2). Bayerische Verlagsanstalt; Deutscher Kunstverlag; R. Oldenburg Verlag.

Gunzelmann, T. (2012b). *Die Kunstdenkmäler von Bayern. Bamberg. Stadtdenkmal und Denkmallandschaft. Stadtentwicklungsgeschichte* (Volume 1). Bayerische Verlagsanstalt; Deutscher Kunstverlag; R. Oldenburg Verlag.

Gunzelmann, T. (2017). Das Kommunale Denkmalkonzept. Aufbau, Inhalt, Methodik. In A. Hansen & S. Tönnies (Eds.), *Das Kommunale Denkmalkonzept: Den historischen Ortskern gemeinsam gestalten und entwickeln* (pp. 11–23). Bayerisches Landesamt für Denkmalpflege. https://www.blfd.bayern.de/mam/information_und_service/publikationen/denkmalpflege-themen_kommunales-denkmalkonzept_2017.pdf

Haas, S. (2015). *Fabrikgebäude und ehem. Fabrikantenvilla, Am Zwinger 4–6, Bamberg. Geschichte, Funktion und denkmalpflegerische Bewertung* [Unpublished master's thesis]. University of Bamberg.

Harrison, R. (2012). *Heritage. Critical approaches*. Routledge.

Heßler, M. (2007). *Die kreative Stadt. Zur Neuerfindung eines Topos*. Transcript.

Hoppe, J., & Oevermann, H. (2020). *Metropole Berlin. Die Wiederentdeckung der Industriekultur*. Bebra.

Kunstraum JETZT! e.V. (n.d.). *Wie alles begann*. Bambergs Raum für Gegenwartskunst. https://kunstraum-jetzt.de/?page_id=24,%2012.10.2023

Laundry, R. (2000). *Creative city*. Earthscan.

Legnér, M., & Ponzini, D. (Eds.). (2009). *Cultural quarters and urban transformation: International perspectives*. gotlandica forlag.

Luftbildverlag Bertram (Memmingen). (1962). *Luftbild von Bamberg, ERBA-Insel mit ERBA Spinnerei* [Aerial photograph]. (Bestand D 5033, Luftbildverlag Bertram, Signatur 717). Bamberg City Archives, Bamberg, Germany.

Meier, H. R., & Steiner, M. (2018). Monument-patrimony-heritage. Industrial heritage and the horizons of terminology. In S. Bogner, B. Franz, H. R. Meier, & M. Steiner (Eds.), *Monument-patrimony-heritage. Industrial heritage and the horizons of terminology* (pp. 16–35). Verlag Jörg Mitzkat; arthistoricum.net.

Merkel, J., & Suwala, L. (2021). Intermediaries, work and creativity in creative and innovative sectors. In

B. J. Hracs, T. Brydges, T. Haisch, A. Hauge, J. Jansson, & J. Sjöholm (Eds.), *Culture, creativity and economy: Collaborative practices, value creation and spaces of creativity* (pp. 56–69). Routledge.

Mieg, H. A., & Näf, M. (2006). *Experteninterviews in den Umwelt- und Planungswissenschaften. Eine Einführung und Anleitung*. Pabst.

Mieg, H. A., & Oevermann, H. (2015). *Planungsprozesse in der Stadt: Die synchrone Diskursanalyse. Forschungsinstrument und Werkzeug für die planerische Praxis*. Vdf.

Mieg, H. A., & Töpfer, K. (Eds.). (2013). *Institutional and social innovation for sustainable urban development*. Routledge.

Oevermann, H. (2019). Festungsarchitektur und Pulverdampf—Stadtbaugeschichte und Industrie in Spandau. *Insitu*, *11*(1), 93–108.

Oevermann, H. (2021). *Urban textile mills: Conservation and conversion*. Bebra Wissenschaft Verlag.

Oevermann, H., Keech, D., Redepenning, M., Fan, L., & Alberth, P. (2023). Continuity and change: Socio-spatial practices in Bamberg's world heritage urban horticulture. *Urban Planning*, *8*(1), 39–51.

Oevermann, H., & Mieg, H. A. (2015). *Industrial heritage sites in transformation. Clash of discourses*. Routledge.

Oevermann, H., & Mieg, H. A. (2016). Nutzbarmachung historischer Industrieareale für die Stadtentwicklung: Erhaltungsbegriffe und Fallbeispiele in der Praxis. *disP – The Planning Review*, *52*(1), 31–41.

Oevermann, H., Polyák, L., Szemző, H., & Mieg, H. A. (2023). *Open heritage—Community-driven adaptive reuse in Europe: Best practice*. Birkhäuser.

Oevermann, H., & Szemző, H. (2023). What is open heritage? In H. Oevermann, L. Polyák, H. Szemző, & H. A. Mieg (Eds.), *Open heritage—Community-driven adaptive reuse in Europe: Best practice* (pp. 158–169). Birkhäuser.

Pendlebury, J. (2013). Conservation values, the authorised heritage discourse and the conservation-planning assemblage. *International Journal of Heritage Studies*, *19*(7), 709–727.

Schott, D. (2014). *Europäische Urbanisierung (1000–2000)*. Böhlau.

Siebel, W. (2002). Urbanität ohne Raum. Der Möglichkeitsraum. In D. Kornhard, G. Pütz, & T. Schröder (Eds.), *Stadt schafft mögliche Räume* (pp. 32–41). Junius.

Smith, L. (2006). *Uses of heritage*. Routledge.

Smith, L., & Campbell, G. (2017). 'Nostalgia for the future': Memory, nostalgia and the politics of class. *International Journal of Heritage Studies*, *23*(7), 612–627.

Stadt Bamberg. (2011). *Gesamtstädtisches städtebauliches Entwicklungskonzept*. Baureferat der Stadt Bamberg.

Stadt Bamberg. (2014). *Fortschreibung gesamtstädtisches städtebauliches Entwicklungskonzept*. Baureferat der Stadt Bamberg. https://www.stadt.bamberg.de/B%C3%BCrgerservice/%C3%84mter/Stadtplanungsamt/Konversionsmanagement/Planung/Stadtentwicklungskonzept-SEK

Szemző, H., Polyák, L., Patti, D., & Mosquera, J. (2023). Lessons learned: Sustainability and social impact. In H. Oevermann, L. Polyák, H. Szemző, & H. A. Mieg (Eds.), *Open heritage—Community-driven adaptive reuse in Europe: Best practice* (pp. 198–206). Birkhäuser.

UNESCO. (2015). *Nomination dossier: Rjukan—Notodden industrial heritage site*. https://whc.unesco.org/uploads/nominations/1486.pdf

Wergeland, E. S. (2022). *Norwegian garden cities*. Cappelen Damm Academic.

About the Authors

Heike Oevermann is professor for heritage conservation at TU Wien and guest professor at the Oslo School of Architecture and Design. Before moving to Vienna, she was interim professor for heritage conservation and sciences at the Otto-Friedrich Universität in Bamberg. She has published across a number of different fields, including industrial heritage, urban heritage, conservation, and conversion. Her latest book is called *Open Heritage—Community-Driven Adaptive Heritage Reuse in Europe: Best Practices* (Birkhäuser, 2023).

Even Smith Wergeland (b. 1981) is an associate professor at the Oslo School of Architecture and Design, where he teaches architectural history, heritage, and preservation. He has published across a number of different fields, including sports architecture, urban mobility, and music. His latest book is called *The Architecture and Geography of Sound Studios: Sonic Heritage* (Routledge, 2024).

Susanne Hanika is a research assistant in the field of art history at the Universität zu Köln. Before completing her master's degree in 2023, she was a student assistant at the Georg-August-Universität Göttingen, the Christian-Albrechts-Universität zu Kiel, and the Otto-Friedrich-Universität Bamberg in the fields of art history and heritage conservation. Her latest publication is called *Das Erbe des Wohlfahrtsstaates? Chancen und Herausforderungen des schwedischen Miljonprogramms* [The Legacy of the Welfare State? Opportunities and Challenges of the Swedish Miljonprogrammet] (Otto-Friedrich-Universität, 2024).

