

Revival of Urban Industrial Heritage Based on Spatial Reproduction Perspective—A Case Study of Jingdezhen Taoxichuan Cultural and Creative Arts Neighborhood

Jiayan Xu

Macau University of Science and Technology, Macau, 999078, China

Keywords: Spatial reproduction; industrial heritage; Jingdezhen; Taoxichuan

Abstract: This paper examines the spatial transformation of Taoxichuan, a traditional ceramics industrial area, based on the theory of spatial reproduction. It analyzes how the area has been revitalized through functional re-engineering, preservation of original architectural features, and the integration of culture and commerce. By introducing cultural industries and online virtual technology, Taoxichuan has been transformed into a dynamic space for tourism, culture, and webcasting. This paper summarizes the successful experience of converting traditional urban industrial heritage into a part of modern urban space, providing an example of sustainable development with reference value for future planning and management of other old industrial cities.

1. Introduction

1.1 Research Background

With the acceleration of China's urbanization and the transformation and adjustment of its industrial structure, many industrial buildings—once symbols of the city's industrial civilization—are increasingly facing the fate of abandonment, renewal, or demolition.^[1] These industrial relics, however, are valuable material and spiritual assets that reflect the nation's industrialization process, making them crucial for fostering cultural confidence and building a strong cultural identity.^[2] Furthermore, Industrial heritage, which encompasses both tangible and intangible cultural elements left behind by industrialization, has irreplaceable cultural value. It captures the history of industrial development within a specific period and records social transformation and technological progress.^[3]

To better protect, utilize, and pass on the city's industrial heritage, the National Development and Reform Commission (NDRC) and five other ministries jointly proposed in 2020 to "use the protection and utilization of industrial heritage as a starting point to promote urban renewal and transformation and to explore new avenues for the transformation and development of old industrial cities."^[4] In 2021, industrial heritage was officially included in the urban and rural Historical and Cultural Protection and Inheritance System, becoming an integral part of the all-round display of China's historical process across different periods.^[5] In 2023, the National Industrial Heritage Management Measures issued by the Ministry of Industry and Information emphasized that industrial heritage utilization should maintain its overall style and cultural inheritance while supporting the construction of

industrial museums to enhance functions such as collection, protection, research, exhibition, and education.^[6]

The protection and renewal of industrial heritage are key to revitalizing a city's legacy. In recent years, vibrant practices in the creative transformation and innovative development of industrial heritage have gained attention. Abandoned factories have quietly evolved into cultural and creative parks, science and technology parks, and other emerging industries. These large factories, with their unique industrial aesthetic, attract photography and art enthusiasts. Industrial buildings have been repurposed into international design week venues, fashion week showrooms, and locations for cultural activities, product launches, and film shoots. Some industrial heritage sites have also been transformed into urban recreational parks and open spaces, meeting daily recreational and entertainment needs, thus reviving their vitality.^[7] Amid this trend, China has numerous urban industrial heritage sites, each with diverse forms and rich history. Taoxichuan Cultural and Creative District in Jingdezhen is one particularly representative example. This paper focuses on the spatial reproduction of Taoxichuan as an industrial cultural heritage, analyzing its transformation process and significance.

1.2 Research Review

In classical Western social theory, space is often treated as a secondary consideration to time. However, the theory of "production of space," first proposed by Lefebvre in the 1970s in his book *The Production of Space*, suggests that space is produced, and that social space is a product of society.^[8] This theoretical framework, known as the "triadic dialectic of space," divides the production of space into three important dimensions: spatial practice, spatial representation, and representational space.^[9] At the core of this theory is the idea that changes in physical space reflect complex social development processes and shifts in social power, social relations, and everyday life.

