

FROM FACTORY TO NURSERY

Beyond Industrialization in Shenzhen: opportunities for former factories



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Beyond Industrialization in Shenzhen:

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ABSTRACT

In Shenzhen, China, many factories are expected to become vacant in coming years due to rising costs of both labour and land. There is a relatively small amount of academic literature about Chinese ways of redeveloping those places. Simultaneously is there often a lack of public facilities, especially at the city outskirts, due to the fast growth of new town Shenzhen. The research contains a case study with different redeveloped factory buildings in Shenzhen. Interviews are held with several actors involved in the specific areas of Da Lang, OCT Loft and Shekou. Changes and similarities are investigated in relation to different factors of influence on the redevelopment process like location, type of land use, stakeholders, ownership, policies and building condition. This all end up in an indication of constraints and possibilities in relation to the implementation of public facilities in those buildings. The main research question answered is: What are the characteristics for reuse of factory buildings in Shenzhen and to what extent can these places be used for public facilities? This case study provides in a number of characteristics that limit redevelopment of factory buildings into public facilities. This is especially related to the urge to make profit, dissimilar building standards, an encouragement of mainly creative industry and difficulties with ownership. The possibilities shown can exist of affordable rent, a less expensive peripheral location, an upgrade for the area in total what makes investments more explicable and a government that is more encouraged to deal with the situation. The aim of this research is a better understanding of the Chinese context for reuse and public facilities and an addition to existing literature.

Keywords: Industrial Renewal, Public Facilities or Goods, Reuse, Redevelopment, Factory Buildings, Industrialization, Shenzhen, China



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This research has been a great journey. Through this thesis an intense year in the Master of Urban and Regional Planning comes to an end. I got the change to be part of a great experience and discover a whole new city and country in a totally different way than by traveling. To live somewhere for around six weeks gives you the opportunity to act as an inhabitant even though it is quite clear you are not. It created also the opportunity to speak to people you will normally never reach. For this experience I would like to thank some people. First, of course, many thanks to all the Chinese students from both Shenzhen and Peking University, without their help this research would have been impossible. Thanks to Sherry, Jan, Zoë, Kevin, Sophie, Constantine, Rosamond and Dove. Also fellow student Sean Wang from the University of Amsterdam fits in this list, thanks a lot for translating interviews, emails, telephone calls, signs, documents and so on. Of course thanks to the respondents for the time and effort they made and I would like to thank the International New Town Institute in Almere and specifically Linda Vlassenrood for the initiative of this whole project. They provided us a lovely place to live in Shenzhen and organized an introduction tour in the first week to expand our network and get to know the city. I also would like to thank both supervisors Arnold Reijndorp and ChingWen Yang for their assistance during the process. Indeed the rest of the group many thanks for their support and motivational words, with special regards to Patrick Brennan, who almost became part of the Chinese group.

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1. INTRODUCTION

China is in the western world mostly known because of its successful economic growth and on-going expansion in the build environment. Currently roughly half of the worldwide total of new built buildings is located in China (Fernández, 2007). However, the available space is not always used in an efficient way. Simultaneously rapid changes are going on within those cities. A shift is underway from an economy primarily focused on industrial manufacturing to more residential and commercial development (Wu and Chen, 2010). A lot of coastal factories are moving to inner China or other countries in Southeast Asia because of lower labour costs and cheaper land prices. Also heavy pollution makes them undesirable for an inner city location resulted in a vast majority of industrial space that becomes superfluous. Knowledge and capital are becoming increasingly important and require new types of land use. This is comparable with the industrial transition the western world went through; nevertheless, the western world has faced the industrialization phase earlier in history then China.

"当下,国内对工业遗产的处理大多采用企业出资改建创意园的单一模式,至今已暴露不少问题。工业遗产的利用,其实还可以运用更多模式,创造多种可能。"

'Right now, most of the industrial heritage is used for just one transformation model namely the creative parks, which has shown many problems already. As a matter of fact, the utilization of industrial heritage can be done in various ways and can create various possibilities.'

"在国内工业遗产进行改造的案例中,华侨城 O C T 一直被当做成功的范本被广为借鉴,以至于当下不少工业区改造都想把华侨城模式照搬复制。华侨城的成功是否就代表创意产业园就是工业遗产改造的理想路径?答案恐怕并不尽然。当下,已经有越来越多的创意园开始暴露出粗放、社会分隔以及从艺术区变相成为高端地产的弊端,华侨城同样也没能幸免。"

'Among the existing reused industrial heritage cases, OCT has always been seen as the successful example. Many on-going changes of industrial areas are directly copied of OCT. But does the success of OCT suggest that a creative park is the ideal model? The answer might be disappointing. Nowadays, more and more creative parks have shown the problems of extensive management and social segregation. Art zones are becoming high-end real estate in disguise. Even OCT cannot exclude these problems.'

"深圳虽是一个年轻的城市,但目前的房价已经让大学生、年轻艺术家在这里生活得很艰难,其实政府可以考虑拿出一部分工业遗产,去打造一些青年社区,既提供给他们创业所需的空间,又有相对低廉的住宿、生活配套设施,这对于深圳未来的持续发展是有益的。政府应该从一开始就把控方向,摸索出一条更符合深圳特性的改造之路。"

'Shenzhen is a young city, but the high living cost has already made the lives of graduates and young artists harsh. The government should seriously consider changing a part of the industrial heritage into youth community, which provides founding spaces and economic

accommodations at the same time. Shenzhen government is responsible for finding the best way for a future development of Shenzhen.'

(Chanchan, 2013)

These three quotes all proceed from an article named: 'Creative Park: the only model for industrial heritage?' ["工业遗产改建只有创意园这单一模式?"] published in the Southern Metropolis Daily during the field work in China (27 April 2013) and was forwarded by one of the respondents. This article demonstrates the current actuality of this research that is further explained in the problem statement below.

1.1 PROBLEM DEFINITION

Due to gigantic developments of the last thirty years the demand for infill within the existing city structure is present (Zacherias and Tang, 2010). It is expected that more and more of these factories will rapidly become vacant. In Shenzhen, in recent years, it is estimated that about one-third of all the industrial estates has become vacant (Zhang, 2009 in Zacharias and Tang 2010).

In the western world the concept of adaptive reuse is used for decennia already because of the potentials for redundant sites. The starters often are pioneers in search for a cheap place. By this use the sites often evolve towards a popular place consisting of different types of functions. Currently these places became really popular; however, China shows a different context. Nowadays the reuse of factory buildings in China becomes gradually a more common practice. At the same time a large part of the factories are demolished and replaced by new buildings in a more higher density. This is mostly because of economic reasons whereby the needs of the public often are neglected. Equally the local government has to deal with the still increasing amount of people from the inner land of China moving to an economically more attractive city.

It looks like most of those redeveloped buildings are filled with commercial, creative industry or residential use, however, many scholars warn for a lack of public facilities in Chinese cities (for example: Wu et al., 2012; Wuttke et al., 2010; Solinger, 1995). The lack of public facilities is a major concern of Chinese urban citizens. The government paid little attention to the provision of public facilities during the economic transition in the past decennia (Saich, 2008). The main focus was to encourage further economic growth instead of the facilitation of needs of the steadily growing population. In Shenzhen there is a great demand for an expansion in facilities as schools, childcare, play grounds, hospitals, sports and youth clubs. Within this fast growing context it is of interest to show the different possibilities of these former factory buildings and the way different actors are involved in the transition. Therefore the aim and main question of this research is:

What are the characteristics for reuse of factory buildings in Shenzhen and to what extent can these places be used for public facilities?

The question shows the different possibilities for reuse of factory buildings within the context of Shenzhen. This city is one of the first cities in China that has to deal with deindustrialization while at the same time it was one of the first where industrialization widely started.

1.2 SOCIAL AND SCIENTIFIC RELEVANCE

Due to economic growth, increasing vacancy rates and a growing amount of people living in the city functional change of factory building is of importance and is of relevance for both policy and scientific research. The reuse of factory buildings is almost a common practice in the western world where a lot is written about the redevelopment of (historic) industrial sites and vacant factory buildings. Often mentioned is the way this development took place, the people who are involved and what type of building has been created. There is a gap in the literature because in the Chinese context most scholars, at least in the academic literature published in English, wrote about the redevelopment and transformation into creative areas. Other types of functions have been discussed only marginally. What means the opportunities besides the now often chosen creative areas have been neglected. The Chinese context is changing quickly which makes it of interest to show a part of this transition. Fast deindustrialization starts to become a major topic within China as a whole but actually already started in Shenzhen.

For the city of Shenzhen it is of great importance to react on the present and upcoming changes during this fast and on-going transition. The creation of a better living and working environment will become more and more important due to increasing living standards. A number of heavy industries moved out from urban areas that created opportunities for reuse. However, the relevance of such a transformation is questionable because implementations of new buildings can remarkable increase the density. Clearly enough there are reasons to make use of the existing buildings and this is already happening on a small scale. Within a city this dense, like Shenzhen, and with the growth potential of the past decennia the opportunities to support such a transformation are high. Many Chinese policies do not go beyond the implementation of creative industry or demolishment of the factory buildings whereas this research tries to look beyond.

PART 1



2. THEORETICAL BACKGROUND

This chapter provides a representation of the literature in relation to concepts of relevance and provides the context for the rest of the research.

2.1 (Adaptive) Reuse and Redevelopment

Reuse appears when a function is no longer useful or redundant which means the existing building can be used for a new function than the initial one. This is called adaptive reuse as stated by Langston (Langston et al., 2007). Other terms to describe (adaptive) reuse are redevelopment, renewal, or regeneration. In the western world the reuse of factory buildings is already a common practice due to low user costs, retaining style and character, the solid building qualities and the appropriateness of the location (Ball, 1999). In China reuse or redevelopment just started as an upcoming trend with possibly other benefits because of a dissimilar context. Because of zoning and regulatory conditions reuse can be, as shown before in the western world, quite challenging. However, as stated by Ball, often the costs of reusing existing industrial buildings are lower than building new ones (Ball, 1999). This makes these places attractive locations for new or other type of functions. Nevertheless, the formation of new buildings can often achieve a much higher plot ratio, or in other words higher density. Though, in the western world the rents of these reused places are often lower what makes them attractive for new or other type of users. These places can provide the possibility to give a kick-start to new companies who just start up (Ball, 1999) and as a result a lot of creative companies are attracted to these places. At the same time an argument often stated for the reuse of existing buildings, is the character and style of the often historic buildings (Ball, 1999; Langston et al., 2007).

The possibilities for reuse are in the western world often influenced by local factors, as stated by Ball (1999). For example the condition of a particular building, design features, flexibility for refurbishment, site access and wider accessibility, the existence of demand and ownership characteristics. In most of the reused industrial environments in the western world there is a demand for low cost property by low grade users (Ball, 1999). Furthermore it can create available space in areas that are already quite dense whereas these areas can provide, as also stated by Zacherias and Tang (2010) an opportunity for entrepreneurship and innovation. It gives the opportunity to experiment with new types of uses or new types of development strategies.

As seen in the western world there is a growing demand for affordable spaces for people without any commercial interest. As noted by Overmeyer (2007) this contains for example artists, social initiatives, youth and sport projects. As stated by Oswalt *et al.*: *'Temporary users are the pioneers of different uses of space and increasingly unstable, deinstitutionalized ways of life'* (Oswalt *et al.*, 2013: 11). For the further development of a specific area these groups are used to create a shift and to start up new functions. In the western world this is a result of less state owned money and more public

involvement in underutilized areas. As a consequence a lot of these places are inhabited by creative companies and start-up businesses as described by e.g. Florida, 2012; Oswalt *et al.*, 2013; Overmeyer, 2007; Evans, 2009; Zielke *et al.*, 2012 as the rise of the creative class. The creative class is part of the creative economy and as stated by Howkins, the creative economy consists of advertising, architecture, design, fashion, film, publishing and video production (Howkins, 2002). These businesses are frequently located in post-industrial urban landscapes often situated in suburban parts of the city (Evans, 2009). Thus reuse or redevelopment means to make use of an existing building for a new purpose. Important characteristics are the location, presumably a cheap rent, a new type of users, room for experiments and probably the creative economy.

2.2 REUSE IN THE CHINESE CONTEXT

The reuse of factory buildings has a huge influence on the character of Chinese urban cities. It can create a shift in the visible urban fabric, in case former factory buildings will be no longer in use for their initial function. Currently an enormous proportion of the Chinese urban scenery exists of factory buildings and industrial areas. When these buildings become redundant this has consequences regarding the spatial visibility of the city. The existing academic literature is rather comprehensive in relation to the western context but English literature about the Chinese context is limited. As Roberts *et al.* (2000:17) mentioned regeneration could be an improvement in the economic, physical, social and environmental characteristics of an area that has been subject to change. In this way it can create potential new impulses for a specific area. These characteristics can apply for the Chinese context as well.

