



# Transformation and upgrading of old industrial zones on collective land: Empirical study on revitalization in Nanshan



Mingmin Pan, Hongyang Song\*

College of Art and Design, Shenzhen University, Shenzhen, China

## ARTICLE INFO

### Article history:

Received 5 November 2016

Received in revised form

19 April 2017

Accepted 24 April 2017

### Keywords:

Old industrial zones

Revitalization

Policy evaluation

Urban regeneration

Industry cluster

Transformation

## ABSTRACT

To advance industrial upgrading, the Government of Shenzhen Nanshan District constantly loosens restrictions and offers more funding for revitalization, creating incentives for village shareholding corporations (VSCs) to revitalize old industrial zones. Focusing on the transformation and upgrading of old industrial zones on collective land based on the case study of Longjing Industrial Zone, this paper investigates the implementation and effectiveness of the new revitalization policies. First of all, by comparing the industrial zone before and after the revitalization, the results of the revitalization are summed up: the renovation of physical environment and infrastructure, the professionalization of operational models, the diversification of enterprise composition, and the demographic change (the move-in of more high-income white-collar workers). Then, the performance of the revitalization is assessed in the aspects of industry cluster and social costs, and the limitation of the transformation and upgrading of industrial zones is identified. In comparison to government-led revitalization projects, based on the analysis of the motives and actions of the stakeholders (district government, VSCs, industrial park operators [IPOs] and tenant enterprises), three underlying factors that exert negative impact on the effectiveness of revitalization have been found: 1) formalistic industry planning; 2) recruiting enterprises with loose restrictions; and 3) imperfect regulation, supervision and final acceptance standards. Finally, based on the above-mentioned limitations and underlying reasons, the paper proposes suggestions on improving the revitalization of old industrial zones.

© 2017 Published by Elsevier Ltd.

## 1. Introduction

Industrial zones<sup>1</sup> play an important role in the economic development of China (Yan, 2016a, 2016b; Altrock & Schoon, 2014). Having been through rapid industrialization and urbanization since reform and opening up, China has reached the stage where industrial upgrading is needed to achieve sustainable economic growth, that is, to replace labor-intensive manufacturing and low value-added industries with knowledge-based and higher value-added industries (Cheong & Wu, 2014; Lin, 2007; Ye, 2009). As a

result, transformation and upgrading of industrial zones is needed due to the restructuring of the Chinese economy and industrial upgrading (Ye, 2011; Lai, Peng, Li & Lin, 2014; Ye, 2010). Shenzhen, the first special economic zone of China and a model city for research on urbanization and urban regeneration in China, is confronted with sharp contradiction between the extreme scarcity of space needed for industrial upgrading and the inefficient use of massive industrial space (Wei & Cong, 2005; Yan & Zhou, 2015; Altrock & Schoon, 2014). The Municipal Government of Shenzhen and the governments of districts in Shenzhen have respectively introduced a series of policies on the revitalization of old industrial zones.

Due to China's urban-rural dual land system,<sup>2</sup> compared with

\* Corresponding author.

E-mail addresses: [mingminpan@foxmail.com](mailto:mingminpan@foxmail.com) (M. Pan), [songhongyang@szu.edu.cn](mailto:songhongyang@szu.edu.cn) (H. Song).

<sup>1</sup> An early industrial zone refers to an area on vast land with an agglomeration of several enterprises. With later and further development, various and specialized industrial zones emerged. Synonyms and types of industrial zones include industrial districts, industrial estates, industrial clusters, industrial parks, export processing zones, science and research parks, business parks, bio-technology parks and eco-industrial parks. In Shenzhen, a revitalized industrial zone will be renamed an "industrial park". To avoid ambiguity, this paper adopts the term "industrial zone".

<sup>2</sup> According to the *Land Administration Law of the People's Republic of China* (2004 Amendment), there are two types of land ownership coexisting in the current land administration system of China, namely, state ownership and collective ownership. The state owns the urban land, while village collectives own the rural land. Urban land use rights can be transferred; however, the sales, transfer and lease for urban use of collective land are prohibited.

state-owned industrial land, the revitalization of collective industrial land presents a more complicated policy and practice issue, as the right of use of collective land is reserved by village collectives (Ding, 2007; Choy, Lai, & Lok, 2013). That is to say, the government is not an absolute leader in the revitalization of collective land and the effectiveness of policies on transformation is limited (Zhang & Li, 2011; Wu, Webster, He, & Liu, 2010; Po, 2008; Bach, 2010). With the revitalization of collective land, an increasing number of government officials and scholars have realized the transformation and upgrading of old collective industrial zones are constrained by many barriers and confronted with several dilemmas (Lai et al., 2014; Lai & Zhang, 2016; Tan & Altrock, 2016). Without the regulation of the government, these widely scattered industrial zones feature intensive labor, high pollution, extensive use of land, unsanctioned transactions, crude and shabby buildings and environment, and faulty supporting facilities (Choy et al., 2013; Zhang & Li, 2011). On the other hand, there are no long-term investments incentives and villagers are accustomed to gaining profits by renting out factories (Lai et al., 2014). As a consequence, they are not enthusiastic about revitalization, which increases the difficulty of the revitalization of old industrial zones. Lai et al. (2014) proves that when compared with state-owned industrial land, the development and revitalization of collective industrial land are constrained from the perspective of property rights; Lai and Zhang (2016) believes that only collective industrial land with good transportation and location (close to city center) is likely to be revitalized, whereas less accessible industrial land does not really stand a chance of undergoing revitalization. Thus, the transformation and upgrading of collective industrial land present a tremendous challenge for the government and city planners amid urban regeneration.