After the theory of spatial production was introduced in China, it was applied in three main research directions: urban, rural, and virtual spaces. First of all, urban spatial production research primarily focuses on the spatial generation and reconstruction of administrative areas and communities, examining the formation of community units by government departments and other administrative bodies, and the reshaping of space by these entities. Research also explores the figurative production of urban cultural space, often using "spatial practice" as a case study to analyze the optimization of physical space, the definition and discovery of cultural symbols, and the creation of institutional space.^[10]

The Lower Tagil Charter defines industrial heritage as the cultural remains of industry that possess historical, technical, social, architectural, or scientific value.^[11] These remains include buildings, structures, machinery, workshops, factories, mines, warehouses, and more, as well as social activity spaces linked to industry, such as residences and educational establishments.^[12] According to urban evolution theory, during the transition to the post-industrial era, many traditional manufacturing plants and their facilities have been abandoned. However, many industrial-era remnants, such as chimneys and old factory buildings, have been preserved due to favorable location conditions and rich historical backgrounds, providing new carriers for the development of creative industries.^[13]

Researchers like Zhang Jingxiang have studied the effects, mechanisms, and governance of urban spatial reproduction. Huang Jianfeng proposed a new paradigm for spatial research in tourist destinations, arguing that space is constantly being constructed, deconstructed, and reconstructed under various forces, especially in the context of social transformation and urban-rural development.^[14] Ye Chao analyzed the process and power dynamics of urban spatial production in China, identifying it as a promising research direction;^[15] Yuan Yue conducted a study on the re-creation of cultural space in Taoxichuan, Jingdezhen, by exploring its intrinsic mechanism.^[16] This

paper interprets the cultural space reproduction of Taoxichuan through the lens of spatial production theory, exploring its value for urban planning, governance, and the dissemination of Jingdezhen's ceramic culture.

1.3 Research Objects and Methodology

This paper focuses on the Taoxichuan Cultural and Creative Neighborhood in Jingdezhen, allowing us to trace the historical trajectory of Jingdezhen, known as the "Porcelain Capital of a Thousand Years." Jingdezhen has a history of over 2,000 years in pottery making, more than 1,000 years of official kiln history, and over 600 years of imperial kiln history. It is one of the earliest porcelain production areas in China. As one of the first national historical and cultural cities, Jingdezhen has preserved the most comprehensive porcelain industry and cultural relics system, forming a unique porcelain style and rhythm.^[17]

In July 2019, the State Council officially approved the 'Jingdezhen National Ceramic Cultural Heritage Innovation Pilot Area Implementation Plan', marking a period of both opportunities and challenges for Jingdezhen.^[18] Since 2021, when it was selected as one of the first national pilot cities for urban renewal, Jingdezhen has implemented bottom-line requirements for urban renewal, balancing protection with development, enhancing the creative transformation of ceramic culture, and promoting the protection and renewal of old urban areas, factories, and historic districts. This process has yielded remarkable achievements and rich cultural deposits. Taoxichuan is a representative case of this transformation. Originally an old factory in a third-tier small town, after three years of careful construction, it was transformed from a 'ruin' into Taoxichuan - CHINA Square, an International Ceramic Culture Industrial Park. Therefore, this paper examines the successful case of urban industrial heritage revitalization in Taoxichuan, Jingdezhen, from the perspective of spatial production grounded theory.

Taoxichuan, located on Zhushan Avenue in Zhushan District, Jingdezhen, was formerly known as Cosmos Porcelain Factory, founded in 1958. As one of the top ten porcelain factories in Jingdezhen, Cosmos Porcelain Factory has the first mechanized porcelain production line in Jingdezhen. At its peak (mid-1980s to early 1990s), its annual ceramic output of ceramics reached ten million pieces, earning significant export revenue from Europe, Southeast Asia, and more than ten countries. It was called "China's Royal Porcelain Factory in Jingdezhen" by foreign businessmen.^[19] However, since the mid-1990s, the state-owned Cosmic Porcelain Factory has been struggled under the planned economy, leading to overcapacity and a gradual loss of market competitiveness. By 2004, the company had gone bankrupt, leaving many plants idle, kilns closed, factory buildings in disrepair, and the surrounding environment severely polluted, affecting the city's image.^[20]

Faced with resource waste, pollution, a lack of culture, and industrial decline, the city Jingdezhen, with government support, attempted to renew and renovate the former industrial areas to revive the lost space.^[21]