A large amount of the reused factory buildings in China is in use for creative or cultural purposes, showing similarities with the western world. It started in the 798 factory in Beijing (Wang and Li, 2005). This factory was partly abandoned and therefore the ideal place for several artists to make temporary use of. In Shanghai the creation of such a similar industry got attention from both government and developers because of the economic potential. Hereafter the culture-led urban regeneration was followed and practiced by a lot of Chinese cities (e.g. Wang and Li, 2005; Zielke, 2012 and Parera *et al.*, 2013; Evans, 2009).

There is a worldwide apparent shift from the consumption of culture to the production of culture (Oswalt *et al.*, 2013). In China this shift took place even more rapid because of the urging need to copy success stories from the western world. The creative way of practicing redevelopment can be seen as a good start for further investments and economic growth as stated by Oswalt (Oswalt *et al.*, 2013). Many cities, in both China and the western world, make use of this urban marketing trick. As argued by equally Keane and Evans the focus in China is mostly on expansion through property led projects like a fast implementation of creative districts in former industrial areas. This has led to: 'A rash of unplanned spaces with spray-on creative facades; [where] very little innovation occurs because the development is driven by real estate speculation' (Keane, 2008, 185 In: Evans, 2009). The implementation of the creative

industries is still new and by far not that successful as in the western world (Evans, 2009). Nevertheless creative areas show an overall shift to a more knowledge based economy.

2.3 ACTUAL POSSIBILITIES FOR REUSE

The actual possibilities for reuse or redevelopment of factory buildings in China are often not taken into account. Besides the reuse for cultural or creative purposes there are regularly no specific ideas or policies regarding this reuse. As described by Wu (2012), the whole plan-making process for urban redevelopment projects does frequently take more time than the implementation of newly developed areas. Most of the former factory buildings will be demolished because of this disparity. The possibilities for reuse are also depending on the kind of functions or type of land-use. Decisions for a new type of land-use are regularly affected by different reasons, the pre-existing street patterns, the type of factories nearby and distance from the central city (Yin *et al.*, 2005). The decisions for the type of functions or land use are made in the comprehensive city plan and can be influenced by numerous developers or investors. Those places, within the municipal boundary, located closest to the central city are the ones who change their land-use function first (ibid). By industrial production people can make less money than by selling land use rights for the development of other purposes. Selling these rights is an attractive way of making money especially for the popular inner city parts of town.

Guangdong Province facilitates a redevelopment policy for the 'Three Olds'. The term refers to the redevelopment of old villages, old towns and old factories. This policy is focussing especially on redevelopment. The old villages' part includes the former farmer and fishing communities occupying the lowlands of Bao'an County in Shenzhen (Hao *et al.*, 2011). The old factories facilitate the conversion of former industrial land towards commercial use (Zielke et al 2012). The more polluting industries are often forced to close or relocate to the less developed hinterlands. Those are mostly replaced by high density housing and commercial spaces (Wu and Chen, 2010). Besides the cultural and creative industry there is an important part of redevelopment associated with residential and commercial use. Consequently most redevelopment projects in Shenzhen are invested by developers who have financial profit as their main goal (Wu, 2012). Many of the extra costs for example public facilities or sufficient car parking are ignored.

The historic value of a city like Shenzhen and the buildings within is arguable but the effect of the buildings is that it creates some feeling of identity (Liu and Ng, 2009). Besides seeing these buildings as possible barriers to investment they can probably create a further feeling of being somewhere home. And as mentioned by Liu and Ng especially for the migrants coming from everywhere around China this could create some city identity. On the other hand the conservation of specific buildings can play a supporting role in city marketing.

Due to the limited space available and because Shenzhen failed in the annexation of neighbouring land the demand for free and available land is enormous, efficient land use is of great importance. Moreover there are some reasons to make use of existing buildings in China as cheap costs

for the user; geographical location; ownership division that makes it impossible to demolish and rebuilt, but even historic value can be a reason. However, especially land use rights are a difficulty for the redevelopment of a certain area because of the different parties involved (Wu, 2012). This will be further explained in paragraph 2.5. Theory about urban regeneration is often concerned with managing urban transformation and in this way with the institutional and organisational dynamics (Robert and Sykes, 2000). The way this change is managed in Shenzhen depends on the different stakeholders.

2.4 STAKEHOLDERS INVOLVED IN REDEVELOPMENT PROCESS

Within the process of urban (re)development many stakeholders are involved. This is partly due to the existing power and the type of rules and regulations. As stated by Hald the governmental power of cities in China consists of the power of legislation, the planning and design of transport systems, ensure a strong local economic development pattern, to address land rights and to finance tools to mobilize investments (see also figure 1) (Hald, 2009). The top-down way of planning has been changed over years (Zhu, 1996). Due to a state monopoly before 1979 the investment capacity for physical development in Shenzhen was low. However, some non-governmental forces played a vital role in the development of Shenzhen. Furthermore developers are playing a more important role during the whole process. As described by Kang and Hua (2007) the redevelopment of former industrial sites is a complex process what involves many different actors. The essential actors are the government, developers and users of the site. In this way the government is the provider of guidance and control during the redevelopment process. Often a conflict can be seen in the different demands of the stakeholders involved (Wu, 2012).

Currently one of the most important regulations for urban development in China is the City Master Plan (Qian, 2013). This plan shows the ideal way of the city's growth in relation to demographic, economic and social objectives. However, the local government is currently seen as the leader in realizing urban development due to administrative, fiscal and land use power decentralization. Also Zhu (2004) points out that the local governments in China has transformed due to forces of decentralization, marketization and political legitimization. These local governments have a strong interest in development. Other local stakeholders with a strong potential interest are enterprises, market-oriented developers and other land-related interest groups (Qian, 2013).

Figure 1, based on the literature, sets out the different stakeholders involved in the redevelopment process. On the left and right sight the influence of both city and local government is described. Schoon (2013) differentiates three different groups involved in the transformation of urban villages. The first group is the local state, formed by the city and local government, the second group is the market including developers and the investors and finally the society, often represented by the original villagers (see also figure 1). The local government has got a new role, since the 1990's, in development by formulating strategies and creating growth coalitions with businesses instead of only delivering services and controlling policies (Ye, 2011).

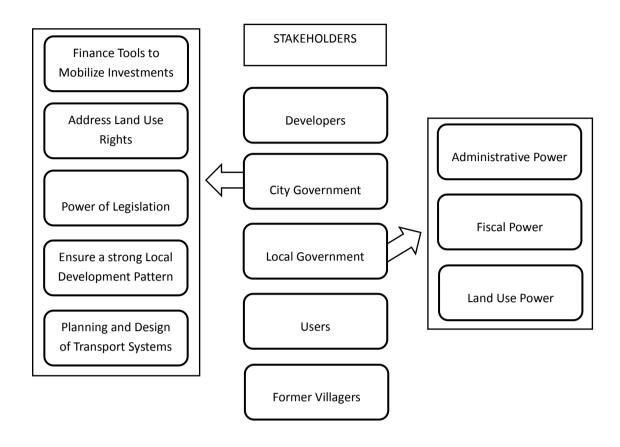


Figure 1: Stakeholders involved in Redevelopment Projects

In conclusion the local government is more and more involved in the redevelopment process. Previously the transition from agricultural to industrial land has been a major source of income for local governments (Wu and Chen, 2010). Often this did occur by informal processes instead of state planning. As a result most of the land resources are consumed by now and not all sorts of investments are welcome anymore. Currently, efficient land use is of major importance due to the limited available space. Many of the industrial sites have undergone a functional change and this was largely with absence of governmental action. Zacherias and Tang (2010) obtain for a regulatory system that can handle a large number of individual changes. Therefore the Shenzhen 2030 Development Strategy suggests a shift from traditional blueprint planning towards macro and long term level (ibid). Of great importance for this is the division of land ownership.

2.5 LANDOWNERSHIP AND URBAN VILLAGES IN CHINA

Until 1987 all urban land in China was state-owned (Cheng, 2012). In this year a land reform led to legalized paid transfers of urban land use rights. Most of the land has got a high commercial value that results in a property-led (re)development model. Due to some institutional changes in the 1990s urban redevelopments in Chinese cities were stimulated. Different tasks of the national government were

decentralized for example the decision-making for local affairs that was transferred to the provincial and city governments (Cheng, 2012). Urban reuse or redevelopment starts to become a major concern of the local government because of thirty years of on-going development ((Zielke et al 2012). Both central and local government take control of the land market and making the decision about land use planning (Kang and Hua, 2007). Developers can only lease the land for a fixed number of years.

Currently landownership in China is organized in two ways of which one is urban land belongs to the government. The other option is land use rights where the urban land belongs to the villagers (Schoon, 2013). Many of the villages in south eastern China became urbanized in the past decennia. These urban villages, also known in Chinese as chengzhongcun, became part of the urban fabric. According to Chinese law, ownership rights of the villagers are limited; it is not possible to bring this into the market (Schoon, 2013). Land use rights were introduced in the late 1980's in Shenzhen where it was first only applicable for foreign and private firms (Deng, 2005). A lot of the developments or transactions are illegal what creates an underground land market. The land use rights are transferred again and again to other enterprises and individuals who are not registered and as a result outside governmental authority (Wu, 2012).

2.6 Public Facilities in Urban and Rural Areas in China

Factory buildings in China are regularly located in enclosed areas but often the area becomes part of the public space after a function transformation. Public space can be defined as the space that is free to use and is used by urban residents regardless of their income or social characteristics (Kostof, 1992, 123-124). As described by Raco (2003) there is a potential undermining of the more socially oriented agendas by the force of developing profitable programmes with high returns. In China all public services and facilities, before China's change, were delivered by the government (Xijin *et al.*, 2009). But after the early years of transition, as described by Saich (2008), the government paid little attention to the provision of public facilities. One was mostly focused on controlling further economic growth and expanding the more profitable resources. Due to this a lot of the public services and facilities in China are inadequate or limited; growing needs cannot be met (Xijin *et al.*, 2009).

Most of the existing literature about public facilities in China is focussing on the lack of those facilities in rural areas. Tsai (2007) observed a huge difference between several villages, some with an outstanding amount of facilities while others were provided with almost nothing. The responsibility of those services is decentralized to the local governments. However, as stated by Zhang and Kanbur the delivery of public facilities in rural areas has become a challenge for policymakers (Zhang and Kanbur, 2005). As stated by Wuttke et al. (2010) the social stability of the city is endangered by the fact that the needs of the public are often ignored. Current policy trends in China show the state as an enabler of public facilities rather than the provider (Saich, 2008). In Shenzhen one of the main tasks is the provision of sufficient public facilities, like schools, nurseries, hospitals, parks, road networks together with appropriate infrastructure (Wu, 2012). In the urban villages most of the land is used for residential

buildings. Compared to the standard there is a higher amount of industrial land. The public facilities are often poor in these areas for example in Futian district in Shenzhen this is 1 to 5 percent compared to 15 to 20 percent on average (Research Group of Futian District, 2005 In: Schoon, 2013). There is an increasing claim on behalf of the government to provide a sufficient amount of space, money and assistance for the implementation of such facilities.

Despite the fact that the amount of public facilities is below average there are also some citizens who face a barrier by reaching these facilities. This is due to the existing Hukou system or Household Registration System that is implemented to control the population's mobility and restrict the continuing urbanization (Cheng and Selden, 1994). A citizen can either have an urban or a rural Hukou that means one is limited to live and work in their hometown, however, since the 1980's a more flexible Hukou has been implemented (Liu, 2005). Two new types were introduced, the temporary residential permit and the blue card. The implementation of those two types is up to the local government. The blue card makes most of the community based benefits and rights accessible and there is even a change to obtain for a regular urban Hukou. Nevertheless are the opportunities for people with an urban Hukou far above those with a rural Hukou. Some rural Hukou holder can attend schools in the cities but pay a much higher fee than other citizens (Liu, 2005). As a result immigrants from out of town face numerous difficulties in the accessibility of public facilities.

2.7 CONCLUSION

A significant part of this research is concerned with possibilities for reuse of former factory buildings in a Chinese context. Derived from the literature review above, the following characteristics seem to be important:

- The geographical location of a particular building but also distance to the central city and type of factories nearby
- The type of land use and range of possible functions
- A cheap or affordable rent
- Type of stakeholders involved in the process
- A new or other type of purpose or user
- Ownership of either land or building
- The existing policies
- Industrial heritage or historic value of a certain building
- The condition of a particular building

The planning process for reuse of vacant factory buildings requires a sufficient amount of time that is perhaps not worth it. It has become more and more an affair of the local government to deal with vacant factory space. For this reason the possibilities for experimenting, for example with creative industry, has increased. However, it looks like the creative industry in China is the most brilliant solution for those

redundant spaces. Only little has been written in academic literature about other possibilities for reuse (as also argued the newspaper in the introduction). Perhaps this is a result because most of the research is focussing on older cities like Beijing and Shanghai.

However, a lot of areas face difficulties by implementing public facilities. This is partly due to the land ownership, the Hukou system and the fast growth of Chinese cities. Also the state as enabler instead of provider of public facilities is becoming a more common practice. However, most of the existing academic literature about the provision of public facilities is focusing on rural areas. It is the question to what extent the characteristics for reuse of factory buildings, derived from the literature that seems to be relevant, and could apply for the specific case of Shenzhen. In addition a combination of reuse of former factory buildings and the implementation of public facilities is hardly ever researched.

