

Transformation Model and Evaluation of Old Industrial Blocks in Shenzhen: A Case Study of OCT-LOFT

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Abstract: In urban renewal and transformation, the transformation and renewal of old industrial landscapes play a huge role. In the context of post-industrial society, industrial restructuring and industrial layout changes have led to the decline of many traditional industrial bases, which have been reduced to abandoned land and have generated a large amount of industrial wasteland, industrial facilities and industrial buildings and other resources. These resources are called post-industrial heritage and urgently need renewal and transformation. The best way to deal with this industrial heritage is to turn them into art parks and creative parks through various analysis methods. This paper chooses OCT-LOFT as an example to briefly introduce their current situation after the renovation, analyze their reason and pattern of transformation, and discuss the model evaluation. Through a case study of OCT-LOFT in Shenzhen, this paper explores the spatial production process of creative industries under the macro-institutional structure and micro-social network structure. The study finds that the institutional dividend promotes the spatial homogenization of OCT-LOFT, indirectly leading to its becoming a product of spatial reproduction and creating conditions for its heterogeneous spatial production.

Keywords: transformation model, evaluation, old Industrial blocks, Shenzhen, OCT-LOFT

1. Introduction

It has been over forty years since the reform and opening-up policy was implemented in China in the late 1970s. Under the influence of the opening-up policy, the domestic social economy began to develop rapidly, and what came with this was a wave of rapid urban construction. However, with the marginalization of primary industries in economically developed areas in recent years, a large number of obsolete industrial sites have emerged in these regions, mostly located in areas where industrial upgrading has been carried out. As important carriers of industrial culture and development history, they witnessed and contained some of the most significant moments in China's modern history and possess considerable historical, technological, social, and aesthetic value. The vast majority of the industrial sites remaining in China are located at port cities of commerce that were forced to open in the early days, at colonial cities, or at the special economic zones that started to develop at the beginning of the opening-up policy, such as Beijing, Shanghai, Qingdao, Tianjin, and Shenzhen [1].

The understanding and conservation of these historic industrial sites in China are still in their infancy. Since the beginning of the millennium, the concept and strategy of "revitalization" of important industrial sites in China have been implemented, with the main step that starts with the

systematic analysis for the upgrading of the original sites, followed by the identification of schemes based on the results of the analysis that allow the preservation, development, reuse, and revitalization of the sites to go smoothly at the same time, and finally the renovation and renewal of the sites themselves.

With the available urban space becoming saturated, the development and reuse of the old industrial sites in the city are the key points of urban renewal. As one of China's most active and fastest cities in terms of urban renewal activities, Shenzhen faces the challenge mentioned in the previous text [2]. As Shenzhen continues to grow, the city's population has exploded – Shenzhen's population has grown 42 times in the last forty years to 17 million people today. The biggest problem is the severe shortage of land space, as the overall industrial structure of the city has changed, creating many abandoned industrial regions. Revitalizing these sites can alleviate the lack of urban space to a certain extent, which would also help cultivate urban cultural industries.

This paper chooses the city of Shenzhen as an example to briefly introduce the ways of renovating and revitalizing industrial heritage in the city and their current situation after the renovation, analyze their reasons and modes of transformation, and discuss the evaluation of modes.

2. Background

2.1. Background of Shenzhen

Shenzhen's industrial development, transformation, and upgrading have been in continuous progress. Within just 30 years, Shenzhen's industrial structure has transformed from traditional to high-tech industry-oriented. Along with intensive urbanization and urban scale expansion, a large number of old industrial areas built more than 10 years ago gradually emerged. The building volume ratio and land utilization rate are obviously low, the internal design is unreasonable, the infrastructure is incomplete, and the ownership relation is complex. According to the "work plan on accelerating the upgrading of the city's old industrial areas", within the 914 industrial sites in the city, 680 of them are considered "old", which have scattered, chaotic, disorderly layouts [3]. Most of the volume rate is extremely low, which brings us to problems like poor building quality, mismatched functions, and low development intensity. Shenzhen's old industrial areas face physical aging, functional decline, and structural imbalance problems [4].