Starting in 2012, Jingdezhen Taoyi Culture Development Co., Ltd., a subsidiary of Jiangxi Ceramics Industry Company, undertook the overall planning and construction with a total investment of 6.5 billion yuan. They engaged renowned institutions both domestically and internationally to renovate the site and create a multifunctional creative park that combines culture, education, shopping, leisure, and entertainment.^[22]

This paper aims to reveal the significance and value that Taoxichuan, as an urban industrial heritage, brings to urban management, planning, and the dissemination of Jingdezhen's ceramic culture. To fulfil this research topic, this study mainly primarily uses the literature review method and case study analysis. The literature research method, also known as intelligence research, data research or literature survey, involves literature searching, collecting, identifying, collating, and analyzing to

form factual scientific understanding of the method. Literature research method to solve the main problem is how to select the information applicable to the subject in the vast amount of literature and make appropriate analysis of these data to summarize the relevant issues. It is one of the most widely used research methods in history, philosophy, and sociology.^[23] In this paper, the relevant literature includes the results of academic research on Taoxichuan in Jingdezhen, which has also taken shape, the relevant discussions on the theory of spatial reproduction, as well as the official documents of Taoxichuan, local records and network information.

The case study method, another commonly used social science research tool, involves the in-depth study of representative cases to gain a comprehensive understanding. It selects representative events as the object of analysis and research, collects relevant information comprehensively, and systematically analyzes it.^[24] This paper introduces Taoxichuan as a representative case contributing to the revival of urban industrial heritage. Representative projects include the Taoxichuan Ceramic Art Avenue, Porcelain Art Museum, and Taoxichuan China Square. Additionally, the research incorporates fieldwork, literature, and data collection for comprehensive analysis and concludes with a review of the development process.

2. Taoxichuan in Spatial Perspective

Taoxichuan has undergone a significant transformation by preserving and restoring 22 old factories and industrial buildings, including coal-fired round kilns, tunnel kilns, and other facilities of the former Cosmos Porcelain Factory. This transformation was guided by the concept of "factory building transformation, cultural design, and functional reconstruction."^[25] The integration of ancient production lines with modern conceptual elements has successfully converted an industrial production space into a hub for tourism, culture, and live webcasting.

2.1 Formation of tourism space

The rise of "special forces style tourism" has brought nationwide attention to Jingdezhen, a small city renowned for its ceramics. A steady stream of tourists come to feel the cultural charm of the millennium porcelain city. As one of the new cultural landmarks in Jingdezhen, Taoxichuan has become a popular tourist destination, attracted over 3.9 million visitors in 2022 and another 5 million between January and October 2023.^[26] In Taoxichuan, the former porcelain factory workers can reminisce about the slogans on the walls, the old kilns, and the machinery used in the past. Visitors, on the other hand, can experience pottery-making workshops and explore a creative bazaar showcasing various styles of ceramics.

To better promote ceramic culture, Taoxichuan for tourists to create a "creative Bazaar" and "Eup space mall". The "Creative Bazaar," which opened on March 19, 2016, operates every Saturday afternoon until evening. Covering an area of 9,000 square meters, it offers a wide array of products, including traditional ceramics, handmade leather goods, wood carvings, fabric products, and more.^[27] Visitors can also purchase various styles of ceramic handicrafts at 'Eup Space'. The Park is also equipped with entertainment facilities such as bookstores, cafes and bars. Moreover, Taoxichuan has developed a robust tourism operation system. Its subsidiary, Taoxichuan International Travel Service Co., Ltd., operates eight double-decker tour buses and has established dual routes—cultural and handicraft tours—among the city's attractions to enhance tourist convenience.

Unlike other tourist spots where visitors primarily consume local resources and souvenirs, Taoxichuan offers a unique experience where tourists can participate in ceramic production and create their own artworks. This space transcends traditional tourism, allowing visitors to transition from mere consumers to active producers. The immersive experience fosters interaction between tourists and local ceramic craftsmen, offering a deep cultural engagement that transforms a simple sightseeing

trip into a meaningful cultural journey. This experience provides travelers with a unique sense of belonging and accomplishment.