3. RESEARCH DESIGN AND METHODS

This chapter contains an overview of the methods used as well as a description of the way the research has been done.

3.1 PROBLEM STATEMENT AND RESEARCH QUESTIONS

As described above there are several factors of importance in relation to the reuse of factory buildings and what kinds of functions are implemented. The local government is frequently in search for new ways to deal with urban problems like redundant factory buildings and the increasing amount of people. The local government finds it hard to respond rapidly on on-going transformations. As a result public facilities are lacking. In Shenzhen about one-third of all factory floors will become vacant. Commercial use is often seen as most attractive use for these kinds of places. It looks like less physical changes have to be met before it could be used this way and it creates a lot of profit. In the western world these sites are often used by small businesses. A lot of these places are filled with the so called creative industry that is also in China one of the main policy goals of the government. To investigate what the impact is on a new born city, or new town, like Shenzhen, with most of their industrial buildings just recently built, this study will answer the following research question:

What are the characteristics for reuse of factory buildings in Shenzhen and to what extent can these places be used for public facilities?

In order to answer this question the research question is divided into the following sub questions:

1. What kind of policies exists in relation to the reuse of factory buildings and the implementation of public facilities?

- 2. For what kind of purpose are most of these factory buildings in use and how does this relate to the type of ownership of either land or building?
- 3. What is the influence of the condition of a particular building and the geographical location on the reuse of factory buildings?
- 4. What kind of opportunities do different experts see for former factory buildings?

3.2 CONCEPTUAL SCHEME

The conceptual scheme describes the influence of the different variables and the relations between these variables that are investigated in this research. This means that the most important concepts and factors are visualized. The different concepts of the conceptual scheme are described below.

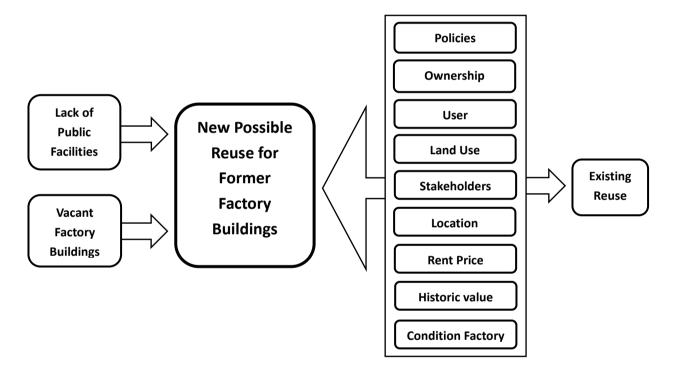


Figure 2: Conceptual Scheme of the research

The conceptual scheme starts on the left side with two problems currently facing Shenzhen. One is (future) vacant factory buildings while the other is a lack of public facilities. There has to be an initiative that results in new possible reuse of those buildings. The different factors that influence the possibilities for reuse are described on the right side and are a result of the theoretical background described above. These factors influence the existing reuse is the main focus of this research because by investigation of this existing reuse the future and new possibilities are formed.

Concepts

This research takes place by using different concepts. The relevant concepts are (adaptive) reuse or redevelopment of former factory buildings; the actors involved; public facilities and experts. (Adaptive) reuse of former factories is often the case when a building can no longer be used for its original function. This research focuses on the redevelopment because of the importance for the management of urban change. To make the research possible the sites in use for other and new purposes are investigated. All together it is not about a vacant site itself but about a former factory building that is currently in use for another purpose. The actors involved in the redevelopment process are the owners, developers, city government, users, local government and former villagers as described above in the theoretical background (chapter 2). Whereby the city government acts as the council of Shenzhen in total and the local government is related to the smaller districts within the city. The public facilities are those facilities accessible for the general public and often provided by the government. The respondents of this research are in the fourth sub-question labelled as expert because they are all involved in redevelopment processes and have an opinion on how to facilitate this in the future.

3.3 OPERATIONALIZATION

Research Design

This research takes place by use of a multiple case study and is conducted in a qualitative way. The research domain of this study is the city of Shenzhen in China. The cases used are different areas of the city of Shenzhen that have been regenerated recently or soon will be. Referring to Yin (2009) an embedded multiple case study is used whereas the design is embedded because each of the cases entails multiple units of analysis. The units of analysis are reused factory buildings as well as different actors involved in this process.

Furthermore, the research design is explorative because there is not much written in the academic literature about the redevelopment of factory buildings in China for other or new purposes. Besides the public facilities are often neglected and most of the research related is about the lack of public facilities in rural instead of urban areas. All together there is a lack of studies to refer to. The main goal of this research is to provide insights that can be used for further investigation. It can also help to bring the specific topic of reuse and public facilities to the front for both policy and scientific purposes.

This study also has a comparative design. The research is focused on differences and comparisons between different cases (Bryman, 2008). Generalization, on the other hand, is an important factor because the city of Shenzhen can be labelled as a unique case because of its geographical location and the high amount of industrialized parts (Bryman, 2008). Nevertheless there are many cities in China that currently face fast growth and possibly show similarities with Shenzhen. The decision to make use of more than one case makes the study more reliable and it creates possibilities to generalize the results, however, the explorative design of this research could make this challenging.

Data Collection and Analysis

The data collection is established in Shenzhen in a six week field work programme in collaboration with the International New Town Institute in Almere, The Netherlands. The fieldwork took place at the end of March and ended in the first half of May, 2013. The field work trip started with a three day programme including site visits and informal meetings with both students and professionals. These days were of great importance for the rest of the research and it helped setting up a network. The different Chinese students from both the Shenzhen University and the Peking University were of great importance to provide assistance for translations. The research consists of various methods of collecting data which includes interviews, policy analysis and observations.

One aspect of the data collection exists of observations and site visits in the relevant areas. This was done accompanied by a Chinese student to make it possible to ask questions and read for example signs on the road and around the area. During the visits photographs were taken what is particularly suitable to visualize the units of analysis in this paper and do further analysis afterwards.

The second method used is the analysis of existing policies. Unfortunately these policies are all written in Mandarin, the language barrier was quite challenging. To get an understanding both Chinese students and a computer translator were used. However, it remained difficult.

The other most important part of the data collection is done by the use of semi structured interviews. Additional interviews with governmental staff were used to discover the existing policies and to grasp their influences and the way they were involved in redevelopment projects. Architects, developers and users were interviewed. Most of the interviews took place in Mandarin with help from the Chinese students for the translations. Some of the interviews could be held in English if the respondent was confident enough to talk. The majority of the interviews took place together with Marie Krop, a fellow student doing a related research. Starting point to find the right people was the introduction in the first couple of days. A Friday afternoon presentation (52th Tea Party 12 April 2013) at the Shenzhen Planning Department in the Shenzhen Centre of Design about the reuse of vacant factories was also of great importance. Some interviews were conducted on site as well. A subdivision can be made of the different people interviewed (see also Appendix A):

- Two users of redeveloped factory buildings
- Two officials from the city government
- One official from the local government
- Four local real estate developers or investors
- Four architects or designers
- One researcher of a Chinese research institute

All the interviews held were recorded and fully transcribed afterwards. This created the opportunity to explore the answers that were given in relation to the research. Most of the interviews took place in Mandarin language what made an on-going conversation sometimes problematic.

3.4 CHOICE OF CASES

The cases used in this research are different reused factory buildings located in Shenzhen. A distinction is made amongst three areas situated all over the city; namely Da Lang, OCT and Shekou area. The areas all have different characteristics and are used for a diverse amount of functions. The areas provided can act as an example for many other areas in Shenzhen and even in China. These specific cases were selected because of their differences but also because of their similarities. Some of the areas are well known, like OCT Loft, others relatively unexplored and fresh, like Da Lang. A further description, of each specific area, including pictures, is given in chapter 5.

3.5 LIMITATIONS

During this research there are some difficulties or limitations that made the research occasionally challenging. An important one is the language barrier that got a huge influence on the final results. Some information is hard to reach and the help of the Chinese students is excessively significant. However, important is that they all got a full understanding of what the research is about. An extensive discussion on forehand is essential. Unintentionally it remains up to their interpretation how things are translated.

Another obstruction is to reach the right people without an existing network in China. This depends on the willingness of people to help and their network. Possibly not every respondent can talk freely that means the answers given should be treated critically. However, the expectation is that this research also covers some respondents from abroad or with a more critically, outstanding view. This research is written from a western point of view that could make it hard to act neutral; however, objectivity is a main goal. The reliability of this research is expected to be adequate. Nevertheless it is important to keep in mind that the research consists of qualitative research methods what makes the neutrality of the respondents questionable.

Statistical information in China is hard to find because of the language and as well because of the accessibility of certain sources. Therefore the amount in quantitative data in this research is limited. Also the restricted time of six weeks in China is a limitation because it already takes some time to set up a network and to get to know the Chinese students. Therefore the actual time for data collection is restricted. Some of the cases are more difficult to access like Da Lang that takes at least around one and a half hour to reach. This research consists of an exploratory research design what makes a connection to existing literature challenging. The theoretical background above primarily acted as a starting point for the rest of the research.

4. GROWTH OF SHENZHEN

Shenzhen is part of the former Bao'an County in the south of China right across the border of Hong Kong (Ng, 2002). The city of Shenzhen started to grow after 1979 whereas it was before just a small town based on farming and fishing (Bruton *et al.*, 2005). During this time China faced gigantic social and economic changes and was just recovering from the 'cultural revolution'. Shenzhen was seen as the perfect place for the development of an economy focused on export (Hao *et al.*, 2011) and the attraction of foreign investments (Bruton *et al.*, 2005). This was all started in 1978 by Deng Xiaoping: 'The chief architect of China's open policy and economic reforms' (Yeung *et al.*, 2009: 222). As a result a Special Economic Zone was introduced in Shenzhen in 1980 that provided a great contribution to foreign investments, growth and for a market transition in general (Wuttke, 2011). A Special Economic Zone is encouraged to pursue pragmatic and open economic policies by implementing innovative new policies

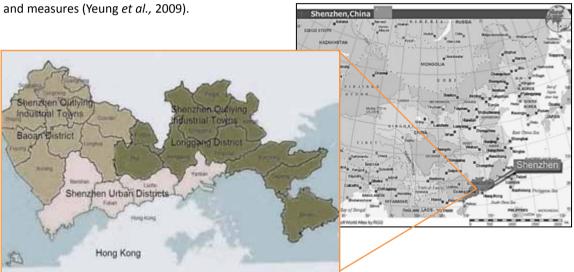


FIGURE 3: SHENZHEN WITHIN CHINA AND SHENZHEN DIVIDED IN DISTRICTS

Shenzhen is located in the Pearl River Delta in the Southern part of China in the Guangdong province (see figure 3). This region, especially inside the economic zone, was for a long time a pioneer in absorbing foreign investment and labour intensive production (Zielke *et al.*, 2012). This attracted millions of migrants from all over China. Nowadays the land prices and wage levels in the area have risen, and the lower infrastructure, planning and construction costs in other areas lead to the relocation of many factories to inner China or other Southeast Asian countries. In fact, Shenzhen is one of the first cities in the Pearl River Delta that shows this rapid de-industrialization (Zacherias and Tang, 2010; Bruton *et al.*, 2005). Shenzhen has a unique geopolitical context, as shown in figure 3 that cannot be found elsewhere in China (Zacherias and Tang, 2010). Due to the massive economic growth the GDP per capita did increase extremely the last decennia (McKinsey, 2006). The expectation is that the GDP per capita in Shenzhen will double the size until 2025. The closeness of economical flourishing Hong Kong and the

rest of mainland China create opportunities for an on-going development within this area in the next couple of years. One of the objectives is an upgrade of the existing structure towards a more knowledge based economy (Wuttke, 2011). Because of the enormous competition between the Pearl River Delta Cities, Shenzhen failed in annexing neighbouring land (Wu *et al.*, 2012). This creates extreme pressure on the existing land that is almost fully built.

PLANNING SYSTEM SHENZHEN

The Master Plan is one of the most important statutory guidance mechanisms for urban development in China (Qian, 2013). Negotiation is still of high importance for local governments. Furthermore are those Master Plans rapidly outdated because of the fast growth what makes adjustments and revisions a common practice (ibid). There are some obstacles in relation to the existing planning system which is extremely detailed and punctual. As stated by Mrs Zhang there is a City Master Plan and this strategic plan is designed by the government instead of planners. It is more an economical plan, rather than a real spatial plan (Int. Zhang, 2013).

'Each of the master plans are planned for a period of thirty years, but every five years there is the chance to modify the plan. So the developers are always looking at this five year period to work on the government to change the land use of a place. [-] The government still has controlling line with the city master plan (Int. Zhang, 2013).'

The link between developers and government has a huge influence on the type of land use. Below this Master Plan there is the Comprehensive and Constructive Plan that give guidance to a lower level. All projects involved with public facilities belong to the Comprehensive Plan as stated by Mr Liang. In some areas the public facilities belong to the constructive plan, however, in the end the planning comity gives permission for implementation or not (Int. Liang, 2013).