Urban Planning
2024 • Volume 9 • Article 8189
https://doi.org/10.17645/up.8189

cogitatio

ARTICLE

Open Access Journal

Resistance to Being Listed Industrial Heritage? The Conflicts and Dilemma of Heritage-Making During Land Banking in Guangzhou

Xiaohong Tan [1,2] **and Uwe Altrock** [2]

[1] School of Architecture and Urban Planning, Guangdong University of Technology, China
[2] Department of Urban Regeneration and Planning Theory, University of Kassel, Germany

Correspondence: Xiaohong Tan (tanxh9@gmail.com)

Submitted: 31 January 2024 **Accepted:** 23 July 2024 **Published:** 30 September 2024

Issue: This article is part of the issue "Industrial Heritage and Cultural Clusters: More Than a Temporary Affair?" edited by Uwe Altrock (University of Kassel) and Janet Merkel (TU Berlin), fully open access at https://doi.org/10.17645/up.i341

Abstract

Amid rapid urban regeneration over the past decade, industrial heritage conservation in China has garnered increasing attention, focusing more on the reuse of listed buildings than on conflicts in the inscription process. This article examines the conflicts and dilemmas between urban redevelopment and industrial heritage conservation during the inscription process in China, through five case studies in Guangzhou. It aims to provide both an understanding of conflicts and institutional challenges posed by land banking, and insights into stakeholder dynamics, the role of media and NGOs, and the implementation of cultural heritage assessments. Grounded in the Institutional Analysis and Development framework, the empirical studies reveal that institutional conflicts, particularly resistance from land development centers and former factory owners, often stem from financial motivations. This resistance can lead to the premature demolition of potential heritage sites but also drive institutional innovations. Guangzhou's introduction of the Wenping assessment system integrates industrial heritage identification with land banking and urban regeneration planning, aiming to protect heritage from hasty demolitions. Media coverage and NGO advocacy have been instrumental in heritage-making and prompting policy responses. The adaptive reuse of industrial heritage sites into creative industrial parks faces challenges from their temporary nature and land banking pressures, underscoring the need for policies ensuring stable and enduring reuse. Ambiguous responsibilities and fragmented management systems further impede effective heritage conservation.

Keywords

heritage-making; heritage inscription; industrial heritage; land banking; urban regeneration

1. Introduction

Over the past two decades, China has experienced a surge in heritage initiatives, utilizing culture and heritage to construct national identity and showcase soft power (Maags & Svensson, 2018; Nakano & Zhu, 2020). Heritage, as noted by Zhu and Maags (2020), serves as a powerful instrument to pursue economic, political, or sociocultural interests. However, the respective initiatives started later than in Western countries, where the value of industrial heritage for tourism gained early recognition (J. Zhang et al., 2022). The 2006 Wuxi Proposal, issued at the first China Industrial Heritage Preservation Forum, marked a significant milestone, integrating industrial heritage into broader cultural heritage management. Since then, industrial heritage research and preservation in China have gained attention, fostering awareness and proactive preservation measures. The inherent conflict between preservation and redevelopment in heritage inscription processes involves negotiation and dissonance (Oevermann, 2015; Oevermann & Mieg, 2021; Smith, 2006; Tunbridge & Ashworth, 1996). Tensions are particularly significant in rapidly urbanizing regions, where development pressures often lead to the demolition of unlisted industrial heritage (H. Zhang et al., 2023; J. Zhang et al., 2022). Despite this growing concern, most research in China focuses on adaptive reuse of listed industrial buildings, often overlooking the conflicts during inscription. There is a need for longitudinal studies to track the outcomes of respective regulations, providing deeper insights into effective practices.

Guangzhou, a major industrial hub in South China, offers a unique perspective on industrial heritage inscription and preservation within China. Despite significant progress since 2006, Guangzhou faces ongoing conflicts and challenges. The Tui Er Jin San (退二进三 in Chinese) strategy, initiated in 2005, aimed to restructure industry by relocating secondary industries and repurposing vacated factory buildings. In 2008, the Municipal Government's *Measures for the Disposal of Industrial Land of "Tui Er Jin San" Enterprises in Guangzhou City* planned to relocate 295 enterprises posing environmental and safety hazards by 2015. Additionally, the 2009 *Opinions on Accelerating and Promoting "Three Olds" Redevelopment (No.56)* focused on regeneration of old towns, former industrial sites, and urban villages. A 2010 document titled *Notice on Promoting the Relevant Planning and Management Requirements for Temporary Construction Projects in "Tui Er Jin San" and Old Factory Transformation* encouraged the temporary reuse of vacant factories, leading to a flourishing of creative industrial parks.

Since these initiatives, the Guangzhou government has surveyed and adaptively reused unlisted industrial heritage. However, rapid urban redevelopment and the absence of a clear protection system have left many potential industrial heritage sites unprotected. The 2009 Three Olds policy allowed factory owners opting for land banking to receive 60% of the land premium as compensation, spurring explosive growth in urban regeneration projects. The 1994 tax-sharing system led local governments to rely heavily on land finance, making land banking a crucial tool for urban development and financing infrastructure projects (Wu, 2022), often resulting in hasty demolitions due to resistance from land development centers (LDCs) and profit-oriented former factory owners given the immature pre-protection policies. For example, the 2013 demolition of the No. 1 Rubber Factory in Guangzhou illustrates how the possibility and procedure of industrial heritage list inscription can accelerate the destruction of old industrial buildings. However, these conflicts can also spur institutional innovations. Understanding institutional conflicts and resulting innovations is crucial for developing policies that balance heritage preservation with urban redevelopment.

The adaptive reuse of industrial heritage sites, often transformed into creative industrial parks, has been both successful and contentious. These creative industrial parks face demolition threats due to land banking pressures, highlighting the tension between temporary and permanent uses of industrial heritage. For example, the controversial case of Redtory in Guangzhou sparked debates on heritage value and related list inscription. Understanding these dynamics is essential for developing long-term strategies that balance heritage preservation with urban redevelopment.

Starting from this point, the article seeks to address the following questions: In which way does land banking cause resistance against industrial heritage inscription in Guangzhou? What factors pose challenges to the adaptive reuse and preservation of industrial heritage? Employing the Institutional Analysis and Development (IAD) framework, the study examines conflicts and dilemmas in the institutional landscape of industrial heritage inscription and preservation in China. By exploring related conflicts and negotiations, it aims to understand the institutional conditions necessary for stabilizing cultural clusters. Building on insights from five case studies in Guangzhou, it analyses specific constellations and provides conclusions applicable to other regions experiencing similar conflicts.

The article encompasses a research review, an introduction to the research framework, an exploration of exogenous variables and context, a detailed examination of specific constellations through case studies, an analysis and discussion based on the empirical studies, and a concluding section. By delving into these questions and employing the IAD framework, the article aims to contribute nuanced perspectives to the intricate interplay between land banking, resistance to heritage inscription, and the challenges faced in the adaptive reuse and preservation of industrial heritage in Guangzhou.

2. Research Review, Research Framework, and Methodology

2.1. Industrial Heritage-Making and Adaptive Reuse in the Chinese Context

Industrial heritage preservation in China has evolved significantly over the past decade, driven by rapid urbanization, economic transformation, and changing policies (J. Zhang et al., 2022). The Chinese government has progressively integrated industrial heritage into broader heritage management, making adaptive reuse and preservation central to urban governance (Currier, 2008; He, 2017; Liu, 2017; Niu et al., 2018; Zheng, 2011). Unlike in the West, where factory closures often result from industrial restructuring, closures in China are linked to state intervention, particularly under Tui Er Jin San. Cities like Beijing, Shanghai, and Guangzhou have focused on transforming old factories into creative industrial parks, supported by government policies promoting creative industries. These parks, distinct from Western creative clusters, operate under top-down policy guidance with weak community ties (Liang & Wang, 2020; C. Yang & Qian, 2023). They require government approval and emphasize industry-upgrading policies (Cen et al., 2017; V. Y. Yuan, 2020), often serving as temporary land-use strategies leading to government-led demolition and redevelopment (Q. Yuan, 2016). This approach has faced dissatisfaction and resistance from the creative class (Liu, 2017).

Recent studies highlight the increasing integration of community engagement in the adaptive reuse of industrial heritage sites in China. Notable examples include the transformation of Shanghai Minsheng Art Wharf. However, the anticipated benefits of community engagement and the bargaining power of non-state

interests have often been restrained by the state exerting vigilance against social unrest that could be brought about by heritage conservation (Qian, 2023). State control remains a significant factor in shaping these processes. In some cases, the redevelopment of heritage sites has led to gentrification, displacing long-term residents and altering the social fabric of neighborhoods (C. Yang & Qian, 2023). However, existing research, particularly in China, often prioritizes technical and spatial aspects, overlooking conflicts inherent in decision-making processes and social aspects of heritage preservation.