2.2 Cultural Space Re-production

How to use the long-abandoned old factory building? Jingdezhen National Ceramic Cultural Heritage Innovation Pilot Zone Management Committee full-time deputy director, Jingdezhen Tao Cultural Tourism Group Chairman Liu Zili told reporters (Guo Jiewen): "The old porcelain factory as part of the history of the "Porcelain Metropolis", we want to keep it. The renovation project retained 22 old factory buildings, converting the original firing workshop into the Taoxichuan Industrial Heritage Museum and Art Museum, while the raw material workshop became a pottery experience space."^[28]

Taoxichuan's cultural dissemination centers around the International Ceramic Culture Industrial Park, which features a living museum of ceramic industrial heritage and a space for intangible cultural heritage exhibitions.^[29] The Industrial Heritage Museum has preserved the ancient round kiln, coal-fired tunnel kiln and steam-fired tunnel kiln, which completely showcases the modern industrial scene of Jingdezhen ceramics. Through the scene reproduction, physical display and other forms, visitors gain a comprehensive understanding of Jingdezhen's ceramic industry, including its processes, products, and historical documents. For example: so far, the museum has collected ceramic workers oral history of 391, porcelain workers "personnel file" 69,000, according to the workshop - private - private joint venture - public-private partnership - state-owned porcelain factory - restructuring transformation of the historical lineage, a perfect description of the development of the ceramic industry in Jingdezhen from 1904 to 2010.^[30]

The Taoxichuan Museum of Art uniquely blends traditional and modern elements. It features ancient green bricks and tiles contrasted with modern glass curtains, providing visitors with an opportunity to appreciate various ceramic artworks. In addition, the museum regularly organizes ceramic art exhibitions and major academic lectures. For example, in 2022, Taoxichuan Cultural and Creative Block hosted over 50 high-quality exchange and exhibition activities, more than 10 large-scale exhibitions and academic lectures with the Central Academy of Fine Arts, and 53 public lectures and academic seminars.^[31] By organizing various activities, Taoxichuan has become an interesting place to visit. In addition, Taoxichuan has also capitalized on its pottery heritage by establishing localized experiential ceramic education institutions like Kungfu Little Porcelain and Cayman No.1. These institutions teach traditional ceramic production techniques, sparking interest in traditional ceramic culture among new generations.^[32]

Therefore, Taoxichuan is not only a figurative geographical space and a unique place that integrates history and modernity, but also successfully realizes the continuation of ceramic culture from the historical to the contemporary spatial sense. Through the immersive experience of the exhibition, which includes historical sites, traditional crafts and contemporary culture, visitors can deeply feel the unique charm of Taoxichuan as a historical bridge of ceramic culture inheritance and how to continue and develop traditional ceramic culture in contemporary times.

2.3 Webcasting Space Re-invention

With the rapid growth of the digital economy, from 2020, Jingdezhen City has engaged in strategic partnerships with platforms like Douyin (known as TikTok internationally), JD.com, Taobao, and Tmall to operate ceramic LIVE branding platforms. In Taoxichuan, the impact of e-commerce on the traditional ceramic industry is particularly evident. Taoxichuan has established a live broadcasting base in collaboration with these major Internet platforms, making it the first ceramic LIVE broadcasting base on Douyin in China.^[26]

At night, the live broadcasting base comes alive with young influencers skillfully introducing various ceramic products to online audiences. According to Chen Xi, the person in charge of the base, more than 3,500 ceramic merchants have settled in since its establishment in July 2020, generating total sales exceeding 3 billion yuan. The base has also incubated over 5,000 ceramic influencers, helping tens of thousands of ceramic merchants transition from offline to online sales. In March 2023 alone, the base achieved sales of 435 million yuan, with a single day's highest sales reaching 17.69 million yuan.^[33] By integrating resources through the "anchor + e-commerce + live" model, Taoxichuan has created a unique and innovative industrial ecosystem that further expands the online sales market for local merchants. This approach provides new ideas for businesses to accurately reach their target audiences, breathing new life into Jingdezhen ceramics.