2.2. Activation of Industrial Heritage

Renovation of urban industrial heritage is essential to constructing the city's historical heritage and urban renewal. The success of Beijing's 798 Art Zone has set off a surge in the renovation of industrial heritage across China, but in the process of reusing industrial heritage, there may be secondary decay and a lack of interest. Therefore, renovation and reuse are not the ends but only the beginning. The next priority is continuously revitalizing the industrial heritage and turning the "experience model" into a "participation model".

For industrial heritage, "revitalization" means the reconstruction of scenes, the continuation of memories, the renewal of functions and the reproduction of values. Industrial heritage revitalization creates and designs spaces that belong to the present and the future while recording and reflecting the industrial achievements of the past. However, industrial heritage revitalization is not always successful and may even bring about renewed decay, such as a single model of revitalization, lack of innovation; lack of public participation and interaction, low popularity; and lack of social memory of the place. These may lead to many renovated industrial relics transforming into "idle places" in the city [5].

2.3. Creative Industry Park

In contemporary cities, urban areas that develop through "spontaneous" means are rare and often perceived as chaotic, unmanageable, and discordant. The emergence of creative industrial parks reveals that very distinctive and dynamic urban areas can be achieved through a "spontaneous" approach to urban development under industry-led conditions. It also seems to find a new paradigm for urban renewal, the impact and potential of which needs to be studied in depth.

The development of Shenzhen's creative industrial park is not long, mainly relying on government policies, planning and funds to promote its rapid growth, but at the same time there are some problems. For example, there is a lack of reasonable arrangement for the positioning and layout of the creative industrial park, and there are problems of repeated construction and copying and imitation; most of them develop high-tech industries in closed park mode, and the interaction with the public is not high and lacks vitality. OCT-LOFT can break out and become the most famous creative industrial park in Shenzhen, which must have its unique socio-spatial factors. Therefore, this paper focuses on the transformation measures of OCT-LOFT.

3. OCT-LOFT

Shenzhen OCT-Loft Creative Culture Park is one of the most mature creative industry parks in Shenzhen, located in the northeast of OCT in Nanshan District, Shenzhen, covering an area of about 0.15km and a building area of about 0.2km. It is surrounded by mainly residential areas, adjacent to Konka Group and other industrial areas, with a relatively dense population and good infrastructure services, such as catering facilities, subway stations, bus stops. (Figure 1).

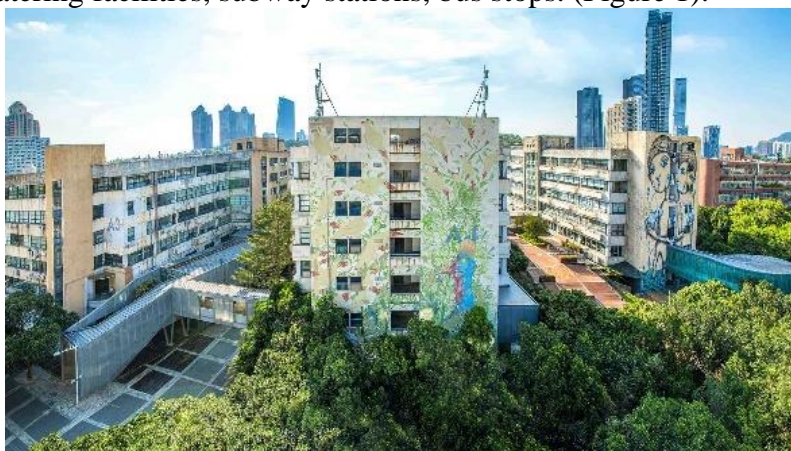


Figure 1: Overview of OCT-LOFT.

Through the study of internal space, external space and business distribution of the case, it is found that the internal space of the existing building has a relatively clear functional positioning after renovation, such as commercial or office. The external space, as a larger part of the park, is less transformed in the planning, and is only used as a roadway or decoration, which makes it possible for self-organization to occur in the external space.