In cases where industrial sites become creative parks, the discourse centers on whether these reuses should be stabilized and listed as heritage. This discourse critically shapes transformation strategies of former industrial sites, influencing decisions on whether land or heritage value takes precedence (Q. Yuan, 2016). Consequently, industrial heritage-making becomes a powerful tool guiding redevelopment, crucial for stabilizing and preserving old factories and transitioning them from temporary reuse to enduring preservation and adaptive reuse (Oevermann, 2015; Oevermann & Mieg, 2021; Tan et al., 2022). Industrial heritage-making involves active social and cultural processes to identify, preserve, and celebrate elements deemed valuable by a community. This process engages various stakeholders, including communities, governments, and organizations, in determining which aspects of the past should be preserved and carried forward. Q. Yuan and Cai (2018) note that grassroots organizations and local communities are playing a growing role in conservation efforts, providing valuable input and advocating for the preservation of industrial sites. By examining conflicts, stakeholder dynamics, and policy innovations, this article seeks to identify critical factors for long-term preservation, and conditions essential for stable and sustainable adaptive reuse of industrial heritage within cultural clusters.

2.2. Research Framework: The IAD Framework

The IAD framework, developed by Ostrom et al. (1994), is a widely recognized theoretical foundation in political science and institutional economics. It provides a methodical approach to analyzing the structure and operations of institutions, particularly in collective action, governance, and resource management. It is significant for illuminating how institutions shape behavior, influence decision-making, and determine outcomes across various social and environmental contexts.

The components of IAD include exogenous variables, action situations, interactions, outcomes, and evaluative criteria (Ostrom, 2010b; see Figure 1 in the current article). Exogenous variables encompass physical and material conditions, community attributes, and rules in use. Community attributes refer to the social and cultural backdrop of an action situation. The action arena, the core element of the IAD framework, includes the action situations and the actors involved, where industrial heritage-making is viewed as a social process involving various actors. Nevertheless, Ostrom (2010a) suggests not strictly distinguishing between the action arena and action situation. The action situation is a "black box" where operational, collective, or constitutional choices are made, encompassing information observation, action selection, interaction patterns, and outcomes. The IAD framework will be used to understand the logic of actors' behavior, and explore the outcomes of their interactions in the context of industrial heritage preservation.

Institutions, according to the IAD framework, are the formal and informal rules and norms that structure interactions among actors. Institutions in this study encompass rules and organizations established to manage and preserve industrial heritage sites, crucial for understanding decision-making, resource allocation, conflict

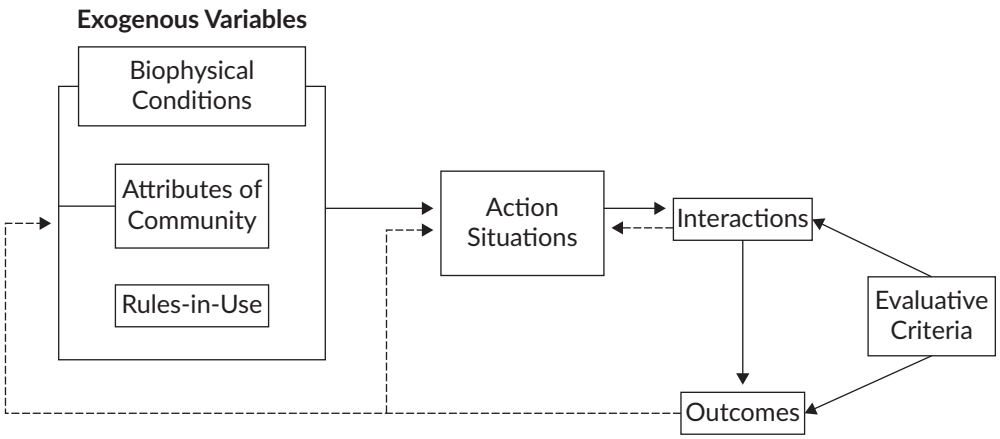


Figure 1. The IAD framework. Source: Ostrom (2010b, p. 646).

resolution, and heritage conservation. The aforementioned exogenous variables provide the external context and conditions shaping institutional development and function in Guangzhou, influencing how heritage sites are preserved, managed, and utilized.

The IAD framework, as a systematic and robust approach, allows for a detailed examination of stakeholder roles and behaviors, including government bodies, NGOs, media, and former property owners, within the institutional landscape. It highlights both resistance and innovation in heritage conservation and seeks to unravel how land banking influences actor behavior regarding industrial heritage inscription and preservation.

2.3. Research Sites, Case Selections, and Data Collection

Guangzhou boasts a notable concentration of industrial heritage along its transport routes, particularly along the Pearl River and near railway stations. The city's institutional development for historical and cultural heritage protection progressed slowly until 2013. In the 1990s, the Guangzhou Historical and Cultural City Conservation Office was established, but it was abolished in 2003. Despite preparations for the Preservation Plan for the Historic and Cultural City of Guangzhou since 2003, the plan took a decade to materialize and remained unpublished until 2013. A pivotal event that year accelerated heritage conservation efforts when the Jinlingtai and Miaogaotai buildings in Yuexiu District were demolished overnight, following the expiration of their heritage protection. Local conservationists and media had previously highlighted the buildings' historical value, and in 2012, the Guangzhou Land and Housing Authority temporarily halted demolition. However, on June 10–11, 2013, the developer illicitly destroyed the buildings, sparking public outcry. Media attention and public pressure led the government to mandate the reconstruction of the demolished structures. This incident prompted a broader debate on heritage conservation, driving regulatory reforms that now require pre-acquisition surveys of historical buildings to prevent similar occurrences.

The five case studies in Guangzhou (see Figure 2) were chosen for their controversial impact on institutional choices, providing rich insights into real-world challenges and innovations in industrial heritage preservation. They illustrate how institutional conflicts and stakeholder dynamics play out, particularly during the land banking process, where heritage inscription is crucial for urban regeneration. In the early stages, heritage inscription might impede land banking leading to hasty demolitions, as seen in the No. 1 Rubber Factory case.

Figure 2. Five selected case studies in Guangzhou.

Former industrial sites transformed into creative industrial parks also faced threats from land banking and demolition, with cases like Redtory drawing public attention and advocacy. The No. 2 Cotton Spinning Factory highlights the complexities of heritage inscription during land banking. To enhance protection, Guangzhou introduced a "cultural heritage assessment" (Wenping, 文评 in Chinese) in 2013, integrating heritage identification with urban planning, as successfully applied in the Guangzhou Paper Factory. Inadequate protection and early demolitions prompted conservationist and NGO attention, exemplified by the Chengzhitang Warehouse case, which showcases bottom-up heritage identification and adaptive reuse.

Data collection spanned several years, incorporating fieldwork, interviews, and investigations. The authors conducted fieldwork from 2008 to 2012 on Redtory, studying No. 1 Rubber Factory from 2014 to 2018, and engaging in in-depth interviews in 2016. More than 20 interviews from 2012 to 2016 involved policymakers, planners, NGOs, media representatives, and residents, exploring the Three Olds Regeneration and Tui Er Jin San. Additional fieldwork from 2018 to 2022, supported by a German Research Foundation-funded project, involved semi-structured interviews with local officials, planners, and developers in Guangzhou.

3. Exogenous Variables and Context of Industrial Heritage List Inscription in Guangzhou

3.1. Physical and Material Conditions: Vacant Old Factories Boom and Land Banking

Since the 1990s, many old industrial sites have been converted into residential housing projects by real estate developers (Zhu & Wang, 2019). For instance, derelict factories along "Industrial Avenue" in western Haizhu District were redeveloped into large housing projects. Developers were highly active in this context under the Tui Er Jin San policy, which relocated 216 enterprises by 2012. The massive closure of state-owned factories freed a lot of land space and resources for urban redevelopment (Q. Yuan, 2016). However, such large-scale property-led redevelopment increased pressure on the public infrastructure in those areas. According to the Three Olds policies since 2009, owners can receive 60% of the land premium as compensation if they opt

for land banking by the government. This incentivized former factory owners to participate, resulting in an explosive growth of urban regeneration projects. Since 2008, creative industrial parks converted from old factories have developed at an unprecedented speed and scale, with 62 conversions by 2014. As the land value increases, land banking becomes increasingly attractive to original factory owners. Many owners prefer maximizing their benefits through land banking rather than remaining as creative industrial parks.

3.2. Community Attributes: Increasing Heritage Value Appreciation by the Civil Society

The proactive involvement of media and NGOs has been pivotal in shaping heritage agendas and influencing government actions. Media coverage of the demolition of industrial heritage often leads to public outcry and subsequent policy responses. Public participation and media coverage are crucial in shaping Guangzhou's urban heritage conservation system. In recent years, third-party organizations, community residents, and the general public have increasingly focused on preserving historical and cultural heritage, gathering public opinion, detecting damage to historical relics, and providing feedback on conservation plans (Q. Yuan & Cai, 2018).

The media acts as a public platform for expression and communication with government decision-makers (He, 2018). Through investigations of public events and social issues, the media captures public attention and stimulates discourse (Lin, 2022). This allows the government to gather suggestions from the public, subsequently influencing public decision-making processes and contributing to institutional development. In essence, the media bridges the public and the government, fostering dialogue that shapes the trajectory of urban heritage conservation.