5. CASE DESCRIPTION

This chapter describes the different cases used for this research in Shenzhen. The actual location of Da Lang, OCT Loft and Shekou is shown in the following map (figure 4).

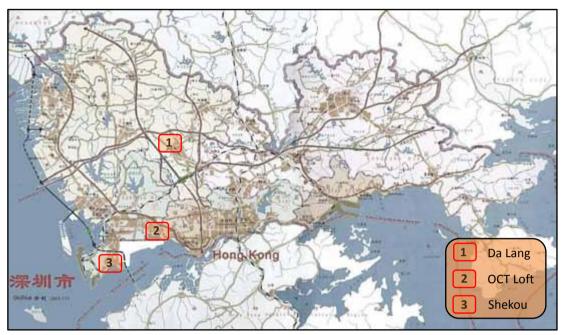


FIGURE 4: LOCATION OF DA LANG, OCT LOFT AND SHEKOU AREA WITHIN SHENZHEN

5.1 DA LANG AREA

Da Lang is part of the much bigger Bao'An District located in the Northwest of Shenzhen whereas it is for most citizens an unknown area at the outskirt of the city. This part of Shenzhen is not related to the Special Economic Zone like OCT Loft and Shekou. It consists of a mix of several former villages but it has faced an extensive growth and intensification, especially during the last decennia.

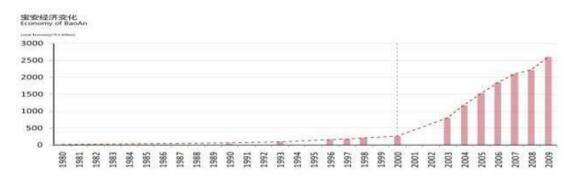


FIGURE 5: ECONOMIC GROWTH IN BAO'AN

The advancing city and the loss of farm land pushed farmers to find new ways of living. All the former villages have been redeveloped into dense building blocks. The renewal was organized by the villagers

themselves whereas they could rent out these buildings. The last thirty years the former village grew to be part of the city. The area has been built up quickly in a really condense way. The economy of BaoAn, where Da Lang is part of, increased rapidly during the last century as shown in figure 5. Currently the area exists of around 500.000 inhabitants of which almost all of them are immigrants from other regions around China. This means around 97 percent of the inhabitants is migrant, the so called floating population (figure 6).

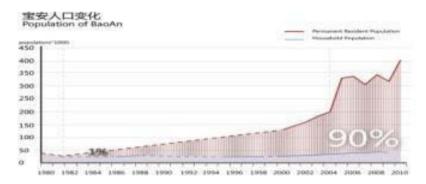


FIGURE 6: POPULATION GROWTH IN BAO'AN

Most inhabitants have a low educational level. Besides there are a lot of young people living in Da Lang in the age between 18 and 25 years old. Only around six percent of the population is older than forty, probably a result of the origins of this place. Most of the inhabitants are working in the manufacturing industry. Because of the strong economic growth of the region of Da Lang the economic situation as well as the job opportunities of the inhabitants will change. The region was previously known because of its clothing manufacturing buildings. Some of these factory buildings have become vacant by now. A huge part of the area exists of (former) factory buildings and warehouses mixed up with the informal residential livings often built by the villagers. The accessibility is increasing but it is still difficult to reach the city centre, thus the area operates almost as an autonomous part of town.



FIGURE 7: FORMER FACTORY IN USE AS COMMERCIAL CENTRE AND NURSERY IN DA LANG

5.2 OCT LOFT AREA

OCT area lies in the Midwest part of Shenzhen, in Nanshan district. In the past it was created as a particular part of the Special Economic Zone and as a result the area can now be seen as a central part of town. The accessibility improved during the growth of the area that means by now the area is surrounded by metro lines, main roads and buses. Currently the area is known because of its shopping, theme parks, culture, creativity and its peaceful living environment. Consequently the focus of this area lies on residential buildings and commercial activities. It is built in a lower density than is common in Shenzhen. This is often mentioned as an environmental quality (Zacharias and Tang, 2010). The theme parks in the area attract millions of tourists from around the Pearl River Delta. Some parts are totally inhabited by the rich and elite what makes it unaffordable for households with smaller budget (Ng, 2003).

Best known within this area is OCT Loft, that covers the eastern part of the OCT area, here highly priced real estate is combined with art and culture (Zielke et al., 2011). It is designed as a creative park occupied by different design or architecture companies and a lot of, according to the Chinese standards, expensive restaurants and coffee shops. Almost the whole area of OCT Loft exists of reused industrial warehouses. Buildings that were before mostly inhabited by the Konka Electronic Group. They were built in 1980's and redeveloped by the OCT Real Estates company from 2004 on (Zielke et al., 2011). In 2005 the area hosted the 1st Shenzhen Biennale for Urbanism and Architecture. This gave the area a huge boost and created its current identity. The creative park is known as the place to hang out in Shenzhen with regularly events, exhibitions and performances.



FIGURE 8: FORMER FACTORY IN USE FOR BUSINESSES AND RESTAURANTS IN OCT LOFT

5.3 SHEKOU AREA

Shekou area is an immense area in the South western part of Shenzhen and also part of the Nanshan district. It is located right next to the sea and with Hong Kong directly across the water. It is one of the first industrial parks, developed right before China's opening up in the 1980's. This area was first known, like Da Lang, as a fishing and farming community. After the creation of the industrial park it became the

first seaport of Shenzhen. Shekou Industrial Zone is developed by the China Merchants of Hong Kong, the oldest shipping company in China. This area became also part of the Special Economic Zone because of its significance, including the port function, as a gateway to the rest of China and with of course Hong Kong nearby.

Nowadays the area exists of culture and creative industries, businesses, commercial and leisure activities (Wu *et al.*, 2012). This area is mostly known because of its port function and shipping business and therefore it consists of many industrial activities. Besides there is a creative park consisting of former industrial warehouses and an entertainment area inhabited by many expats and business people. The accessibility of the area is quite good although it is the end of the Shekou metro line. The area lost some of its industrial functions and as a result some of the factory buildings became obsolete. The same Shenzhen Biennale for Urbanism and Architecture mentioned before will now, in the end of 2013, settle down in the Shekou area in some of the abandoned factories.



FIGURE 9: FUTURE REUSED FACTORY BUILDING AND CREATIVE PARK IN SHEKOU

5.4 CONCLUSION

All three areas started to develop around China's opening up in the 1980's. Two of them developed because of the implementation of a Special Economic Zone and the development as an industrial park (OCT Loft and Shekou) and the other (Da Lang) as a consequence of the growth possibilities at the outskirts of Shenzhen. Also here was the industrial function of great importance.

All three of them have already faced a (partially) redevelopment, whereby some of the factory buildings have been or will be used for other purposes than their initial one. The redevelopment in OCT Loft started years ago and in the other two areas it is more a future expectation whereby parts of Da Lang already have been transformed. There is a big difference between the type of functions in the three cases that are further investigated, next to other differences and similarities, in the rest of this research.

| PART 2 |



6. POLICIES FOR REUSE AND PUBLIC FACILITIES

Governmental policies have a certain impact on the type of actions that are made. The first question answered is:

What kind of policies exists in relation to the reuse of factory buildings and the implementation of public facilities?

This paragraph gives an overview of some relevant policies that are of importance for the possibilities for redevelopment. Further on the existing policies in encouraging public facilities will be clarified.

6.1 Policies regarding reuse Factories

In relation to the reuse of factory buildings there are no specific existing policies yet. The Urban Renewal Office is working on the formation of these types of policies at the moment, which will probably be implemented in the end of 2013 (Int. Chun, 2013). These policies are specifically covering the redevelopment and reuse of former factory buildings within the Shenzhen municipality. The Urban Renewal Office, as a special department of the Urban Planning, Land and Resources Commission of the Shenzhen Municipality is particularly looking at this.

There are also some more general policies for the different methods to fulfil urban renewal in Shenzhen. There is one document called 'Instruction on Urban Renewal Methods' [深圳市城市更新办法] (Shenzhen Municipality, 2009). This document is related to the regulation of urban renewal activities and sets a standard for the development rate. The description of urban renewal that is used in the document is as follows:

'Urban renewal is an approach used to improve urban functions, optimize industrial structures, improve the living environment, promote conservation, and intensify use of land, energy and resources in a sustainable, socio-economic way (Shenzhen Municipality, 2009).'

As stated by the policy document, both infrastructure and public service facilities are in need of improvement. Moreover the promotion of conservation and the need of intensification of land in a sustainable way, as stated in the document, pointing towards reuse. Priority should be given to state-owned land for infrastructure and public facilities (art. 43). Investments by the government on urban renewal projects always require a certain amount of provisions like public facilities. However, when there is a change of function in land use this should be in accordance with the relevant laws and regulations of the Municipal Planning and Land authorities (art. 25). Urban renewal also means an industrial upgrade and competent departments should provide those related industries with solid advice (art. 7). Industrial

upgrading means a change in function of residential, office, commercial or other business purposes (art. 38). The following policy documents are examples for this.

Another document is the 'Instructions regarding Industrial Area Upgrade' [关于工业区升级改造的若干意见] (Shenzhen Municipality, 2007). This policy document has a strong focus on the different steps needed to fulfil the upgrade of industrial areas. The first step is the collection of some comprehensive diagnostic details about the different industrial areas by the different departments involved. The second step is a classification and division into categories like demolition or reconstruction, and most important to solve problems. Also important is the implementation of supporting policies regarding transformation.

Commercial Use

The 'Three Olds' Reformation Policy' [三旧改造] is specifically related to the Guangdong province (Guangdong Province, 2008). This policy tries to facilitate the redevelopment and reuse of three different types of land use, namely old towns, old villages and old factories, including a shift from industrial to commercial land (Zielke *et al.*, 2011). This is seen as the development strategy of the Guangdong province because it creates new use for aged property.

Creative Parks

There are some specific policies and subsidies in Shenzhen for the creation and support of the creative industry. This is a result of a drive to be part of the World Creative Cities Network (UNESCO, 2013). This automatically leads to a greater attention for this specific type of function. This is also caused by the different subsidies that make it appealing for stakeholders to invest. A lot of the redeveloped factory buildings in Shenzhen contain some sort of creative type of function, for example in most of the OCT Loft area.

One of the main documents is the 'Master Plan of Promoting and Developing Cultural and Creative Industry of Shenzhen 2011-2015' [深圳文化包意产业振兴发展规划] (Shenzhen Municipality, 2011). This policy document carries out the further expansion of the culture and creative industry. In their words this means to provide and support cultural products and services like journalism, publishing, radio, film, creative design, cultural software, animation games, new, cultural information services, cultural exhibitions, performing arts and entertainment, cultural tourism, advertising, replications, arts, crafts and other industries. The city government has a 500 million Yuan budget to spend between 2011 and 2015 on the development of cultural and creative industries. The government wants to encourage cultural enterprises to actively participate in old industrial areas, old villages and old city towns in order to promote industrial upgrading.

Another document is the "Three Olds' Reformation and Constructing Cultural and Creative Parks' ["三旧"改造建设文化产业园区] (Shenzhen Municipality, 2008). This policy document gives an

outline for the promotion of cultural industries alongside the 'three old' transformation. Old industrial areas can be turned into creative parks. Also, the government is giving support to those businesses that want to develop their headquarters in a cultural industry park. Thus, from the perspective of those policies, a function change needs to be facilitated from industrial towards more residential, commercial and business purposes with a strong emphasis on the creative industry.

6.2 Policies regarding Public Facilities

The amount of public facilities that are implemented, and the location, is often decided by the city government. The government is always forced to implement public facilities in urban renewal projects (Shenzhen Municipality, 2009). In general this is part of the existing Master Plan and furthermore, the plan provides additional details about certain locations. The improvement of land use efficiency is one of the main goals of the document (Shenzhen Municipality, 2010).

In another document called 'Shenzhen Urban Planning Standards and Guidelines' [深圳市城市规划标准与准则], a subdivision of public facilities into eight categories is made, namely: educational, health care, cultural entertainment, sports, social welfare and support, administration and community services, commercial facilities and municipal utilities (art. 4.1.1) (Shenzhen Municipality, 2004). This document also states that facilities on both the municipal and district [local] level should be based on the requirements for urban planning, socio-economic development objectives and social needs (art. 4.2.4).

'By the allocation of public facilities providing residents with a suitable living environment and to meet people's material and spiritual needs.'

However, in many areas in Shenzhen it works a bit different. Most of the existing land is owned by the government, but can be leased to other parties for up to seventy years. In Da Lang nearly the whole area is owned by the former farmers, what makes governmental guidance challenging. Most of the inhabitants are former villagers without actual rights or power to create public facilities in this urban area. Because of the rapid growth within this part of town, the local government is struggling with new policies and interventions to create room for public facilities.