Additionally, Internet platforms enable Taoxichuan to spread ceramic culture and the spirit of craftsmanship more widely. Through live broadcasts, traditional craftsmen can showcase their pursuit of classical beauty to online audiences, bridging the gap between tradition and modernity. These traditional artworks, which emphasize meticulous craftsmanship, stand out in an era dominated by large-scale mechanized production. Artisans also share their aesthetic values and passion for quality of life through their exquisite handmade ceramics. This online interaction allows visitors from around the world to experience a profound cultural exchange and appreciation, enriching their artistic perspectives and promoting intercultural understanding.

As digital technology advances, the Internet platform and self-media technology continue to evolve. The webcasting space transcends the constraints of traditional physical space, giving Taoxichuan a spherical and futuristic perspective. This platform not only enhances the dissemination of Jingdezhen ceramic culture but also builds a new bridge between art creators and audiences. Tourists who cannot visit in person can watch live demonstrations of craftsmen's work, facilitating a deep integration of online and offline resources and promoting efficient omni-channel synergy.

3. Summary

This paper explores the Taoxichuan Cultural and Creative Park through the lens of spatial reproduction theory, analyzing its significance and value in urban governance, planning, and the dissemination of Jingdezhen ceramic culture. Taoxichuan, a new cultural landmark in Jingdezhen—the birthplace of China's ceramic industry—embodies a thousand years of traditional craftsmanship and rich ceramic culture.

From a spatial theory perspective, Taoxichuan realizes the production and reproduction of space through the formation of tourism space, cultural space reproduction, and webcasting space reinvention. As an 'urban industrial heritage', Taoxichuan has a certain significance for other urban planning and management, particularly in cultural heritage preservation, economic development, and the maturation of online live broadcasting. Cultural heritage preservation is evident in Taoxichuan's protection of original industrial sites and the continuation of ceramic cultural space from past to present. Economically, ceramics remains Taoxichuan's pillar industry, and the influx of tourists has not only transformed physical space but also shifted participants' identities from consumers to producers. The growing maturity of online live broadcasting has broken traditional geographical and spatial limitations, facilitating real-time interaction between influencers and consumers and driving consumer desire. The planning and construction of Taoxichuan align with the development of the local ceramic industry, creating cultural spaces that reflect Jingdezhen's ceramic heritage, such as the "Creative Bazaar" and "Eup Space Cultural Mall." Through this study, the paper illustrates the multiple transformations of Taoxichuan—from "urban industrial heritage" to a space for culture, tourism, and webcasting—providing relevant insights for the renewal of other old industrial cities.