3.1. Transformation Background

3.1.1. Abandonment of Industrial Sites

The decline of the industry in the OCT provides the basic conditions for the transformation of OCT-LOFT, which belongs to the former east industrial zone of OCT. Since the 1990s, Shenzhen's social

and economic structure began to adjust, production costs gradually increased, and the industrial capacity of OCT declined. A large number of enterprises in OCT were relocated or shut down, and the industrial structure became homogeneous. The representative enterprise in OCT, Konka Group, even suffered a loss of 70 million yuan in 2001, which left most of the factories in the eastern part of OCT in an abandoned state. As of 2004, only 0.09 km² of the 0.358 km² of industrial building land owned by OCT was used for production, which is 1/4 of the total, and the old abandoned factory buildings provide the foundation for the transformation of OCT-Loft [6].

3.1.2. Rise of the Tourism Industry

The upgrading of the area's functions driven by tourism provides the environmental conditions for the transformation of OCT-Loft. OCT Group attached great importance to developing the tourism industry and developed several tourism sites at the early stage of its establishment. Later, it gradually shifted its development focus from the secondary industry to the tertiary industry and continued to develop tourism facilities such as Window of the World, and the number of tourists gradually increased as a result, which brought huge commercial benefits to OCT Group.

3.2. Transformation Modes

3.2.1. Government-supported Promotion

The start of creative industries mostly relies on market spontaneity, showing the characteristics of small scale and wide dispersion, while the development of creative industrial parks mostly relies on government promotion. OCT-LOFT also developed rapidly under the Shenzhen government's support; the lack of overall planning, insufficient supporting systems, and homogeneous competition with other similar parks are also the initial characteristics of OCT-LOFT.

Due to the lack of relevant experience, the rapid development of Shenzhen's creative industrial parks has also led to problems of duplicated positioning, duplicated functions, and similar forms among parks [7]. In the absence of overall planning, all places tend to invest and build their creative industrial parks as soon as possible with the government's preferential policies, which has caused the overall spatial homogenization of Shenzhen's creative industrial parks.

In this context, the development of OCT-LOFT also benefits from the above-mentioned institutional dividends. The government vigorously promotes the development of OCT-Loft, developers actively invest in it, and its location is mainly based on its development needs. This leads to a relatively concentrated overall layout of creative industrial parks, and the form and function are homogeneous, and OCT-Loft becomes a product of spatial replication and homogenization.

3.2.2. Commercialization within the OCT-LOFT

Under the case of the gradual decline of the OCT industry, to promote industrial upgrading and functional diversification, the development of OCT-LOFT becomes its best choice to improve market competitiveness jointly; OCT-LOFT unites with the existing tourism resources in the surrounding area to form a development network based on tourism space production, generating a clustering effect, which is evident from the annual number of visitors to OCT, that has been on an upward trend since 2000 (Figure 2). In the above development process, OCT-LOFT not only enhances the cultural taste and brand of the park but also provides the surrounding area with an excellent and orderly living community environment, attracts high-grade and high-quality top creative organizations with high-quality configuration, and forms a commercial chain based on creative consumption in combination with related supporting facilities such as coffee shops, teahouses and lifestyle products [7], which perfects the function of public life, experience, leisure and consumption.

OCT-LOFT unites various units in the OCT area to redevelop their own spaces in cooperation with each other to improve the quality of space through the comfortable environment in the area, with a focus on providing a "creative" environment while improving the quality of life in the eastern community, creating an enriched internal space and establishing a mutually beneficial relationship of coexistence.