One policy document is specifically about public facilities in Bao'an, the greater district where Da Lang is part of (Shenzhen Municipality, 2005). It is called 'Specialized Plan on Public Facilities in Bao'an District, Shenzhen 2005-2020' [章宝安中心组团公共设施现状] and it discusses the importance of implementation of public facilities that results from the growth of the urban population in the last twenty years. It mentions different types of public facilities and how many of them should actually be implemented and where. However, it remains vague how the local government can facilitate this.

6.3 CONCLUSION

To conclude, both local and city government want to facilitate an industrial upgrade and transformation of their existing industrial space. As described in current policies, this mostly towards commercial or business reuse with the focus on creative industry. Moreover, only the creative industry receives money for further expansion, sometimes combined with incentives to make use of former industrial areas. The promotion of other types of use for those factory buildings does not exist yet. Another main goal is the improvement of land use efficiency that shows a discrepancy with reuse because none of the government officials knows how to facilitate such a transition. Subsequently investors are committed to add extra floors when they are developing an existing building.

7. Type of Reuse and Ownership

The following chapter outlines the present state of different factory buildings in each of the specific areas of Shenzhen, Da Lang, OCT Loft and Shekou area.

For what kind of purpose are most of these former vacant factories in use and how does this relate to the type of ownership of either the land or the building?

There are different possibilities for the reuse of factory buildings. Most of the empty factories are redeveloped into housing or small businesses as stated by Mr ZhiGang, Master Planner of the Shenzhen Municipal Urban Planning Department (Int. ZhiGang, 2013). The government has several projects where it wants to change the buildings into living space; however, most of them are turned into commercial places (ibid). The contract is still in effect and a commercial place generates more money, but, as stated before, creative businesses are also popular. The reason why former factories in the whole of Shenzhen are attracting many creative companies is argued by Mr ZhiGang:

'There are three reasons. The first is the space: old factories have a lot of space for the creative industries to create such a park. The second is the market; only in this area one can earn some money and in other areas not. Third are the people, for example architects, who are willing to go to these places (Int. ZhiGang, 2013).

Mr ZhiGang also describes the problems that arise by the accomplishment of the land and the amount of money that should be given as compensation. As he argued, it involves a lot of negotiation with the factory owners and it is difficult to get the land as long as the contract is in effect and they still own the land use right. However, hereafter the land automatically belongs to the government (ibid).

7.1 DA LANG: NEIGHBOURHOOD CENTRE

Commercial function

In Da Lang it is possible to find a couple of examples on how to make use of former factories. One of the options is reuse for commercial purposes. This is often mentioned as the most profitable option that generates the highest amount of money. The commercial centre lies in the northern part of Da Lang and it consists of six former factories that are now being further transformed. As stated by Mr Hu, spokesman of the Da Lang local government:

'Also due to the global economic crisis a lot of people do not want to manage their industries or factories. That is why a lot of them changed into commercial use (Int. Hu, 2013).'

The area was originally built as a manufacturing area with production workshops and residential dorms for the workers, as stated by Mrs Lv, Vice Manager of a Da Lang Real Estate Company (Int. Lv, 2013). The buildings were established around 20 years ago. As a result of the market, a decision is made to implement a commercial function, as stated by Mr Mei, Developer and Investor in Da Lang, because the residents need a way to spend their money (Int. Mei, 2013).

The commercial centre in Da Lang exists of several clothing stores and food stands and is developed in accordance to the comprehensive urban plan of the government (Int. Lv, 2013). The developer saw opportunities within this area because another commercial centre was quite far away, that means the villagers had to travel a lot to buy life supplies. The government was supportive in the creation of such a new centre and gave both the developer and investor some privileges (ibid).

Other functions

Another function for former factories that is seen in the Da Lang area is the use for a school and a couple of nurseries. As stated by Mr Hu, a lot of former factories are rented out for different kind of purposes (Int. Hu, 2013). The nurseries are rented privately, that is common in Shenzhen. The reason, according to one of the managers, to choose for both the location and the building was because of the low rent and because the building was not that noisy, as stated by the manager of the Da Lang nursery (Int. Kg, 2013). There also was a higher demand in the area because of the Hukou system mentioned before. The nurseries do not get any governmental support but, as the manager mentioned, it is possible that they will receive some subsidy if the investor decides to give the nursery an upgrade. The nurseries need to meet certain standards to be able to receive those subsidies. However, as stated by the spokesman of the Da Lang government, these nurseries are not allowed (Int. Hu, 2013).

'Some private ones [nurseries] are allowed by the government, so they can use a factory structure for a nursery, but this is not very formal and also not that common in the area. It is sort of illegal (Int. Mei, 2013).'

One of the nurseries was not even able to talk freely because they expected a journalist who could provide them bad publicity. This makes it complicated for the government to monitor a certain standard and as a result the nurseries do not want to talk about their business, afraid of getting a reprimand for acting incorrectly.

Ownership of either land or building

Almost all the land in Da Lang is owned by the former villagers who rent it out to different users. Since 2008 the buildings are rented by the investment branch of a real estate company. The investment party wants to make more profit and wants to develop a more systematic real estate industry alongside a 12 branches bookstore (Int. Lv, 2013). The area was particularly suitable for the development of a commercial centre. The only reason why the stakeholders in this area made use of the existing factory buildings is because the contract forced them to do so (Int. Lv, 2013). The fact that both the building and the land is owned by the former villagers, made it impossible to demolish the buildings.

'We as developer signed a contract with the villagers for 25 years, so not really for a long time. During this period expansive construction work cannot be built because the time is limited. The government does not encourage this kind of demolition and the contract did not allow us to demolish the buildings either (Int. Mei, 2013).'

As a result the commercial centre is making use of those buildings in a more or less temporary way.

Vacant Factories?

Compared to other parts of the city, Da Lang is still doing well in relation to vacancy, because a lot of people are working in the clothing factories, what is the most commonly used type of factory in Da Lang (Int. ZhiGang, 2013). At the same time it is not doing that well, as specified by Mr ZhiGang, because there are some empty places that nobody wants to rent. Currently there is still a proportion of clothing factories that can only survive in this area because a lot of those factories are clustering together, what makes it difficult for others to move (ibid).

'The price of most of the land is experiencing, or subject to, increase, and due to poor management, some of the factories went bankrupt. However, the owner of the building can make a decent live by renting out. So factories are rarely really abandoned or vacant, because of the value of the land and the space within the building (Int. Hu, 2013).

Renting out these factories is one of the main ways to receive money without demolition. Of interest is that in this location in Da Lang the factories were asked to move out because of the shift from manufacturing to commercial use, as written down in the Comprehensive Plan for the Da Lang area (Int

Lv, 2013). Both the developers and the investor got support from the government to negotiate with different factories to move out. As stated by the vice manager of the investment party:

'We negotiated with them to move out or the government forced them to move out because of the importance of commercial space within this area. [-] The government gave the factories abundant time to move out and provided some privileges to help the factories to settle down. This could have something to do with non-financial compensation, like extra floors in another area (Int. Lv, 2013).'

Thus because of the Comprehensive Plan that the factories in the commercial area are or will be reused and not because of an existing vacancy problem, this is emphasized by Mrs Hu.

7.2 OCT LOFT: A CREATIVE PARK

Creative function

A lot of the redeveloped factories in OCT Loft are in use for the creative industry which means the site consists of many shops, offices, galleries, bars and restaurants.

'The place used to be an industrial area, but during the 1980's and 1990's a lot of factories moved to other cities and places. So this area, although it is kind of in the city centre, was a little bit isolated but that made it interesting to develop (Int. Han, 2013).'

As stated by Mrs Han, the Vice General Manager of OCT Loft Culture Development, the government asked the OCT Group to develop the area after many factory owners moved out. Previously the area turned into a Special Economic Zone that made it become economically powerful. For creative industry a function or zoning change is often not necessary because in addition the creative industry can be titled as an industrial function as stated by Mr Zhao, Project Manager of the Desjoyaux Pool Shop in OCT Loft (Int. Zhao, 2013). Almost the whole OCT area exists of those kinds of smaller businesses and related functions. It is a bit playing with existing rules to implement these specific functions.

Other functions

There are some other functions located in OCT Loft as well, for example the swimming pool shop mentioned before (Desjoyaux Pool Shop). As an upcoming brand in China renting in other popular areas was too expensive but at OCT Loft it was still reasonable as stated by Mr Zhao (Int. Zhao, 2013). The shop had troubles to find a location where they could actually build a swimming pool because in a lot of places it is not allowed to build one inside. Also the ground floor would be best in relation to weight and pressure problems. The shop and showroom for swimming pools in OCT Loft is labelled as creative furniture (ibid). Like other shops in the OCT Loft who are selling designer lights and benches and as the shop owner said the products they sell are also for the decoration of your house (ibid). Thus to avoid the

zoning rules for this building and to find a tenant the rules were not followed that strictly, or were circumvent.

The developers do often not need to register or make clear what they want because the government will shut their eyes for as long as they agree with it as stated by Mr Chun, Member of the Urban Renewal Office Shenzhen (part of the Urban Planning, Land and, Resources Commission of Shenzhen Municipality) (Int. Chun, 2013). Moreover this could be a result of the regularly strong linkages between developer and government.

Ownership of either land or building

OCT group is the owner of almost the entire parcel of OCT Loft, including all the buildings. The land is owned by the government, but the OCT Group actually started as a state owned company with the redevelopment of those buildings (Int. Han, 2013). Currently this company is doing business all around China, but it all started in OCT when it became a Special Economic Zone (Int Zhang, 2013). All the land in China is owned by the government and rented out for certain periods, like thirty years for industrial use or seventy for residential use (Int. Chun, 2013). An exception, as described above, is the construction in Da Lang in the former villages. Almost the whole area is managed by the OCT Group, which is mainly involved in the allocation of different functions and the renovation of the exterior of the buildings. The OCT Group is also responsible for the recruitment of artists, designers, institutes, companies or studios and they are in charge of the organization of artistic and cultural events (Int. Han, 2013).

The swimming pool shop has got a contract to rent the place for five years. The shop owner said that after this period they hopefully will have grown enough to move to a much bigger place (Int. Zhao, 2013). Most of the users in the area are renting their place for a short period of time.

'Why you think they do not demolish the factories and build new ones? The property in this area is very mixed [-]. Most of the property located in the area belongs to OCT Group, but some other buildings are very much in confusion about the property rights (Int. Zhang, 2013).'

Mrs Zhang made some critical connotations for the reasons to choose for reuse of the present buildings. This is partly due to an unclear distinction about who owns what and as she argued there are some really good buildings in OCT that are not in use:

'They are so weak [the other owners besides OCT Group], they are at the edge of being broke, so they do not have the energy to fix it, renovate it and rent it out. But they do not want to give it up. Some other properties are in good use, but they do not belong to OCT. So in case everything would have belonged to OCT in China, if it were a complete piece of land, they would have demolish and rebuild it. But now it is only a little bit here and a little bit there, so the big developers are not interested to build up small things again. So why do we not just reuse it? [-] They are just waiting until the ownership is sorted out (Int. Zhang, 2013).'

Because of the fragmented ownership in OCT Loft, it is difficult to create an overall strategy for urban renewal, what is a reason to make use of the existing buildings. Thus OCT Group chooses to use a temporary use strategy to add value to the site by the implementation of creative industry.

Vacant Factories?

It is not always the choice of the factory owner to relocate and also in OCT Loft some of them were asked to leave because of new or different plans for the area (Int. Han, 2013). This means that also in this area it is not a result of vacancy but more a result of the shifting demand or changing opportunities within the area. Currently it is difficult to find an empty, available, building in OCT as stated by Mrs Zhang. A few years ago this was easier; this is related to the location (Int Zhang, 2013). Some factories did relocate themselves but others were asked by the OCT Group. As stated by the Vice General Manager of OCT Loft Mrs Han the factories did want to leave because they felt the city is no longer suitable for a manufacturing industry (Int. Han, 2013).

7.3 SHEKOU: A CREATIVE COASTLINE

The plan for the area of Shekou is to become a creative coastline what has been decided by the government (Int Zhang, 2013). The area exists of different parts of which a portion of the former industrial factories in the harbour part will be redeveloped.

'The area exist of three different type of buildings, warehouse, silo and machine building, all together good for around 20.000 m2 (Int, Bouwman, 2013).'

The buildings must be filled with museums, schools, design labels and other organizations that all come together here and can share their experiences, as specified by Mr Bouwman, Architect and Creative Director of the Shenzhen/Hong Kong Bi-City Biennale of Urbanism and Architecture (Int. Bouwman, 2013). Most of the factory buildings in the area are abandoned by now. However, the cargo and passenger port are still in use but only the passenger port will remain in the future (Int Zhang, 2013). There are three major development plans, one for the empty cargo port, one for an empty factory and another one for the glass factory. The glass factory is the scene for the Shenzhen and Hong Kong Architecture Biennial. This year the 6th of December the so called beta version of the redeveloped former glass factory has to be finished. Because of its success it should persuade the owner to move on and make further improvements on the buildings as argued by Mr Bouwman (Int. Bouwman, 2013). It should not be used, as what happens often, as a semi marketing trick. This is endorsed by different scholars (e.g. Wang and Li, 2005; Zielke, 2012 and Parera *et al.*, 2013; Evans, 2009). As stated by Mr Bouwman it is all about the urban potential of the industrial area. There is a strong need in Shenzhen to make use of the biennial for further urban development (Int. Bouwman, 2013).