The media focuses on conflicts and controversies, using in-depth coverage to bring issues to the forefront of public attention. Tensions between regeneration and heritage conservation aspects of the Three Olds policy frequently lead to public events prominently featured in the media. The contentious Enning Road regeneration project (2006–2021) demonstrates how media coverage of heritage preservation can transform events into public matters, influencing public opinion and government responses. Continuous media attention and public outcry led to more inclusive and collaborative planning methods. This case highlights the vital role of the media in urban heritage conservation, showing how coverage drives public engagement and influences policy decisions (He, 2018; Tan & Altrock, 2016; Tan et al., 2023). The government is compelled to address public concerns, align them with its agenda, and impact decision-making and institutional development (He, 2018; Tan & Altrock, 2016). This is facilitated by the relatively open nature of media and government departments in Guangzhou, which are rather receptive to public criticism and opinions.

3.3. Rules in Use: Industrial Heritage Inscription in Guangzhou

The conservation status of heritage in Guangzhou, categorized into "immovable cultural relics," "historic buildings," and "traditional buildings," is determined by factors such as value, state of conservation, adaptive reuse, conservation cost, and stakeholder preferences (Long et al., 2017). Stringent management, particularly for immovable cultural relics, can impact adaptive reuse. Industrial heritage, listed as immovable cultural relics in Guangzhou, enjoys better conservation due to strict legal protection, while listing as historic buildings leads to less optimistic preservation outcomes. Nevertheless, historic building status helps mitigate the risk of demolition.

Since 2010, the Guangzhou Urban Planning and Research Centre has surveyed over 100 industrial heritage sites, formulating criteria and identifying both protected and unlisted buildings. Mapping efforts delineated 45 comprehensive industrial heritage landscape areas. In March 2012, the Guangzhou Planning Bureau announced the city's first comprehensive survey of historical buildings and the establishment of an inscription list for historical buildings. This survey also assessed "approved but unbuilt" sites in Guangzhou, focusing on identifying unlisted buildings and structures deemed worthy of preservation.

In 2013, increased awareness of industrial heritage preservation led the Guangzhou government to emphasize evaluation and inscription during land banking through the aforementioned Wenping. It aimed to identify industrial buildings with preservation value at the early stage of land banking, preventing demolition and initiating subsequent conservation. In 2014, Guangzhou initiated a cultural heritage census, focusing on industrial heritage. The recommended list of industrial historic buildings is formed through various methods, with a lengthy process from identification to approval, sometimes leading to demolition before heritage listing.

4. Focal Action Situations

4.1. Resistance to Be Listed as Industrial Heritage: Demolition Before Heritage Inscription

Established in 1944, the Guangzhou No. 1 Rubber Factory was relocated to Conghua District in 2010, leaving its original Haizhu District site under the Guangzhou LDC's management, where it remained unused. The Guangzhou LDC operates under the Guangzhou Municipal Land and Housing Authority. Its key responsibilities include drafting, submitting, and executing compensation and resettlement plans for demolitions within land banking areas. Additionally, the LDC manages the tendering, auctioning, and sale of profit-oriented land, as well as the allocation of non-profit-oriented land within the land banking system. In October 2013, the *New Express* published an investigative report on the factory's abandonment, emphasizing its conservation value. The report stemmed from a nomination by the NGO Henandi Cultural Association, attracting public attention and prompting media coverage.

Shortly after the publication, the LDC quickly informed the local authorities about the demolition of the northern part of the factory due to concerns that media attention would subject it to public scrutiny and inclusion in the heritage assessment (interview with journalist on March 4, 2016). Simultaneously, the journalist contacted the Planning Bureau, leading to a letter urging pre-protection of cultural heritage clues within the site. The Planning Bureau's directive included suspending the sale of the site. Although the demolition was halted upon receiving the moratorium, most historic buildings, including those with potential value, had already been destroyed, leaving only part of the framework (see Figure 3).

The LDC's urgency was driven by its annual land banking task, aiming to meet land sale targets. Property rights of No. 1 Rubber Factory were held by the LDC, essentially making them government property rights. LDC chose to sell the land to fulfill annual targets:

> The property rights of the No. 1 Rubber Factory have already been given to the LDC, which is essentially the property rights of government departments. However, the LDC seemed reluctant to preserve them, viewing them as deteriorating buildings with limited value. Additionally, there is a mandate to sell the land. The LDC must sell the land to meet its annual land sale target. (interview on March 4, 2016)

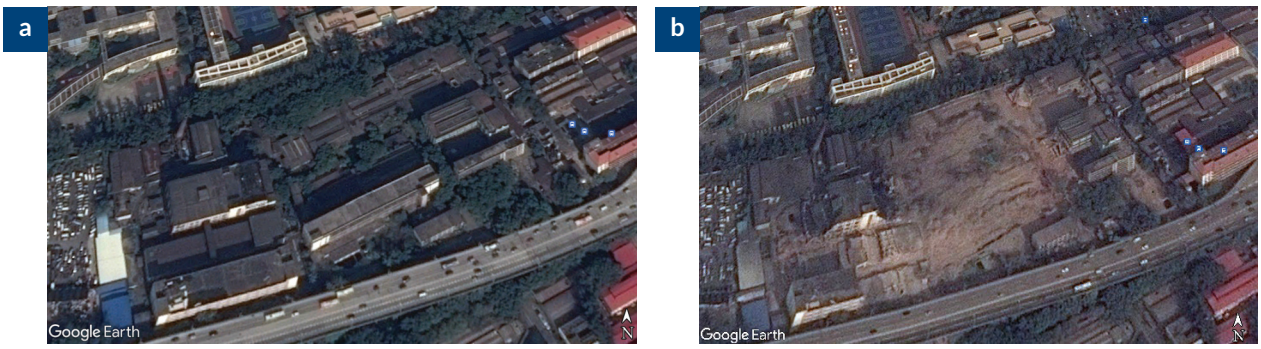


Figure 3. No. 1 Rubber Factory (a) before demolition in 2012 and (b) after demolition in 2013.

Journalists' networking with local planning authorities played a crucial role. Timely media updates on potential industrial heritage helped planning authorities avoid administrative risks. The relationship between journalists and planning authorities was described as mutually beneficial, with journalists acting as informants, aiding the authorities in fulfilling their preservation duties.

The Jinlingtai event has prompted Guangzhou to establish a pre-protection system for historical buildings, while the case of No. 1 Rubber Factory further emphasized the urgency of accelerating its development. In November 2013, the Measures for the Protection of Historic Buildings and Historic Landscape Areas in Guangzhou were introduced. They allow anyone finding a building with conservation value to report it, triggering immediate pre-protection. Buildings passing the evaluation are safeguarded from damage or demolition during the 12-month pre-protection period. This has contributed to preventing the destruction of other historic buildings in similar circumstances. Additionally, the regulation stipulates that any losses incurred due to pre-protection measures must be compensated according to the law.

In response to the No. 1 Rubber Factory case and to mitigate similar risks faced by historical buildings, Guangzhou launched its first list of historic buildings in 2014. Seven industrial heritage sites were included, demonstrating a commitment to preserving its historical and cultural assets.

4.2. Heritage Inscription Driven by the Demolition of Creative Industrial Parks

Despite the success and attractiveness of many creative industrial parks developed on the land of former state-owned enterprises in Guangzhou, they often face demolition due to land banking. The controversial demolition of Redtory, once a successful case of adaptive reuse, serves as a prominent example. After the Guangdong Canning Factory relocated in 2008, its original site was included in the government's land banking plan and temporarily managed by the original company. In 2009, Jimei Group Interior Design Co., Ltd. and Guangdong Canning Factory signed a 10-year lease agreement. By attracting artists and revitalizing the space, the old factory was successfully transformed into the widely recognized Redtory, a prominent creative industrial park. However, since its land had been transferred to the LDC for land banking, the planned International Financial City in the area (see Figure 4) led to Redtory's demolition controversy starting in 2013. Meng Hao, a member of the Guangdong Provincial Committee of the National Political Consultative Conference, strongly opposed the demolition and even moved into Redtory to protest. In 2014, he established a gallery, co-founded by Zhang Hong, a member of the Guangdong Provincial Committee of the Chinese People's Political Consultative Conference and a professor at the Guangzhou Academy of Fine

Figure 4. Sites of heritage clue within the scope of the planned International Financial Centre. Source: Guangzhou Municipal Government (2014).