References

- [1] Information on: https://www.thepaper.cn/newsDetail_forward_2951617
- [2] Information on: <http://www.wenming.cn/20240725/4ad51e17914645b69203f87be66a7652/c.html>
- [3] Zhao Xueqiang, Fu Xiaoyu, Yan Jitong. Study on the Protection and Utilization of Industrial Heritage under the Vision of Urban Renewal--Taking the Renovation of the Old Site of Texas Machine Tool Factory as an Example. *Art Technology*, 2023, 36(13):204-206. DOI:10.3969/j.issn.1004-9436.2023.13.065.
- [4] Information on: https://www.ndrc.gov.cn/xxgk/zcfb/tz/202006/t20200609_1231025.html
- [5] Information on: https://www.gov.cn/zhengce/2021-09/03/content_5635308.html
- [6] Information on: https://www.gov.cn/zhengce/zhengceku/2023-03/15/content_5746847.htm
- [7] Information on: <http://paper.people.com.cn/rmrhwb/images/2022-04/19/05/rmrhwb2022041905.pdf>
- [8] LEFEBVRE H. The production of space. Translated by NICHOLSON-SMITH D, Oxford: Wiley-Blackwell, 1991:14-18.
- [9] Henri Lefebvre. The Production of Space[M]. Liu Huaiyu, trans. Beijing: The Commercial Press, 2021:1-8.
- [10] Chen Bo, Pang Yating. Research on the spatial production mechanism of the Yellow River National Cultural Park and its scene expression. *Journal of Wuhan University (Philosophy and Social Science Edition)*. 2022, 75(05):66-80. DOI: 10.14086/j.cnki.wujss.2022.05.006.
- [11] Sun Guang, Wan Yiqing. Study on Renewal Design of Urban Industrial Heritage--Taking Jingdezhen Taoxichuan Ceramic Culture and Creative Park as an Example. *Art and Design (Theory)*. 2023, 2(11):54-57. DOI:10.16824/j.cnki.issn 10082832.2023.11.016.
- [12] Qiao Zhi, Qi Dongyu, Cheng Yajing. Conservation and Reuse of Industrial Heritage in the Context of Urban Renewal [J]. *Modern Horticulture*. 2024, 47(11):126-128+131. DOI:10.14051/j.cnki.xdy.2024.11.013.
- [13] Information on: http://www.urbanchina.org/content/content_8054609.html
- [14] Huang Jianfeng. Paradigm Transformation of Spatial Research on Tourist Places under the Perspective of Spatial Production--A New Paradigm of Spatial Research Based on Spatial Emergence. *Geoscience*. 2015, 35(01):47-55. DOI: 10.13249/j.cnki.sgs.2015.01.006
- [15] Ye Chao, Chai Yanwei, Zhang Xiaolin. The theory of 'production of space', research progress and its implications for urban research in China. *Economic Geography* 2011, 31(03):409-413. DOI:10.15957/j.cnki.jjdl.2011.03.010.
- [16] Yuan Yue. (2017). Research on the Mechanism of Cultural Space Re-creation in Taoxichechuan, Jingdezhen. *Creativity and Design* (03), 14-19.
- [17] Information on: https://www.thepaper.cn/newsDetail_forward_26108234
- [18] Information on: https://www.mct.gov.cn/preview/whhlyqzcxw/zghl/202012/t20201226_920115.html
- [19] Information on: <https://baijiahao.baidu.com/s?id=1614909738614844581>
- [20] Information on: https://www.sohu.com/a/399827563_120206473
- [21] Sun Guang, Wan Yiqing. Study on Renewal Design of Urban Industrial Heritage--Taking Jingdezhen Taoxichuan Ceramic Culture and Creative Park as an Example. *Art and Design (Theory)*. 2023, 2(11):54-57. DOI:10.16824/j.cnki.issn 10082832.2023.11.016.
- [22] Wang Yongjian. Landscape Production of Urban Art Districts in Post-Industrial Societies - The Case of Taoxichuan, Jingdezhen [J]. *Ethnic Art*, 2019, (02):139-146. DOI:10.16564/j.cnki.1003-2568.2019.02.014.
- [23] Du Xiaoli. The vitality of literature research method. *Shanghai Education Research*. 2013, (10): 1. DOI:10.16194/j.cnki.31-1059/g4.2013.10.002.
- [24] Liu Dan. Reflections on the Work of Public Libraries in Developing Parent-Child Reading Services[J]. *Library Research*, 2010, 40(1): 82-84.
- [25] Information on: http://jdz.wenming.cn/news/xwt/201707/t20170719_4626331.html
- [26] Information on: https://www.sohu.com/a/748901049_808363
- [27] Information on: http://jx.cnr.cn/2011jxfw/shxw/20170409/t20170409_523698876.shtml
- [28] Information on: http://www.xinhuanet.com/2021-05/20/c_1127468856.htm
- [29] Information on: <https://china.jxnews.com.cn/gq/>
- [30] Information on: https://www.sohu.com/a/665383195_121106994
- [31] Information on: https://m.sohu.com/a/308368630_728663?_trans_=010004_pcwzy
- [32] Information on: https://www.sohu.com/a/288485635_720180
- [33] Information on: https://m.thepaper.cn/newsDetail_forward_17675104