Ownership of either land or building

The land is in use by China Merchant, an enormous developer in China. China Merchant does not own the land but in the end has the right to make use of the land. These rights were given by the central government because at that point in time there was no property law (Int. Zhang, 2013). Thus China Merchant received a privilege in the past, what made them become a huge company, similar to the OCT Group. The land is qualified as industrial land but in China the rent can change every year, even with an increase of thirty percent per year. As stated by Mr. Bouwman:

'This makes the factories easy moveable. When the rent increases, the factory will move away and built a new complex somewhere cheaper (Int. Bouwman, 2013).'

This was also the reason for the former glass factory to move out what makes it now suitable to create something new. China Merchant is the most important investor in the whole project but if there is not enough money the government should lobby to attract other companies (Int. Bouwman, 2013). As argued by Mrs Zhang the whole redevelopment process of the glass factory is just an intermediate idea. This whole project will increase the land value, improve the infrastructure and last but not least this impressive ocean front area has got a lot of opportunities. As she said it will take maybe five or ten years before they are going to demolish most of it and rebuilt it in a higher density to make more profit (Int. Zhang, 2013). In this manner it provides only a temporary solution for this piece of land.

Vacant Factories?

As stated by Mr Bouwman there is not a real vacancy problem of factory buildings in Shenzhen.

'There is not really a vacancy problem in Shenzhen. Not like we know it in the Netherlands as a symptom of serious decline in the industrial economy. There are abandoned places here in Shenzhen but that is a result of modernization. This is due to the possibility that there is a better, faster and cheaper option so this idea is totally opposite of our idea of vacancy (Int. Bouwman, 2013).'

However one is already looking for companies that want to settle down in the former factory building or glass factory when it has been redeveloped. But as stated by Mrs Zhang, the price did already go up to 85 Yuan per square metre, and as she said that is quite a lot for an empty factory that you need to renovate yourself (Int Zhang, 2013).

7.4 CONCLUSION

The three areas described above have different characteristics in relation to land and building ownership, but also in relation to the type of functions implemented. The land in both OCT Loft and in Shekou is owned by the government and most of the buildings are owned by the massive 'partly' state owned companies, who became enormous after these specific areas were marked as Special Economic

Zone. On the other hand both the land and the buildings in Da Lang are owned by the former villagers. The areas are all planned in a top down way through the local, or city government that makes the decision for a specific path of the whole area. This is done by use of the Comprehensive Plans or by use of specific policies; however, those policies are often not that specific related to certain areas.

All areas do not face a real problem with vacancy because the amount of abandoned factory buildings cannot be considered as too high. In addition, most of these buildings find a new function or are demolished soon. A division in ownership can make it really complicated to redevelop an area. This may cause the temporary use of the factory buildings like in OCT loft and maybe also in Shekou and Da Lang. In this way temporary use is just a strategy for an area in transition for another purpose to increase the value.

8. Influence of specific Buildings

This chapter provides an answer for the following sub question.

What is the influence of the condition of a particular building, flexibility for refurbishment and the geographical location on the reuse of factory buildings?

A division is made into the condition of a particular building that can be seen as the explicit characteristics of a building. Flexibility for refurbishment and in this way the kind of improvements the different cases face and the existing legal requirements but also the location of a particular building are further explored.

8.1 Building Characteristics

There is a huge difference between the building characteristics in the different cases. Both Da Lang and OCT Loft mainly exist of former warehouses whereas Shekou has some more distinctive buildings, for example the former glass factory. One could say that this building may looks unmanageable and from a first point of view it looks like the Shekou area has some more difficulties in relation to the potential of redevelopment. However, for the swimming pool shop both OCT Loft and Shekou were the only possible locations to create this type of shop. The reused factory building was actually the only option for this shop to start up their business (Int, Zhao, 2013).

Also argued by Mr Bouwman a lot unusable buildings have been built so redevelopment is not an option for each factory building. However, he called the buildings in Shekou special ones. Even though the buildings are only thirty years old, they won a win a price for functionality and this buildings are industrial heritage. So he assumed that the building quality is workable and that it has such a pureness inside that it is not getting outdated (Int. Bouwman, 2013).

'So it is all about keeping some icons and not about keeping all factory buildings in general. It is about giving some charm and therefore it is not necessary to retain all (Int. Bouwman, 2013).'

Mr Bouwman is in favour of keeping some distinctive buildings only and does not try to conserve as much as possible. Nevertheless said Mrs Han the reused warehouses in OCT Loft could add some unique style to area; however, she argued that they are not an essential part (Int. Han, 2013). From her point of view it is not necessary to have those former factories but it could either be another building.

As stated by Mr Hu, a public hospital is highly needed in the area of Da Lang. Due to rising living standards there is a request for a cinema, theatre, gym and a music hall whereas most of the former factory buildings need to meet specific architecture requirements for these types of functions (Int. Hu, 2013). If the land is used for public facilities it is required to compensate the property owner because he or she wants to make money. This is only possible when the government is paying a high fee of compensation what is difficult to measure. As argued by Mr Chun how much is it worth to change a private space into a public one? (Int. Chun, 2013). But as stated before by Mr Hu the standards required for factories and for public facilities are not similar (Int. Hu, 2013). For example it is not allowed by the government to make use of former factories for educational purposes. Both factories and schools have different kind of architectural requirements in relation to light, ventilation and similar things (ibid). It actually has to be worth to keep specific buildings what depends on the kind of improvements that have to be made.

8.2 Types of Improvements

The different cases faced several methods of improvement for redevelopment of the factory buildings. In Da Lang the redevelopment took place in three phases of which currently one is finished, one is still under construction and one is a future goal. There are currently two former factory buildings under construction to be redeveloped into a department store as explained by Mrs Lv:

'They add some decoration on the surface, divided the interior space into small pieces to cater different brands. And they improved the light system, refined the electricity system and drainage system. Apart from this they made some effort to build the precaution system in case of the disaster, such as fire or earth quake (Int. Lv, 2013).'

This means that different interventions were made in order to make it usable for a new function. However, there were difficulties in transforming from an industrial to a commercial function. Especially in relation to the building and the way it is built. As stated by Mr Mei it was necessary to implement some new connections and some platforms to divide the area and change the structure to make it suitable for the new purpose (Int. Mei, 2013).

In OCT Loft the buildings were renovated by the OCT Group by giving them some physical improvements.

'The buildings were not that featured as 798 in Beijing. They have a lot of industrial architecture. But we had just old buildings. We hired some architecture design companies to give some suggestions. We tried to combine a more contemporary concept to the old architecture. We are not just using the original buildings but trying to add something as well (Int. Han, 2013).'

These improvements were mostly done because the company wanted to add some unique style to the otherwise just ordinary buildings but at the same time the conditions within OCT Loft are not that perfect as argued by Mrs Han because the parking places are old and insufficient. The space available is limited and there are not that many places to stay overnight. Some of the lifts are in a bad condition and as she said this is because the buildings are old and some things need to be fixed (Int. Han, 2013). There were and are physical improvements that have to be done on the exterior. For the interior the shop owners did not get help or support throughout the redevelopment process.

'It was just an empty hall consisting of concrete. We had to build everything from toilets to air-condition, electricity and walls. Even without the swimming pools it costs already around 1 million RMB to make the place workable (Int, Zhao, 2013).'

And next to this Mrs Zhang explains:

Sometimes it is just about some windows and so on but sometimes it is a lot more work. Sometimes the walls are just one thin layer. How can you use it? There is no isolation; it is noisy (Int. Zhang, 2013).'

For the exterior it even meant that it was not allowed to change anything on the outside of the building. Only the interior in OCT Loft could be changed (Int. Han, 2013) but at the same time there were a lot of restrictions as stated by the Mr Zhao, the manager of the swimming pool shop. It was not allowed to build a swimming pool outside and even the balcony led to many problems because external changes were not permitted. The logo above the front door was too big and the OCT Group said that it looked like the shop owned the whole building. Mr Zhao also mentioned that they painted the outside wall but even this was not allowed, it had to remain the original color and the imaged look (Int. Zhao, 2013).

8.3 LEGAL REQUIREMENTS

There are many legal requirements that either make one force to make use of the existing factory building or make it impossible to implement a specific function. Sometimes the developer is forced to make use of the original building because of a contract that does not allow them to demolish the building; this is what happened in the Da Lang commercial area (Int. Lv, 2013).

Mrs Zhang states about requirements for redevelopment:

'There is nothing we can follow. When I sign a contract with the developer there are often a lot of gaps in it. So actually they can often not go for submission. I think that is why they often do not use an architect. So when you ask about these restrictions. We do not really have a law for it. We have regulations for renovation, but we do not have an act or regulation for these fabric or old building regeneration (Int. Zhang, 2013).'

She further explained that if you want to transform a building that was formerly used as storage into an office you need to go through the whole formal procedure. The land use should change but also the schematic design what ends up in intensive process. A lot of developers decide not to do this but reconsider the whole redevelopment as interior change. When at the same time a lot more is happening than a transformation on the inside.

'Chinese regulation is sometimes not the best one, but it is the strictest one. So many people do not follow it, because it is too strict. It is a stupid circle, because it is too strict people do not follow and because people do not follow the rules become even stricter (Int. Zhang, 2013).'

Because of the strict rules and the different building standards it is nearly only possible to change the former factory building into a commercial place or a small business as stated by Mr ZhiGang (Int. ZhiGang, 2013). Next to that, the government should agree with either the reuse or demolishment of the building as stated by Mr Xu, Chairman of the Shenzhen Yousheng Real Estate Development CO (Int. Xu, 2013). But as elaborated upon by Mrs Zhang this is often not happening. Temporary use could sometimes be an option for those factory buildings:

'Temporary use is possible, because the developers just do not register as they normally have to do in order to develop something in the area. However, the government will shut their eyes as long as the developers are doing things the government agrees with (Int. Chun, 2013).'

This is endorsed by Mrs Zhang explaining that in China almost everything is temporary (Int. Zhang, 2013). In addition, she argued that almost the whole system in China is a planned economic system. The government does not want to save money because new functions, buildings or infrastructure have already been taken into account in the Master Plan. This means the money is fixed and needs to be spent. As a result the government is often not choosing to reuse original buildings but instead of builds new ones (Int. Zhang, 2013).

8.4 GEOGRAPHICAL LOCATION

The location is of great importance for the possibilities for reuse. Ms Lv elaborated upon the advantages of the location of the commercial centre in Da Lang. It has possibilities for long term redevelopment with the main road and the upcoming high speed rail. Geographically it is a good area because of the transportation and convenience of logistics (Int. Lv, 2013). As argued by Mr Bouwman, Chinese investors

are smart enough to understand that when the government is interested in a particular place it can bring them some profit (Int. Bouwman, 2013). So in this case the location is of great importance and when the government not have enough money to encourage all those redevelopments, they could propose developers to do so (Int. Chen 2013). But these developers often only want to invest in projects where they can generate a lot of money and choose to demolish existing buildings.

'For example Detroit in the United States, they still have the same problem like Da Lang. As soon as you start to develop, the new things will replace the old things. Da Lang is a forgotten corner of Shenzhen, they are doing some manufacturing things and the technology is developing so I am sure the former factory will soon be replaced. But both the government and some companies do not know how to deal with those things. This is more a process for the city master. Like Rotterdam in the Netherlands what is kind of deprived but it has to get through this process. It is a problem the government has to solve but they do not know how. Like Liverpool in England (Int. Xu, 2013).'

Creating a creative park could be an option for such an area, but as argued by Mr Xu creative parks are not that profitable. The density in creative parks is too low especially in an inner part of the city like OCT Loft. It really depends on the location if reuse could be an option (Int. Xu, 2013). At the same time the location is of great importance when one is running a business like Mrs Zhang:

'For me something is very realistic; if you work on a good location you can easier get people. People are more willing to come because it is more convenient (Int. Zhang, 2013).'

8.5 CONCLUSION

Based on the analysis above can be said that the condition of a particular building is of influence on the possibilities for reuse. A distinctive and monumental building has greater opportunities or capabilities for reuse. However, refurbishment can make this complicated. In addition the typical warehouses can be used for reuse as well, but often a lot of physical improvements have to be made. Therefore, it is not always necessary to create for example the creative places inside a former factory but research has shown that this is often happening, just like in the western context. The physical improvements on the exterior are often done by big companies or initiated by the government. It is rarely done by the people themselves whereas the interior is mostly transformed by the actual users. The inside often requires a reasonable renovation to make it suitable for the new purpose. The location is also an important factor for reuse because specific functions can be too valuable or less profitable for a certain site. Because of the strict rules and regulations, refurbishment for a specific function can be difficult to achieve.

9. OPINION OF EXPERTS

The research question answered in this chapter is the following one:

What kind of opportunities do different experts see with former factory buildings?

This question is articulating the opinion of several experts involved in the process of redevelopment. A division is made into government, architects, developers and researcher. The different opportunities will be further explained what makes this chapter more solution oriented.