Arts. In January 2015, the Guangzhou Municipal LDC sent a letter to the operator of Redtory, requesting them to expedite the clearance of tenants and the handover of land on the site. As a result of widespread criticism from scholars and the media, the government was under pressure from the public and reassessed the industrial heritage at the site, later adjusting its plan for complete demolition to a proposal of partial preservation and partial redevelopment (see Figure 5). Despite protests and calls for preservation, part of Redtory still faced demolition (see Figure 6). This highlights how creative industrial parks in Guangzhou are often treated as temporary land resources, which can lead to conflicts with efforts to preserve industrial heritage.

A planner from the Guangzhou Planning Institute said:

> Redtory was allowed to be used as a creative industrial park at the beginning when there was no pressure on local finances, but the land was found to be too valuable; the land banking started to work. But at that time, Redtory was already operating well and had become popular with the public, but perhaps some of the preliminary lease contracts were not written clearly, so when the LDC tried to acquire the land, they found a lot of resistance. (interview on November 25, 2021)

Another case called Guangzhou No. 2 Cotton Spinning Factory, transformed into a creative industrial park in 2012, also faced protests and conflicts with tenants when the owner sought to end the lease and redevelop the land into the International Financial Centre through land banking (see Figure 4). As the conflict between the landlord and the tenants escalated, the media reported about it and drew some attention from the public and professionals. In the factory, there was a former large textile workshop with jagged windows intact, published in the *Journal of Architecture* in 1963 and recommended by experts to be listed as historic building. After on-site research, experts concluded that it has a certain conservation value and expressed the need for in-depth research. The tenant hoped that the historic building status would help to ensure the tenancy, while

Figure 5. Plan of Redtory. Source: Guangzhou Municipal Government (2014).

Figure 6. The remaining part of Redtory in 2019.

the owner opposed heritage inscription, wishing to end the lease as soon as possible. In order to ease the conflict, the government adopted the vague expression "Guangzhou No. 2 Cotton Spinning Factory (part of the workshop)" when announcing the conservation list. The purpose of including the building in the industrial inscription without specifying its scope was to provide space for future planning negotiation (Long et al., 2017). The government's vague approach reflects the delicate balance between stakeholders in this case.

The demolition of creative industrial parks underscores their temporary nature. While controversial, it often sparks debates about industrial heritage protection. Yet, within the context of land banking and urban redevelopment, the development of creative industrial parks remains temporary and unstable.

4.3. Compulsory Industrial Heritage Assessment in the Detailed Regulatory Planning

Guangzhou, in its efforts to enhance the protection of industrial heritage within the context of land banking, has introduced the Wenping system. The primary goal is to prevent incidents like the No. 1 Rubber Factory demolition, integrating industrial heritage identification with land banking and urban regeneration planning. Guangzhou proposes incorporating requirements for industrial heritage assessment and conservation into land transfer management. This approach aims to address resistance and potential destruction during land transfer, making planning and design conditions for industrial heritage integral to overall land transfer processes.

An illustrative example is the Guangzhou Paper Factory. Following its relocation to Haizhu District in 2012, the original site was handed over to the LDC for land banking. The survey of the industrial heritage, initiated with the onset of land banking, ran parallel to the regeneration plan. The survey and planning teams collaborated closely to synchronize the construction of new buildings and conservation of industrial heritage in the planning scheme. To safeguard the highly valuable industrial heritage, adjustments were made to the original road network, preventing heritage destruction during later redevelopment. In addition to the initial four immovable cultural relics, the survey recommended recognizing nine more historic buildings and 11 traditional buildings. On September 25, 2014, the detailed regulatory plan for the area, along with the associated list of industrial heritage clues, received approval from the Planning Commission. In 2015, the revised detailed regulatory plan for the parcels was approved by the municipal government (see Figure 7). Industrial heritage was incorporated into the planning and design conditions of the 17 plots within the Guangzhou Paper Area as part of the regulatory plan.

While the Wenping system plays a crucial role in conserving unlisted industrial heritage, implementation challenges persist due to system imperfections, such as lax qualification requirements for preparation units and insufficient implementation of in-depth field research. The lack of qualification requirements, absence of independent regulatory mechanisms, and weak legal constraints pose significant hurdles. Planning and design institutes, often tied to project developers, primarily undertake cultural assessments, compromising independence (W. Yang & Wu, 2019). Unclear requirements contribute to simplified processes, and conflicts arise during plan adjustments, where Wenping clashes with redevelopment demands (He, 2022). The system, initially aimed at rescuing unlisted cultural heritage, has become essential for conserving unlisted industrial heritage—but improvements are needed for more effective implementation and conflict resolution.

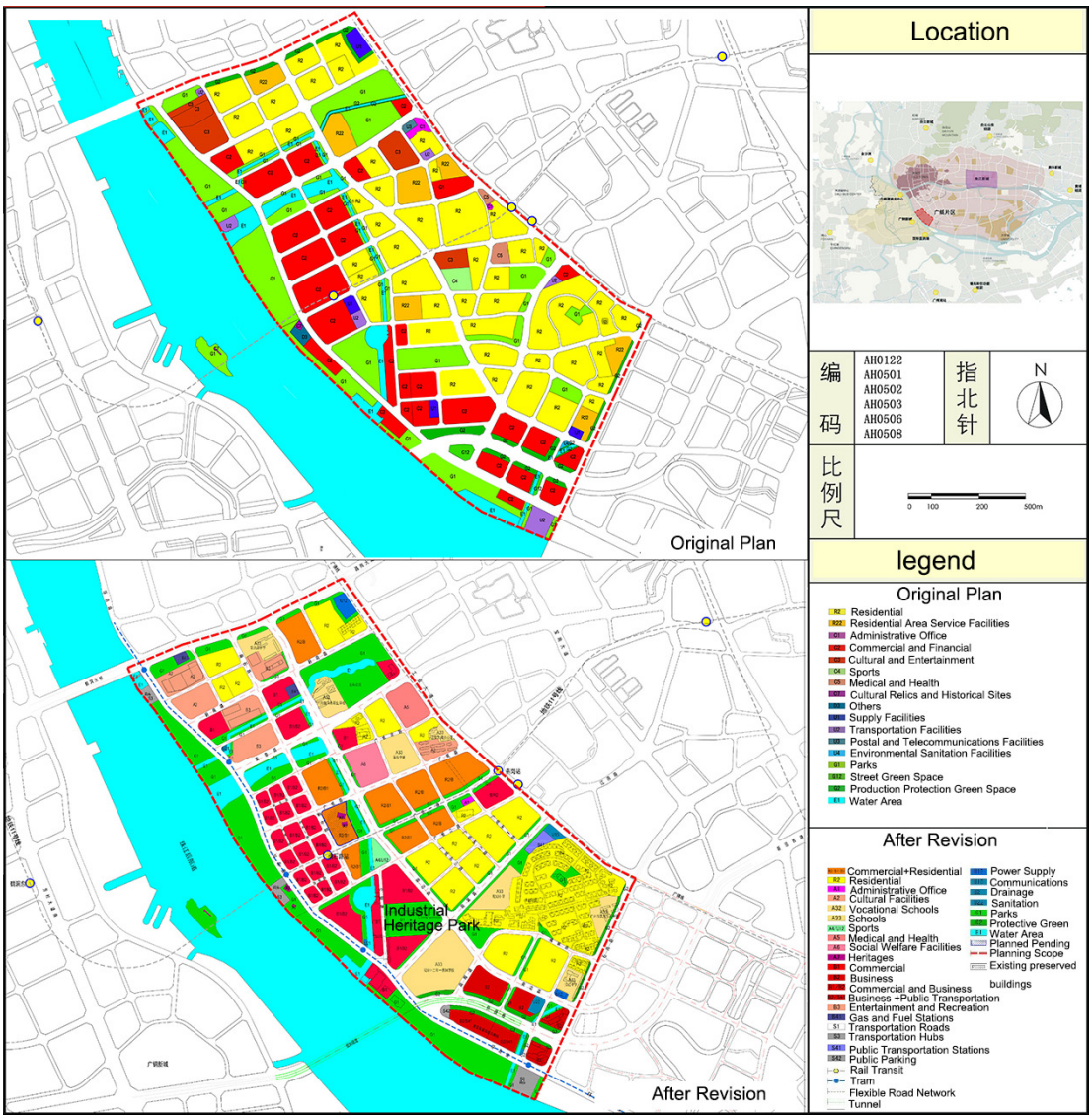


Figure 7. Revised regulatory planning of the Guangzhou Paper Factory area. Source: Guangzhou Municipal Government (2016).