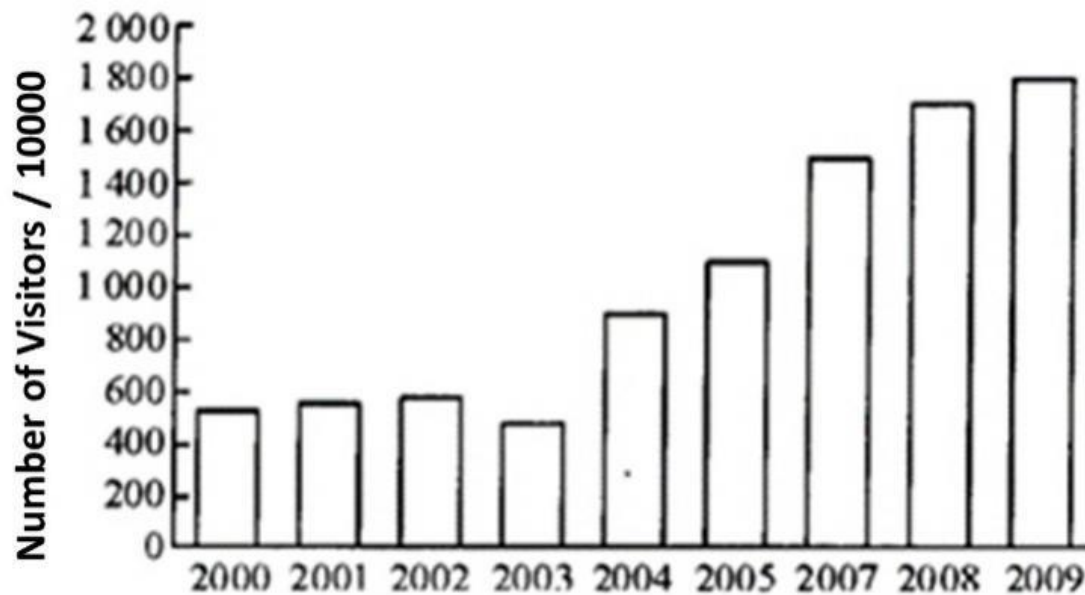


Figure 2: The number of yearly visitors to OCT[6].

3.2.3. External Expansion of the OCT-LOFT

OCT-LOFT actively cooperates with creative units in society to organize various art activities, and the creative units have been able to expand their publicity to society through OCT-LOFT, the most iconic of which is the "Bi-city Biennale of Urbanism/Architecture", which started in 2005 and greatly enriched the cultural influence of OCT-LOFT and creative units. In addition, the "Creative T Street" event held on the first weekend of every month in the district provides an effective venue for young artists to sell and exhibit their works, as well as to teach and promote their work, adding vitality to the place.

In the process of expanding the external space of OCT-LOFT, a suitable institutional platform is the foundation, rich cooperation, and participation are the guarantee, timely information dissemination, and feedback is the core, and social space is used as the fusion agent, so that OCT-LOFT can effectively unite with the outside world to become an organic whole, thus occupying a more top-level position in the creative industry chain, generating stronger influence and enabling its spatial heterogeneity production to be realized [8].

3.2.4. The Remarking of Collective Memory

The revitalization of industrial heritage could create and design spatial forms that belong to both the present and the future while recording and embodying the industrial achievements of the past. The space and its built environment can be understood as a product of collective creation [4]. A collectively created industrial heritage contains not only the building itself; but also the collective memory that was once created in that building.

The construction of collective memory for the revitalization of industrial heritage means using the architecture of the place as the intersection of nostalgic memory and new creativity, as well as the combination of urban physical space and cultural space. The case in this paper has been used as the venue of the Bi-city Biennale of Urbanism/Architecture (UABB), the OCT-LOFT as the venue of the 2005 "City, Open Up!" in 2005 and "Urban Regeneration" in 2007. The UABB has repeatedly chosen industrial heritage renovation sites as the venue, not only leading city residents to review the contribution of these old industrial areas to urban development and the glory they once created, bringing people to flow and visibility to the second renewal of industrial heritage, but also giving the old industrial areas new connotations and functions through artistic intervention and cultural regeneration, a reshaping and re-creation of collective memory.