9.1 GOVERNMENT

Local Government [Da Lang]

It is expected by Mr Hu that the area of Da Lang is becoming a more residential area in the future because of the real estate boom in China. The factories are likely to be demolished because different type of functions correspondent with different architectural requirements as explained by Mr Hu of the Da Lang government (Int. Hu, 2013). However, the government is willing to make use of existing factories because of the expected lower expenses. There are opportunities for redevelopment of those kinds of buildings; however, it is not yet clear in which way this shall be done. As stated by Mr Hu is the process of reuse not following a certain rule but it is developing mainly accidently (ibid). The effect of certain interventions is difficult to measure or understand. The convenience of infrastructure available could be an important factor to start up the renewal process. Also the collaboration between different stakeholders could be of interest. As stated by Mr Hu, the developer in Da Lang commercial centre played a key role, however, the collaboration with the local government could have affected the process and make it run more easy and smooth (ibid).

Municipal Government

It is recognized by the government that there is an increasing need for land and that there is too much industrial land at the moment. Therefore, the government wants to achieve a function change and at the same time they have to demolish and rebuilt (Int. Chun, 2013). As stated by Mr ZhiGang most of the redeveloped buildings will be used for small businesses, commercial use or the creative industry (Int. Zhigang, 2013). With regards to reuse this is both the most profitable and easiest solution. There are often no problems with existing inhabitants during redevelopment processes because these developments happen in former industrial areas where not many people live (Int. Chun, 2013). Also stated by Mr ZhiGang, the reason not to choose to implement housing everywhere is because of the real estate crisis in the United States in 2008. Due to this the Chinese government do not want to provide too much space for housing (ibid).

The redevelopment of urban villages can generate a lot of profit therefore many developers want to get involved in it, especially when the buildings can be turned down and rebuilt on approval of the government (Int. Chun, 2013). Also the government can earn money if they approve all projects for demolishment and rebuilt. As stated by Mr Chun it is not about the money but about the preservation of cultural and social diversity in the city and it is the task of the government to encourage this preservation and to protect the buildings (ibid).

'The government is actually the guard of the old city, they do not want to demolish everything and rebuild it (Int. Chun, 2013).'

Until now the government could not find a profitable way to preserve the old industrial buildings therefore demolition is more profitable. The only value the old building has got is the witness of the history of the city. This history is maybe not even a history, as argued by Mr Chen, because it is only a history of around twenty years. Hence it is a bit contradictory, on the one hand the government wants to protect and preserve those buildings, but on the other hand this is often too costly. And even then the government is the only interested party who wants to invest in such protection and conservation. The buildings have to be given some new function or new life in order to make them sustainable and find new ways to increase their value (Int. Chun, 2013). From this year on there is a quota on the amount of buildings or the amount of square metres that can be demolished within the city of Shenzhen per year. When the level is reached, the government does not approve any more demolishment within this period of time (ibid). By use of this rule the government can affect what happens and can take care of the demolitions. Also stated by Mr Chun is the fact that the government can make use of specific policies to promote certain functions like what is happening with the creative industry. For projects like OCT Loft there was some special subsidies and policies. However, this is also related to the implementation of a creative park in the area that automatically leads to some preferential policies. As stated by Mr Chun of the Urban Renewal Office:

'We are now studying on the preferential policies for the renewal or regeneration of the old factories instead of demolition, so we are working on this right now. It is not implemented yet (Int. Chun, 2013).'

They are actually working on those preferential policies in relation to reuse of factory buildings to broaden the scope instead of only preferential policies for the creative industry. Another incentive could be the approval of extra floors by using an existing building (Int. Chun, 2013).

9.2 ARCHITECTS

Architects have different opinions about the influence they have on the actual transformation and redevelopment. It is a lot of trial and error. Mrs Zhang explained that the city of Shenzhen is a testing field for the whole of China (Int. Zhang, 2013).

The symbolic value of industrial China needs to be changed into one for culture as stated by Mr Bouwman, from mass production of subtle matter to the production of culture, from material to immaterial (Int. Bouwman, 2013). Hence, Mrs Zhang is invited in the Shekou area to move in with her office by providing her a cheap rent. One is trying to attract several famous designers to put Shekou on the map of popular places. Though for Mrs Zhang it is not the ultimate place yet because it is far out of town, it needs to be renovated, the logistics are bad, and there are a lot of trucks and dust. It is not sure if the investment is worth it and as she said maybe the building is demolished in five or ten years (Int. Zhang, 2013). In Shenzhen there is not that much vacant land that can be used to build. Developers do not choose Shenzhen because they need a lot of money to either demolish or rebuilt or redevelop an area. As argued by Miss Chen, developers prefer buying new land and building new buildings. Thus not many developers would prefer to regenerate an area like Da Lang (Int. Chen 2013). In OCT Loft money is also seen as an issue. The profit made by the developer is not that big. Moreover it could be a lot more with the same projects, energy and investments. The reason the developer choose to redevelop this area is because it is a better branding for their company and for the future use of this land (Int. Zhang, 2013). Another area in Shekou, besides the harbour part, is already developed into a sort of OCT Loft. The warehouses are redeveloped into a creative area with in most of the streets a car park on the ground floor inside the building.

'Sometimes things work, sometimes not. That is the way of thinking here (Int. Patte, 2013).'

Hence, these parking lots have ruined the liveability on ground level. The mistake is distinguished by now and it is changed again by creating windows and opening it all up (Int. Patte, 2013). This shows also the flexibility and the pace how things change.

Often the architect is invited when the decision for a specific area has been made already. The influence of architects on the actual decision to make use of existing buildings is limited as argued by Mrs. Zhang:

'Architects are very weak in term of influencing the decision. [-] But in this kind of projects, the policy has so many gaps and they will make things up, so all developers doing this kind of projects use their agents to talk to the right government bodies. Those are the most important actors. There is no clear policy about these projects and actually it is not always the case that architects are working for these projects. They always just employ a graphic designer and use a local builder to build the project. These kinds of agents often have a different background than architects. In Shenzhen there is no architect association, so they do not come together. These actors are just painting the walls, so they do not want to spend too much money (Int. Zhang, 2013).'

Mr Bouwman tries to have a certain impact on the amount of money China Merchant wants to spend by trying to convince them of the importance for further development (Int. Bouwman, 2013). It is about just a small additional investment to start up a whole new economic cycle. Mr Bouwman tries to convince the developer of the fact how they can earn even more. However, when a factory moved out possibilities can be a new industrial function or demolition. This is only useful if it is not the only one in the area because to start up a new function right in the middle of the industrial zone is hard. Than it is necessary to think of a bigger urban scale whereas it would be better to wait a couple of years until more abandoned places have appeared. It is possible to demolish everything but a new plan is taking a couple of years. A step by step approach with a tailor made programme for a particular building could be a better choice (ibid). Like the factory building in Shekou:

'Within the buildings there are a lot of opportunities that are not possible in for example OCT Loft like an architecture track along specials places, beautiful rooms, extraordinary light and a tempting view over the city (Int. Bouwman, 2013).'

As argued by Zhang the land use in all projects is industrial and if you want to change this as a developer to create other functions you need to ask the government to modify the Master Plan (Int. Zhang, 2013). In the end the government still has a sort of control on what is happening. As specified by Zhang, in most of the regeneration projects the developers did not follow the formal procedures even not in OCT Loft. Everybody knows this, nobody is taking care of it and the government turns a blind eye to it. However, the government needs to follow all the formal rules and regulations when they want to redevelop something, what makes it way more complicated. Developers can decide differently and take some risk, for example by calling the redevelopment process interior change, as stated above.

Most of the time the government asks a developer to pay. This is not a problem, as stated by Mr Patte, designer for Shenzhen/Hong Kong Design Biennale Shekou and Founder of Riptide Company, because these developers make a lot of money (Int. Patte, 2013). As he argues it is in China all about the business model whereas he finds the social value and how people get together way more important. However, because it belongs to China Merchant it is all about real estate.

'In China nobody really cares about culture. Chinese people, they want shopping malls and parks but that's it. They do not go to museums and so on (Int. Patte, 2013).'

This is more a western point of view, a culture difference that is difficult to grasp. Mr Patte not sure if the buildings in the Shekou area are used after the biennale as well. For him the area is a huge challenge with also a lot of opportunities. As he argued democracy is slow and within the Chinese system developments can go much quicker. Most of the people do not care about the way it goes as he said, because it brings them money and wealth (Int. Patte, 2013).

As Mrs Zhang said there is right now, from an architect kind of view point, a blank field for redevelopment projects. As she said a graphic designer who has been hired but cannot redevelop such a factory building and also the influence on the surrounding area is often forgotten. Another important fact is fire safety because there is not any regulation on this in China. Not when you do not go through the whole process of changing the land use and everything else, if you just make something temporary. As Mrs Zhang argued the government should make a set of temporary use regulations in order to counteract these issues (Int. Zhang, 2013). Mostly when a developer wants to make use of existing buildings it is just an intermediate idea. When both the infrastructure and land value has increased the building will be demolished after maybe five or ten years. The division of ownership has got a huge influence on the decision on what to do with the area, hence, the consequence is temporary use.

9.3 RESEARCHER

As stated by Mr Liang, is it even for the government the most attractive to implement commercial functions because it generates the highest profit. For public functions this could even be the opposite that is also the reason why a lot of developers not want to invest, as stated by Mr Liang. The government find difficulties to attract other kind of organizations to coordinate and implement other type of functions (Int. Liang, 2013).

'There will be no change of the situation. The planning comity will publish what their plan is for this area. Together we need to find what is best for the area. What functions are suitable and if we cannot find an efficient solution we will keep the original situation. The government has to build those functions but the capital belonging to the government is limited so they are not able to develop. But maybe when they have made more money with commercial use they can bring more attention to other developments (Int. Liang, 2013).'

Actually nobody knows how to deal with the situation and the government is not that detailed about how to do this. To make use of this existing city scale policies is consequently hard on the scale of the local government because different areas have different conditions. Especially local governments are stumbling in the dark how to deal with the situation (Int. Liang, 2013).

9.4 Developers or Investors

Almost all developers or investors want to demolish the factory building because in this manner they can make the most profit. However, in Da Lang they were forced to make use of the existing buildings and it were both the investor and the developer who invited the commercial use into the area. The government was very supportive in this (Int. Lv, 2013). The investor wants to make more money and that is why he decided to invest in this specific area. For him the creative industry does not generate enough money and there was room and demand for the implementation of a commercial centre within this area

(ibid). Nevertheless the plot ratio of most of the existing factory buildings was too low so there was a need to add extra floors or expand the existing buildings (Int. Mei, 2013).

As argued by Mrs Han it is difficult to copy paste an example as OCT Loft to other areas in town. As she states the government want the creative industry because there are some old buildings left but. However, it is mostly depending on the people, you need to combine specific conditions of a city to make it accepted by the people (Int. Han, 2013). It is impossible to change every former factory into a creative area or either public facilities because, as stated by Mr Xu, the government does not have money and moreover not the responsibility to do this (Int. Xu, 2013). Therefore it is also necessary to find some companies who want to invest and want to get involved in the project for a long time. Therefore is the sponsorship of the government of great importance for the redevelopment of factory buildings and to help to promote a specific area for organizing big events and things like that ass argued by Mrs Han (Int. Han, 2013). On the one hand there is not enough money but on the other hand is the sponsorship of OCT Loft of great importance for this area. Mr Xu has got some more critique on the way the government is dealing with the situation:

'The government is very lazy, if the companies or factories cannot come over some difficulties they will not help. They let the companies try to deal with it and to change the situation. In China we cannot rely on the government (Int. Xu, 2013).'

The developers did not see a lot of opportunities for public facilities either:

'Yes we did a project with schools, nurseryand a hospital. And we wanted to restore historic sites within projects to keep the historic meaning of this place. We wanted to save the cultural meaning of this place and the memory of this place. There was no way that we could make use of these buildings (Int. Xu, 2013).

By using some historic pieces of the former buildings the cultural meaning of the place was saved, however, this was impossible by use of the complete buildings. In addition states Mr Mei once again that those facilities do not make enough profit and that this should be the responsibility of the government. However they made a small contribution for the implementation of some non-profit bookstores and the entertainment stage outside in Da Lang. The purpose was to increase a positive community culture in this area (Int. Mei, 2013).

9.5 CONCLUSION

The question brought up in this chapter is the opinion of different experts in relation to the possibilities with those buildings. The government sees themselves not as a key actor involved in the redevelopment process, the developments happen often accidently. In this manner it is stated that the government needs to act as the guard of the old city. Next to potential opportunities is there also the need to protect

the existing buildings. However, a contradiction can be seen here because the government also states that those buildings maybe do not have much value besides the value of witnessing the history of the city. The government does not have any idea on how to facilitate the process of reuse. Some of the architects see opportunities for reuse in a more cultural way and others talk about the more public related facilities. Nevertheless these kinds of activities do not generate a lot of money. Developers are needed for investments what means they have the power to influence the type of functions that are implemented. However, the government still got the control over the Master Plan so in this way they are powerful as well. Questionable is the fact that not everyone follows the strict rules and requirements but the government is adhered to this. One of the main goals of the investor or developer is to make as much money as possible. This is where most of those people often see opportunities with a specific location and not particularly a building.