4.4. Active Participation of NGOs in Informal Industrial Heritage Investigation

Due to the lack of effective channels for public participation and supervision, instances of "constructive destruction" of heritage have repeatedly occurred, especially in the context of land banking. This preservation challenge has, to a certain extent, eroded public trust in the government, leading to the emergence of civil society preservation actions. In Guangzhou, an increasing number of third-party organizations and NGOs, such as the Provincial Attractions (Shengcheng Fengwu) and the aforementioned Henandi Cultural Association, have directed their attention to the preservation of industrial heritage. These self-organized initiatives play a crucial role, especially after the historical significance of the Guangzhou No. 1 Rubber Factory, nominated and recommended by the Henandi Cultural Association, had left the group members shocked and deeply disappointed upon learning of its looting and demolition.

Figure 8. Chengzhitang Warehouse (a) before renovation and (b) after conversion into kindergarten. Source: Guangzhou Municipal Planning and Natural Resources Bureau (2023).

The Chengzhitang Warehouse in Haizhu District represents another industrial heritage site discovered by the Henandi Cultural Association. Built in the late Qing Dynasty and reconstructed during the Republican period, the warehouse was initially found in a state of disrepair in 2013 (see Figure 8a) by a heritage enthusiast and the Henandi Cultural Association. Subsequently, it was recognized as one of the industrial heritage sites of the Pearl River Back Channel through a declaration. In January 2014, the warehouse received designation as one of the first batches of historic buildings in Guangzhou. In 2014, Taikoo Xinlei Education Development Company leased the old warehouse and transformed it into Taikoo Xinlei Kindergarten (see Figure 8b). However, during the specific renovation and transformation process, the lack of legal support and regulations on planning, construction, and fire protection hindered the implementation of revitalization. Despite these challenges, the project was acknowledged as a pilot project and a good example of the conservation and utilization of historical buildings by the Ministry of Housing and Urban-Rural Development in 2018.

The insufficient protection of industrial heritage by local authorities and the destruction of historic buildings by market developers consistently draw the attention of cultural conservationists and NGOs. These advocates often turn to experts and the media to voice their concerns, monitor developments in industrial heritage conservation, and exert pressure on policymakers. A journalist from the heritage census section of the *New Express* stated:

> These volunteers provide us with clues. Usually, having been in this field for so long, you get to know certain individuals or NGOs, and they will provide some research they conducted or offer clues about which site is at risk. We then investigate; some information comes from individuals, some from NGOs. (interview on March 4, 2016)

5. Discussion

5.1. Action Logics: Resistance to Heritage Inscription by LDC and Former Owners, and Latest Trends

The regeneration of old factories on state-owned land in Guangzhou is predominantly achieved through land banking or self-regeneration. After regeneration, complete property rights allow independent property sale and mortgage. Government expropriation via land banking involves sharing land rent surplus with owners.

Self-regeneration by state-owned enterprises enables original owners to profit post-transfer to the government, occurring after the free transfer of at least 15% of the land and payment of a land premium. Since the Three Olds program, land banking for residential use has been popular and lucrative, often preferred over self-redevelopment into commercial or industrial use. Factories converted to residential housing are expropriated via land banking, with former state-owned enterprises receiving 60% of the land premium under the 2009 policy. Though this compensation was reduced to 40% in 2015, land banking remains a favorable option for former owners.

In the 1990s, the tax-sharing system led local governments to finance themselves through land banking for development. LDCs serve as the governments' land banks, acquiring funds for urban infrastructure and industrial park development. The hosting of the Asian Games elevated Guangzhou's international profile but burdened the city with significant debt, increasing dependence on land banking for revenue. The LDC formulates annual land transfer plans to control prices, facing difficulties and pressure in land acquisition, highlighting the conflict between cultural heritage conservation and land banking.

The LDC's swift decision to demolish the No.1 Rubber Factory post-media coverage was driven by the fear that heritage designation would impede development and land banking. To avoid a financial loss, the state opted to demolish the factory for land sale as soon as possible. The head of the Guangzhou Planning and Research Centre stated: "In the past, many of these very valuable appellations were reluctant to be listed as heritage areas because declaring them would have meant restricting their operation, conversion, trading, restoration, and use" (Lv, 2019).

Adding insight from interviews, a planner from the Guangzhou Urban Planning and Research Centre mentioned:

> We worked on a project from the Guangzhou Shipyard, a factory rapidly demolished by its owners during land banking. The warehouse was valuable due to its military industry origins. In fact, many of the buildings were of quite good quality. Unfortunately, it was the manufacturers themselves who abandoned and demolished them. (interview on November 6, 2019)

Moreover, resistance to becoming listed heritage from the property owner has been also noted by the media. For example, a journalist highlighted:

> I have interviewed many owners of historic buildings, and many of them were unwilling to have their properties protected. They told me privately but would not approach the newspaper to report about their properties as historic buildings, and they also do not want them to be inscribed as historic buildings because, in this case, they cannot be demolished. Mostly they bought the properties just to demolish and rebuild. (interview on March 4, 2016)

The contraction of the real estate market since 2021 has reduced the demand for new construction, creating opportunities to focus on the adaptive reuse of industrial heritage sites. The slowdown in land banking has shifted actors' behavior and priorities regarding industrial heritage inscription and preservation. Local governments' reduced reliance on land sales revenue now allows prioritization of long-term cultural and historical value over short-term economic gains, leading to more balanced urban planning and integrated industrial heritage preservation.

Land banking has proven to be a crucial strategy for revitalizing declining urban areas, particularly in older industrial cities (Silva, 2011). However, this approach can threaten industrial heritage preservation, as economic development pressures lead to the destruction of valuable former industrial sites (Q. Yuan, 2016; H. Zhang et al., 2023). Property owners' reluctance to designate sites as heritage areas exacerbates this issue, favoring financial gains from redevelopment over preservation (He, 2018). Balancing the economic benefits of land banking with the need to preserve industrial heritage is crucial for maintaining the cultural and historical fabric of cities amid urbanization. Adaptive reuse, which repurposes old industrial buildings to generate economic benefits while preserving their historical features, offers a viable and essential solution (Niu et al., 2018). In recent years, as the industrial heritage system in China has gained support and become more refined, resistance from LDCs and factory owners has eased, leading to increased recognition of the value of industrial heritage and support for preservation efforts.

5.2. Interaction Pattern: Bottom-Up Investigation Based on Social Network

In the No. 1 Rubber Factory case, the *New Express* newspaper actively engaged in heritage surveys, prompting conservation actions and mobilizing various stakeholders. Since July 2012, its *Guangzhou Historical Building Survey—Civil Edition* encouraged public and NGO nominations, resulting in 119 nominations out of 721 historic buildings in Guangzhou and influencing government support (He, 2018). These recommendations were submitted to government survey teams, and among the first and second batches of 478 historical buildings, 95 were nominated by the *New Express*.

The demolition of the No. 1 Rubber Factory followed media coverage within this civic survey framework, illustrating direct media involvement in heritage preservation. In January 2014, the *New Express* published an investigative report revealing the demolition of many old factories, including eight sites listed in the *Third National Cultural Relics Census*. This report prompted the planning department to investigate and review all Three Olds redevelopment sites, placing those identified by experts under preliminary protection.

Other outlets like *Guangzhou Daily* and *Nanfang Daily* adopted similar initiatives, expanding public engagement. *Nanfang Daily* and the Provincial Bureau of Cultural Heritage launched an online platform, People's Direct Voice for Guangdong Cultural Preservation, collecting public clues about endangered unlisted heritage. A total of 134 sites in the first and second batches of historical buildings were recommended by news media. However, media professionals often face pressure from stakeholders when reporting on heritage issues.

Linking this with the first case, the journalist from *New Express* highlighted their early attention to industrial heritage, initiating an informal census in 2012 with citizen-nominated potential heritage sites. Collaborating with an NGO, they addressed the disappearance of old factories, emphasizing preservation. Urgency arose with Guangzhou's Tui Er Jin San announcement, prompting a citywide survey of industrial heritage. Their efforts prompted the government to increase listed industrial heritages and initiate evaluations and investigations during the Three Olds regeneration. This proactive stance by the media, predating incidents like Jinlingtai, showcases their pivotal role in shaping heritage preservation agendas and spurring governmental action.

The cases of Guangzhou show how media and NGO involvement can prompt governmental action and policy shifts, aligning with global discourses on participatory governance and community-driven conservation

(Gibson & Pendlebury, 2009; Kalman, 2014). It underscores how bottom-up initiatives can complement top-down approaches, creating a more inclusive and effective governance framework for heritage management, and ensuring the sustainability and resilience of cultural clusters.