4. Evaluation of the Transformation Mode

The spatial production of OCT-LOFT is rapidly realized by virtue of "strong support from the system, continuous promotion by the government and active investment by the developers", and other creative industrial parks in Shenzhen also use this spatial production mode, and they learn from each other under similar physical space conditions and imitate openness, which is a rapid spatial homogenization. It is a manifestation of the rapid production of space homogenization. In turn, OCT-LOFT, through the advantages of OCT's spatial resources and the enrichment of social network, has improved its functions, enriched its configuration, broadened its market, and promoted its brand, thus standing out among the homogeneous spaces and realizing the heterogeneous production of space (Figure 3). This is an inevitable process to enhance its competitiveness and influence under the market system [9].

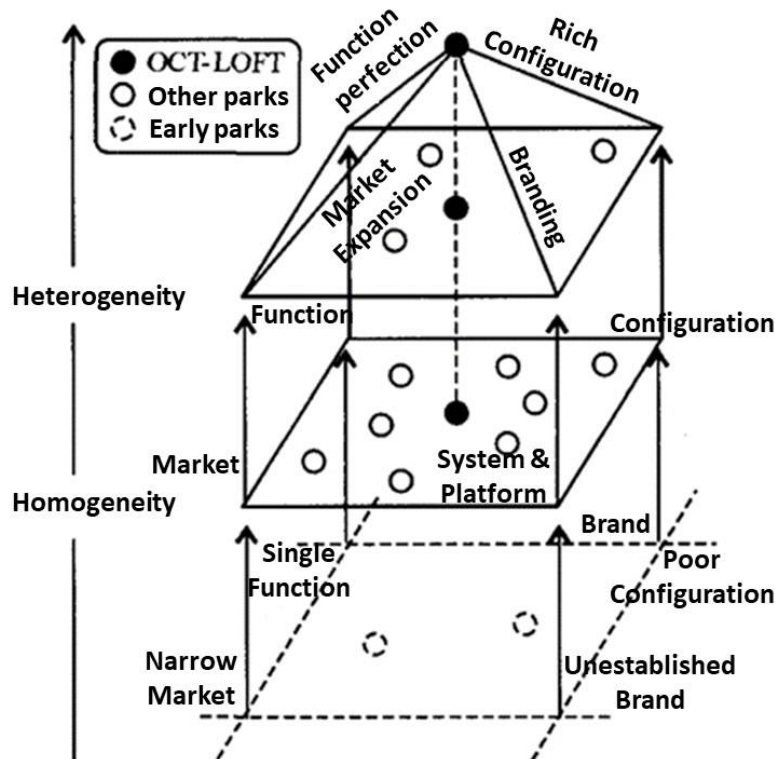


Figure 3: Process of "reproduction of space" of OCT-LOFT[6].

Ideally, "spatial reproduction" is a circular process, as long as the capital, power and social movement are strong enough, the heterogeneity of a certain space will be upgraded by a certain force

in the society and market, resulting in the elimination of this space and breaking the overall spatial equilibrium, and then this force will build a new but not solid standardized platform in the society and market, and then consolidate its own spatial production process, which is also the process of homogenization of the overall society and market space to heterogeneous production.

5. Conclusion

In the development process of Shenzhen creative industry, OCT-LOFT can become the only successful completely open creative industrial park in the city, which shows the process of shifting from spatial homogenization to heterogeneous production, and this paper defines this process as "spatial reproduction".

At present, there are other similar phenomena of homogenization of urban space in China, such as most of the new cities are planned with the goal of developing high-end business districts and business circulation districts, which inevitably form the intuitive impression of "one side of a thousand cities"; "building city-like houses, living the same life as village people " of no planning, no design, no characteristics of the "thousand villages" of new rural construction; "constantly destroy modern architecture, but constantly replicate the fake antiques" of the "historical district pseudo-protection "However, if these areas have greater commonality in resources, environment and other conditions, and do not adopt a staggered competition in the face of similar opportunities, they will inevitably over-consume and The more serious problem is that it is difficult to realize the heterogeneous production of space, and the problem of development homogeneity, stereotypes and rigidity, and the loss of characteristics, individuality and traditional culture. Therefore, the continued homogenization of space is bound to cause more social problems.

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