However, although industrial zones in China have undergone massive redevelopment in recent years, a fair amount of existing research on urban regeneration focuses on urban villages and inner-city old towns; there is not adequate systematic and monographic research on the transformation of old industrial zones on collective land amid urban regeneration; particularly, there is a lack of up-to-date studies after this recent round of revitalization measures with big moves implemented in Guangdong Province since 2009 while enormous socio-economic changes have taken place during these processes (Tan & Altrock, 2016).

Therefore, this research aims at filling this gap by investigating the transformation and upgrading of old industrial zones in Nanshan, Shenzhen, evaluating the effectiveness of the new policies of revitalization and providing implications to revitalization of industrial space in other areas facing similar issues. The framework of this paper is as follows: through a brief review, it first introduces the background of the transformation of old industrial zones on collective land and identifies the research gap which this paper aims to address. Section 2 elaborates the theoretical concepts in the context of China. It then analyzes the obstacles to the revitalization of old industrial zones in Nanshan District, the content of the increasingly supportive policies on revitalization introduced by the District Government, and the overview of the revitalization projects implemented since the introduction of the policy 4 years ago. Section 4 raises specific research questions and research methods. Section 5 compares the before and after situations of the case, Longjing Industrial Zone. Next, section 6 discusses the deficiency of the revitalization of collective industrial zones, and explores the reasons for such deficiency based on the motives and actions of all stakeholders with a comparative perspective to the government-led revitalization of industrial zones. Finally, some implications of the findings are provided in the last section.

## 2. Theoretical background

The reuse and revitalization of brownfields,<sup>3</sup> or industrial sites which are outmoded and fail to meet the contemporary requirement of the user or potential user (Ren, Shih, & McKercher, 2014), has become an important task in urban regeneration in many industrialized cities over the past decades (Dixon, 2007; Kazimierzczak, 2012; National Round Table on Environment and the Economy, 2003). Although the discourses and practices of revitalizing industrial sites vary in different places, the essence of revitalization lies in a series of integrated and comprehensive actions designed to resolve issues of regional development, promote regional sustainable development and improve regional competitiveness (Kiss, 2004; Chmielewska & Otto, 2013; Frantál et al., 2015; Loures, 2015).

Because the degraded industrial space differs enormously in history, size, character and potential, policy makers need to introduce different strategies of revitalization to suit local circumstances, and monitoring the outcomes of revitalization has been a major field of urban studies. Researchers evaluate revitalization projects and policies of industrial space from different perspectives, including urban competitiveness (e.g. Xian & Chen, 2015), industry cluster (e.g. Sellar, Emilova, Petkova-Tancheva, & Mcneil, 2011), environmental sustainability (e.g. Williams & Dair, 2007; Wedding & Crawford-Brown, 2007), economic restructuring (e.g. Hudalah & Firman, 2012; Kiss, 2007), creative class and creative cities (e.g. Evans, 2009), socio-cultural conditions (e.g. Chan, Cheung, & Wong, 2015), gentrification (e.g. Bryson, 2012; Lees, 2003), public participation (e.g. Li, Hong, Wang, Liu, & Li, 2016) and so on (e.g. Tang & Ho, 2014).

In China, old industrial zones do not have to be “old” in physical terms, yet they are those whose utilization of land and industrial output fails to meet the needs of regional development and economic performance (Shenzhen Municipal Government, 2009). The transformation and upgrading of old industrial zones involve 3 aspects: 1) physical renovation – the transformation (refurbish, reconstruction, etc.) of original industrial space; 2) economic redevelopment (e.g. industrial upgrading, the introduction of new functions); 3) social changes – behind the revitalization of old industrial space is the competition and alternation of different social forces, e.g. changes in demographic structures, relationship between stakeholders, and their say and gained interests (Yan, 2016b). Apparently, the ultimate objective of revitalization is more about economic growth.

## 3. Nanshan District: old industrial zones on collective land & increasingly supportive policies on revitalization

Nanshan serves as a significant base and cluster for the innovative and high-tech industry of Shenzhen. It is proposed in *Nanshan Districts' outline of the 13th Five-Year Plan* (Nanshan District Government, 2016) that Nanshan will be built into an international innovation district by 2020 by means of industrial upgrading. Based on the statistics published by Nanshan District Government in 2007, there are 46 village-owned collective industrial zones in Nanshan, covering an area of 4.08 km<sup>2</sup>, accounting for 24.7% of Nanshan's total industrial land. “Low-tech foreign capital + cheap migrant labor + cheap collective land” is still the production model of collective industrial land; most tenant enterprises in such industrial zones are traditional processors of hardware, electronics, clothing, etc.; the annual output values are low and the annual rent

<sup>3</sup> The notion of “brownfield” refers to underused, abandoned, derelict and often contaminated lands and premises.

Download English Version:

<https://daneshyari.com/en/article/5114687>

Download Persian Version:

<https://daneshyari.com/article/5114687>

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