5.3. Challenges of Rules in Use: Operational Inefficiencies

The implementation of heritage preservation faces challenges due to fragmented responsibilities and unclear position rules. Research on heritage management has shown that such fragmentation often leads to operational inefficiencies and undermines effective conservation efforts (Pendlebury, 2009). Administrative departments like cultural heritage authorities oversee immovable cultural relics, while planning departments handle the census, declaration, and management of historic buildings, leading to inefficiencies and redundant surveys. The compartmentalized management fosters a tendency to evade responsibilities during the declaration and identification process, leading to operational inefficiencies in assessing heritage status. Simultaneously, the district head may prioritize heritage preservation, but the subordinate department may not share the same priorities. Fragmented responsibilities between administrative departments and planning authorities also lead to inefficiencies and conflicts in heritage preservation efforts. Clear delineation of responsibilities and transparent decision-making processes can mitigate conflicts and enhance heritage conservation stability.

Furthermore, ambiguous roles between planning authorities and street offices further hamper collaboration in urban heritage preservation. Historic buildings managed by street offices often face neglect due to hesitancy in oversight, while the Planning Bureau cannot intervene effectively due to their equal status. This linked mechanism complicates responsibilities, making it easy for issues to go unnoticed. A journalist noted: "The Planning Bureau's responsibility for planning management and the district's role in site protection often clash. Timely notifications lead to action by the Planning Bureau, but districts resist being reported as they bear primary responsibility" (interview on March 4, 2016). Clear responsibilities and transparent decision-making processes can mitigate conflicts and enhance heritage conservation stability. This issue resonates with broader debates in heritage management literature, which emphasize the need for integrated governance frameworks to overcome institutional silos and enhance collaborative efforts (Smith, 2006).

Preservation challenges extend to industrial heritage not officially inscribed. The Guangzhou Urban Planning and Research Centre faces difficulties in protecting surveyed industrial heritage lacking legal status. A staff member involved in the research project at the Guangzhou Urban Planning and Research Centre, which has been working on surveying and registering industrial heritage since 2010, stated: "These heritages, though surveyed and included in the database of potential industrial heritage, are excluded from the historic city protection system. Colleagues provide advice on planning, but without legal backing, ensuring their preservation remains challenging" (interview on November 6, 2019). This challenge is reflective of broader issues in heritage conservation where legal and policy frameworks often lag behind the needs of heritage sites, particularly those associated with industrial and modern heritage (Gibson & Pendlebury, 2009). By integrating industrial heritage into planning and design conditions, future efforts can enhance legal support and improve preservation outcomes, contributing to more sustainable and inclusive urban development.

5.4. Outcomes of Nested Action Situation: Conflict-Driven Institutional Innovation

Between 2012 and 2016, interconnected case studies formed a complex network of focal action situations in Guangzhou. The controversial demolitions of Jinlingtai and Miaogaotai in 2013 marked a turning point, prompting official attention to unlisted heritage preservation and accelerating the cultural heritage plan. The demolition of the No. 1 Rubber Factory further highlighted the need for a better pre-preservation system, leading to the issuance of the Measures for the Protection of Historic Buildings and Historic Landscape Areas in Guangzhou to prevent similar destruction.

The No. 1 Rubber Factory case also sparked institutional innovation with the Wenping system, influencing subsequent cases like the Guangzhou Paper Factory, where heritage surveys were included early in the land banking process. The Redtory case stirred public debate on balancing heritage preservation with land redevelopment, revealing the instability of adaptive reuse and highlighting the need for more supportive policies. The Redtory and No. 2 Cotton Spinning Factory cases underscored the necessity for stable policies to support adaptive reuse, ensuring the long-term sustainability of cultural clusters.

In response, Guangzhou implemented several institutional designs, including the 2016 Regulations on the Protection of the Historical and Cultural City of Guangzhou, encouraging diverse uses based on historic building characteristics. The Chengzhitang Warehouse case exemplified the need for better regulations, prompting policymakers' attention. Further support for adaptive reuse came in 2018 when Guangzhou was included in the first batch of 10 pilot cities in China for the conservation and utilization of historic buildings. Subsequent regulations, such as the 2019 Measures on Supervision, Management, and Subsidy for the Renovation of Historic Buildings, and the 2020 Measures on Promoting Rational Utilization of Historic Buildings, strengthened legal frameworks. In 2022, the Guangzhou Municipal Bureau of Industry and Information Technology issued the Measures for the Management of Guangzhou's Industrial Heritage, the first city-level regulatory document on industrial heritage in Guangdong Province. These policies collectively facilitate the legal adaptive use of industrial heritage.

The case studies from Guangzhou highlight the complexities of preserving industrial heritage in rapidly urbanizing contexts. This aligns with broader heritage governance literature, emphasizing adaptive policies and multi-stakeholder engagement for sustainable heritage sites (Kalman, 2014; Smith, 2006). Meanwhile, they also underscore the need for longitudinal research to assess the long-term impacts of policy innovations and stakeholder interactions, enhancing understanding of effective and sustainable heritage conservation measures over time, and contributing to ongoing debates on best practices in industrial heritage preservation.

6. Conclusions

The pivotal role of media and NGOs in shaping heritage agendas and influencing government actions highlights the importance of civil society in heritage conservation—an area requiring more attention in existing research. The introduction of a pre-protection system for historic buildings in Guangzhou is a novel contribution, allowing for immediate temporary protection of buildings with potential heritage value, thus preventing hasty demolitions and ensuring comprehensive heritage assessments. Additionally, the adaptive reuse of industrial heritage, despite its temporary nature, can influence heritage preservation debates, underscoring the need for mature policies to support stable and sustainable adaptive reuse practices.

By analyzing interconnected action situations, this research contributes to ongoing debates in industrial heritage conservation by revealing how conflicts and controversies can drive institutional innovation and policy reform, and demonstrating the dynamic and iterative nature of policy development in heritage preservation and land banking. Driven by conflicts in the practice of industrial heritage inscription and preservation, Guangzhou has made considerable strides in heritage conservation and adaptive reuse. Governance efforts matured significantly since 2013, with advancements in policy, industrial heritage investigations, and increased systematic industrial heritage inscription. Clear and enforceable policies, thorough early heritage assessments, and stakeholder collaboration are identified as crucial for successful heritage conservation. These elements ensure a more predictable and stable environment for heritage conservation, help identify and protect valuable heritage sites before redevelopment pressures arise, and integrate heritage preservation into broader urban development plans.

In the early stages, when the industrial heritage preservation system was underdeveloped, there was a rush to demolish industrial heritage during land banking due to immature pre-protection policies. To strengthen industrial heritage protection, Guangzhou implemented the Wenping system to avoid incidents like the demolition of the No. 1 Rubber Factory. Despite its positive intent, practical issues such as lax qualification requirements for preparation units, preliminary assessments, and limited in-depth field research persist. Additionally, Wenping often curtails developable land, affecting development project intensity and leading to conflicts with redevelopment demands.

By examining the specific challenges faced in Guangzhou, this study provided reflections that illustrate the broader issues of institutional fragmentation and regulatory ambiguities that are common in many parts of the world. It highlights the importance of clear and transparent decision-making processes, essential for mitigating conflicts and ensuring the stability of heritage conservation efforts.

In conclusion, empirical studies guided by the IAD framework highlight the importance of a multifaceted approach to industrial heritage preservation, involving clear policies, stakeholder collaboration, financial incentives, and public engagement, crucial for creating a sustainable and resilient framework for long-term preservation and adaptive reuse of industrial heritage sites. Furthermore, identification and analysis of resistance from LDCs and former factory owners against heritage inscription due to potential financial losses are critical for understanding the challenges in heritage preservation. Further investigating conflicts in industrial heritage inscription during land banking and more longitudinal studies on respective regulations and specific projects would help to enhance ongoing advancements in conservation and governance for adaptive reuse.

Acknowledgments

The authors would like to thank Dr. Anthony Alcock for his generous offer of proofreading, as well as the three anonymous reviewers and the editors for their invaluable comments on the article.

Funding

This work was supported by the German Research Foundation-funded project Made in China? Konzepte der Stadtteilentwicklung auf Industriekonversionsflächen in chinesischen Küstenmetropolen, the Guangdong Basic and Applied Basic Research Foundation (No. 2021A1515110276), the Guangzhou Philosophy and Social Sciences Foundation (No. 2020GZYB54), and the Guangdong Philosophy and Social Sciences Foundation (No. GD19YYS07).

Conflict of Interests

The authors declare no conflict of interests.

Supplementary Material

Supplementary material for this article is available online in the format provided by the authors (unedited).

References

Cen, D., Wu, J., Huang, H., & Zhou, M. (2017). Jiyu zhidu sheji de Guangzhoushi jiu changfang "wei gengxin" tansuo—yi guojia danwei chuangyiyuan wei li. *Shanghai chengshi guihua*, *5*, 45–50.

Currier, J. (2008). Art and power in the new China: An exploration of Beijing's 798 District and its implications for contemporary urbanism. *Town Planning Review*, *79*(2/3), 237–265.

Gibson, L., & Pendlebury, J. (2009). *Valuing historic environments*. Ashgate.

Guangzhou Municipal Government. (2014). *Regulatory detailed plan for phase II of Guangzhou international financial city*.

Guangzhou Municipal Government. (2016). *Announcement of the planning deepening and regulatory plan revision of the Guangzhou Paper Factory Area in Haizhu District* (No. 28).

Guangzhou Municipal Planning and Natural Resources Bureau. (2023). *Lao cang huan xinsheng: Guangzhou shi lishi jianzhu Chengzhitang huocang jiuzhi huohua liyong*. Guangdong Provincial Department of Housing and Urban-Rural Development. https://zfcxjst.gd.gov.cn/zwzt/pzts/bhcc/gzjl/content/post_4197859.html

He, S. (2017). The creative spatio-temporal fix: Creative and cultural industries development in Shanghai, China. *Geoforum*, *106*, 310–319. https://doi.org/10.1016/j.geoforum.2017.07.017

He, S. (2018). Xinwen Meiti dui Guangzhou chengshi yichan baohu zhidu jiangou de yingxiang—yi Xinkuaibao wei li. *Jianzhu yichan*, *1*, 83–88. https://doi.org/10.3969/j.issn.1672-9080.2018.05.050

He, S. (2022). Guangzhou chengshi gengxin zhong "wenping" gongzuo de shijian yu sikao. *Fangdichan shijie*, *20*, 18–20.

Kalman, H. (2014). *Heritage planning: Principles and process*. Routledge.

Liang, S., & Wang, W. (2020). Cultural and creative industries and urban (re)development in China. *Journal of Planning Literature*, *35*(1), 54–70.

Lin, Y. (2022). Social media for collaborative planning: A typology of support functions and challenges. *Cities*, *125*, Article 103641. https://doi.org/10.1016/j.cities.2022.103641

Liu, X. (2017). "Contested policy mobility": The creative transformation and temporary use of brownfields in Redtory, Guangzhou. *Urban Geography*, *38*(6), 884–902. https://doi.org/10.1080/02723638.2016.1178882

Long, X., Liu, H., & Wang, X. (2017). Cong Jiazhi pinggu dao shenfen rending—Guangzhou gongye yichan baohu guocheng zhong de liyi biaoda yu xieshang. *Jianzhu yichan*, *01*, 78–86.

Lv. C. (2019, October 29). *Protection and reuse of Guangzhou's modern industrial heritage* [Paper presentation]. 1st International Symposium on People-Oriented Urban Design, Nanjing, China.

Maags, C., & Svensson, M. (2018). *Chinese heritage in the making: Experiences, negotiations and contestations*. Amsterdam University Press.

Nakano, R., & Zhu, Y. (2020). Heritage as soft power: Japan and China in international politics. *International Journal of Cultural Policy*, *26*(7), 869–881.

Niu, S., Lau, S. S. Y., Shen, Z., & Lau, S. S. Y. (2018). Sustainability issues in the industrial heritage adaptive reuse: Rethinking culture-led urban regeneration through Chinese case studies. *Journal of Housing and the Built Environment*, *33*, 501–518.

Oevermann, H. (2015). *Industrial heritage management in the context of urban planning*. Zenodo. http://doi.org/10.5281/zenodo.4087399

Oevermann, H., & Mieg, H. A. (2021). Urban development and world cultural heritage: Two perspectives of planning practice dealing with industrial heritage. *Planning Practice & Research*, *36*(4), 430–441.

Ostrom, E. (2010a). Analyzing collective action. *Agricultural Economics*, *41*(S1), 155–166. https://doi.org/10.1111/j.1574-0862.2010.00497.x

Ostrom, E. (2010b). Beyond markets and states: Polycentric governance of complex economic systems. *American Economic Review*, *100*(3), 641–672.

Ostrom, E., Gardner, R., & Walker, J. (1994). *Rules, games, and common-pool resources*. University of Michigan Press.

Pendlebury, J. (2009). *Conservation in the age of consensus*. Routledge.

Qian, Z. (2023). Heritage conservation as a territorialised urban strategy: Conservative reuse of socialist industrial heritage in China. *International Journal of Heritage Studies*, *29*(1/2), 63–80.

Silva, D. A. (2011). Land banking as a tool for the economic redevelopment of older industrial cities. *Drexel Law Review*, *3*(2), 607–641

Smith, L. (2006). *Uses of heritage*. Routledge.

Tan, X., & Altrock, U. (2016). Struggling for an adaptive strategy? Discourse analysis of urban regeneration processes—A case study of Enning Road in Guangzhou City. *Habitat International*, *56*, 245–257.

Tan, X., Altrock, U., & Liang, X. (2023). Towards collaborative planning: Deliberative knowledge utilization and conflict resolution in urban regeneration in South China. *disP – The Planning Review*, *59*(4), 31–49, https://doi.org/10.1080/02513625.2023.2323820

Tan, X., Altrock, U., Wang, J., & Yue, J. (2022). Understanding experimental governance of urban regeneration from the perspective of social learning—The case of Kingway Brewery in Shenzhen. *Urban Research & Practice*, *17*(2), 195–217. https://doi.org/10.1080/17535069.2022.2158042

Tunbridge, J. E., & Ashworth, G. J. (1996). *Dissonant heritage: The management of the past as a resource in conflict*. Wiley.

Wu, F. (2022). Land financialisation and the financing of urban development in China. *Land Use Policy*, *112*, Article 104412. https://doi.org/10.1016/j.landusepol.2019.104412

Yang, C., & Qian, Z. (2023). "Art district without artists": Urban redevelopment through industrial heritage renovation and the gentrification of industrial neighborhoods in China. *Urban Geography*, *45*(6), 1006–1028. https://doi.org/10.1080/02723638.2023.2246846

Yang, W., & Wu, J. (2019). "Wenping" zhidu de Guangzhou shijian yu fansi. *Jianzhu yichan*, *2019*(2), 124–130.

Yuan, Q. (2016). Gongcang, tudi caizheng, chuangyiyuan yu changsuo yingzao. *Beijing guihua jianshe*, *3*, 159–161.

Yuan, Q., & Cai, T. (2018). Yi shehui canyu wanshan lishi wenhua yichan baohu tixi—laizi Guangdong de shijian. *Chengshi guihua*, *1*, 92–100.

Yuan, V. Y. (2020). *The economic logic of Chinese cultural-creative industries parks*. Palgrave Macmillan.

Zhang, H., Wang, F., Guo, F., Cai, J., & Dong, J. (2023). Urban built heritage protection and realistic dilemmas: The development process, protection system, and critical thinking of historic districts in Dalian. *Built Heritage*, *7*, Article 25.

Zhang, J., Cenci, J., Becue, V., Koutra, S., & Liao, C. (2022). Stewardship of industrial heritage protection in typical Western European and Chinese regions: Values and dilemmas. *Land*, *11*(6), Article 772. https://doi.org/10.3390/land11060772

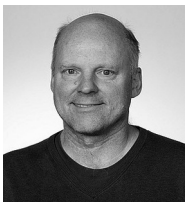
Zheng, J. (2011). 'Creative industry clusters' and the 'entrepreneurial city' of Shanghai. *Urban Studies*, *48*(16), 3561–3582.

Zhu, Y., & Maags, C. (2020). *Heritage politics in China: The power of the past*. Routledge.

Zhu, Y., & Wang, T. (2019). Shengyu quan shijiao xia de chengshi gengxin zhengce bianqian yu shishi—yi Guangzhou weili. *Jingji dili*, *39*(1), 56–63(+81).

About the Authors

Xiaohong Tan (Dr.-Ing.) is an urban researcher with a focus on urban regeneration, urban governance, public participation, social learning, and informal housing in China. Her current research explores social innovation, urban gardening, artistic interventions, and heritage preservation within the Chinese context.



Uwe Altrock (Dr.-Ing.) is a professor of urban regeneration and planning theory at the Institute for Urban Development of the School of Architecture, Urban and Landscape Planning at the University of Kassel. His research interests are urban regeneration, urban governance, planning theory, megacities, and suburban development. Currently, he is the head of the German Research Foundation-funded research group FOR2425 Urban Expansion in Times of Re-Urbanization—New Suburbanism?

URBAN PLANNING
ISSN: 2183-7635

Urban Planning is an international, peer-reviewed open access journal of urban studies aimed at advancing understandings and ideas of humankind's habitats — villages, towns, cities, megacities — in order to promote progress and quality of life.

The journal is founded on the premise that qualitative linked to quantitative approaches provide mutually sympathetic outcomes for adding knowledge to the complex and polyhedral system par antonomasia as the city is.

cogitatio

www.cogitatiopress.com/urbanplanning