Both the local and the city government have not any idea how to facilitate the process of reuse. At the moment their influence is limited. Some experts said that policies could be of help but are part of the government's task. Also the quota on the amount of buildings that can be demolished is part of the ascendancy they have. As a consequence of the strict rules and requirements a lot of the reuse and redevelopment is temporary and as a result many rules failed to comply. One of the architects talked about a set of regulations especially for temporary use. To have a better protection against this intermediate idea but also to exert a more advanced influence. The developers got influence because they are the ones with money; also the government is depending on them. The government is doing whatever they need, to keep them on board.

| PART 3 |



10. CONCLUSION

Due to an economic shift in Shenzhen this study explores the possibilities for a combination of reuse of vacant factory buildings and the implementation of public facilities. Nine characteristics, that influence the possible reuse, were identified. This chapter formulates an answer on the main research question of this research as stated before:

What are the characteristics for reuse of factory buildings in Shenzhen and to what extent can these places be used for public facilities?

This study found out that there are several limitations to the redevelopment of vacant factories and it is even more difficult to use them for public facilities. The characteristics that constrain the reuse in Shenzhen are divided in five themes; policies, ownership, functions, building conditions, geographical location. Some of the themes exist of a combination of different characteristics.

Policies

The city government supports an efficient land use and the redevelopment of vacant factories. However, the City Master Plan is reviewed only every five years, in the meantime functional change is impossible. Creative industry is tolerated because government officials consider this as economically beneficial and it is often seen as a tool for city marketing. Public facilities lack direct economic advantages and are therefore neglected. Policy making can be defined as trial and error; examples are investments in creative parks and the stimulation to add new floors on existing buildings. Local governments have not yet defined their policy, since they just have started investigating the topic.

Ownership

In Shenzhen two types of landowners can be distinguished: the former villagers and the city government. Buildings are either owned by the villagers or by developers that have acquired land use rights by the city government. This results in limited capacity to enforce the desired reuse for public facilities, because former villagers and developers mainly want to invest in profitable functions as housing, commercial use and offices. This is the same for the government that only acquires land and end land use contracts when it comes to investments in the economy and infrastructure. There are not only financial limitations; plots are divided by multiple owners, which makes it hard to create complete plans.

Functions

The majority of functions that occupy reused factories are commercial functions or small business, mainly in the creative sector. They are often chosen because of their added value to the area and their

temporary nature. An example is the case of OCT Loft that is supposed to act as a generator for further urban development and that occupies a building until its ownership is clarified and more profitable opportunities for the area in total arise. Commercial use is seen as the most profitable option and it is often stimulated by the government, for example in Da Lang. This makes it difficult to raise support for public facilities. However there are some examples that prove the contrary, like the nurseries and schools in Da Lang. These are mainly private functions but their value is highly public.

The strict rules and buildings standards make almost every functional change impossible. Some current redevelopment projects avoid this, declaring they only consist of interior changes. The use of the building is often described as temporal because then a change of function is tolerated by the government. An example is the swimming pool shop in OCT Loft, which is defined as a creative furniture to avoid legal requirements.

Building Conditions

The character of the vacant factories poses limitations to reuse, mainly because of strict building standards. Functional change requires adaptation of the building because every type of function has other standards. Standards for public facilities are more stringent and this makes it expensive to transform. As a result the developers chose to invest in other functions. This is seen in the case of Da Lang where the actual number of public facilities is inferior to the planned number. However, more and more people agree on the possibilities of those buildings. Especially in former warehouses that are easier to redevelop than ancient factories because of their building structure.

The historic value of the vacant factories is not considered that high as it is in the western world. However, some respondents see possibilities for sites like Shekou that are measured as iconic, unique and ageless. The iconic value of OCT Loft is added more recently by the OCT Group.

Geographical Location

Functional change for public facilities is easier in the periphery than in the city center because the latter has higher property values. Therefore it is cheaper to acquire buildings over there and this decreases the necessity for a profitable function. For example, OCT Loft, was more isolated at the moment of redevelopment and therefore possible to transform it into a creative park with small business and restaurants. Due to urban development the site has become more central and this has led to higher rental prices and more upscale functions, like design shops. This example shows the limitation of increasing rental prices for functional change into public facilities.

This case study provides in a number of characteristics that limit redevelopment of factory buildings into public facilities. This is especially related to the urge to make profit, dissimilar building standards, an encouragement of mainly the creative industry and difficulties with ownership. The possibilities shown can exist of affordable rent, a less expensive peripheral location, an upgrade for the area in total what makes investments more explicable and a government that is more encouraged in the situation.

10.1 RECOMMENDATIONS

As a result of this case study rrecommendations can be given for both Shenzhen and further academic research. Advices for Shenzhen contain:

- The creation of policies specifically related to the development of public facilities in a certain district. In addition a better cooperation between developer and government is extremely important in order to achieve this.
- The local government should get a better understanding of the needs of the general public within their district. This is also related to the Hukou system what makes it extremely complicated to predict future demand for public facilities.
- Public facilities have specific requirements creating difficulties by using existing factory buildings, however, some of them do not need all the architectural requirements for example a youth or community centre (also mentioned in the introduction).
- The government should reconsider the strict rules and requirements in relation to land use. As a result many functional changes are impossible.
- To create a boost in the reuse of factory buildings it could be of interest to create more incentives as
 for example additional extra floors when using an existing building or other non-financial
 compensation incentives.
- The implementation of a set of regulations in relation to temporary use could support reuse of factory buildings. It is questionable how these regulations should look like and until what extent they provide a framework for redevelopment. It is also debatable until what extent these places can provide room public facilities on a temporary basis.

Recommendations for further academic research are:

- To get a better understanding of the implementation of public facilities in urban areas in China more research is needed.
- The urge of the government to keep existing factory buildings whereas this study demonstrates that almost nobody want this buildings. It would be of interest to further investigate governmental reasons for this.
- Possibilities for temporary use in relation to legal rules and requirements could be of interest.
- Further research on behalf of incentives like non-financial compensation models to stimulate reuse.

10.2 REFLECTION

Some pitfalls came across during this research. One of the most important ones is the language barrier as mentioned before what sometimes let to misunderstandings and made it hard to trace the right people. For example the meeting at the Shenzhen Planning Department in the Shenzhen Centre of Design (52th Tea Party, 12 April 2013) on the reuse of vacant factories was significantly useful to broaden

the network. However, it was even with translation, quite hard to follow what was going on. The translations by the Chinese students could also differ. Some were difficult to understand or did not dare to pose questions. Furthermore were some of the respondents hard to reach, both by telephone and email. Eventually not all desired respondents were retrieved, that may result in incomplete outcomes.

In advance it was difficult to predict what was going to happen and therefore the research design has changed during the process. This was strengthened by the fact that the research took place in another country on the other side of the world. Furthermore this made it challenging to receive all the information needed. Back in the Netherlands there were some gaps in the research data. It was difficult to deal with this because of the long distance, since the majority of respondents could not questioned by telephone. On forehand the focus was mainly on the area of Da Lang, however, the results were too limited to investigate. For this reason the other two areas were involved at a later stage.

The different cases showed a lot of contradictions what made it hard to compare them. For example the ownership division, the building structure but also the type of existing functions. On the other hand represents each of them a particular type of a redevelopment process in China, or at least two different types. Simultaneously shows this research a lot more similarities with the western context than expected. A comparison would have been impossible, was the expectation on forehand. Due to the location of Shenzhen, characteristics as a new town and formerly known as manufacturing of the world. However, it remains difficult to generalize the research towards other Chinese or even western cities. It would probably make sense to generalize this research towards other new towns in China.

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| Appendices |



APPENDIX A - LIST OF RESPONDENTS

List of the respondents interviewed for this research, chronologically ordered by date

- 1. Mrs Y. Lv Vice Manager Da Lang Real Estate Company
- 2. Mr L. Hu Spokesman Da Lang Government
- 3. Mrs Anonymous /Kg Manager Da Lang Nursery
- Mr X. Chun Member Urban Renewal Office Shenzhen (Urban Planning, Land and, Resources Commission of Shenzhen Municipality
- 5. Mrs Z. Han Vice General Manager OCT Loft Culture Development
- Mr L. Zhao and Mrs V. Zhang Project Manager and Office Manager of the Desjoyaux Pool Shop OCT Loft
- 7. Mrs J. Zhang Architecte, Design Principal and Director at MADA s.p.a.m.
- 8. Mr L. ZhiGang Master Planner of the Shenzhen Municipal Urban Planning Department
- 9. Mr L. Mei Developer and Investor Da Lang
- 10. Mr M. Liang Researcher at China Development Institute
- Mr M. Patte Designer for Shenzhen/Hong Kong Design Biennale Shekou and Founder of Riptide Company
- 12. Mr Z. Xu Chairman of the Shenzhen Yousheng Real Estate Development CO.
- 13. Miss Y. Chen Master Architecture at Chinese University of Hong Kong
- 14. Mr O. Bouwman Architect and Creative Director of the Shenzhen/Hong Kong Bi-City Biennale of Urbanism and Architecture

APPENDIX B - LIST OF ILLUSTRATIONS

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APPENDIX C - INTERVIEW QUESTIONS

This appendix shows an example of the listed interview questions, however, for each actor were used slightly different questions in relation to their profession.

Questionnaire Mrs Zhang, architecte in Shenzhen

- 1. What is your main influence on the redevelopment of vacant factory buildings?
- 2. Are there any specific policies of the government that promote reuse of buildings or that promote specific types of functions?
- 3. Is there according to you a vacancy problem of factory buildings in Shenzhen?
- 4. How does the redevelopment process normally take place and who is the initiator?
- 5. Does the redevelopment occur in coalition with other actors and what other sorts of actors (like the local or national government, informal actors or local residents)?
- 6. Has the involvement of the various levels of government in the redevelopment process changed over the last decades? Or are they not involved at all?
- 7. What about the condition of a building and the flexibility for refurbishment, is this of influence on the decision for redevelopment?
- 8. Who makes the decision for the implementation of a specific function?
- 9. Are there requirements of restrictions for the redevelopment of factory buildings?
- 10. What about land zoning and a change in function of a building?
- 11. Do you think it could be possible to implement public facilities in former factories? Or is this impossible (due to building structure or regulations)?
- 12. How realistic is the redevelopment of buildings that initially not have been built for a long term life? So how valuable actually is such a building?
- 13. Could you think of policies or other incentives that could be helpful for the redevelopment of factory buildings?
- 14. What do you think are the opportunities for these former factory buildings within the existing environment of Shenzhen?

APPENDIX D - CONCLUDING SCHEME

Chapter ten is based on the following scheme, showing an analysis of the research.

Characteristics for	Constraints	Possibilities
Reuse	Constraints	1 ossibilities
Policies	-No existing policies related to reuse factory building -Preferential policies regarding the creative industry combined with incentives to make use of industrial -Shirt from industrial towards commercial use -Improvement of land use efficiency -Policies too general for smaller scale -Local government no idea how to deal with the situation -Existing building do not provide enough room	-Government supports industrial upgrade and transformation -Implementation of new supporting policies regarding reuse -Urban renewal plans require certain amount of public facilities -Trial and error -Incentive, by adding extra floors when reusing existing building
Ownership of either	-Most of the buildings owned by	-Because the buildings are owned by
Land or Building	the OCT group but not all -When it was a complete piece of land in OCT they would have demolished and rebuilt -Before never a clear distinction about property rights -Because of privilege developers became big and early involved	the former villages, demolition not possible, forced by the contract -When the contract is over, land automatically belongs to the government -Because OCT does not own the whole piece of land possibilities for other type of use
Type of Use	-Housing or small business -Creative because it is adding value to the area, they are waiting until the ownership is sorted out, shifting demand and changing opportunities -Commercial because it generates money, most profitable option, comprehensive plan forced to do so -Biennial with different cultural functions should be the generator of further urban development -Not a real vacancy problem in	- Nursery not allowed, sort of illegal -Seldom really abandoned because of value land and space within building -Renting out good way to make money -Playing with existing rules, swimming pool shop, creative furniture -Ocean front so just temporary use -Temporary use is possible, government turns a blind eye as long as they agree -Often short term contracts -Rent can change every year what has his impact of the type of use

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	Shenzhen	
	-Because there are no rules for	
	redevelopment some of them are	
	just considered as interior change	
	-Because of strict rules and building	
	standards nearly every function	
	impossible	
Type of Land Use	-Strategic Master Plan designed by	-Because of preference of the
Type of Lana Ose		government change into commercial
	government has a more economic	•
	focus instead of a spatial, guide for	-Playing with existing rules, swimming
	type of land use difficult to change	pool → creative furniture
	-Function change not necessary,	-Government will should their eyes as
	creative industry is also industry	long as they agree
Stakeholders	-Besides 12 branches bookstore	-Factories easy moveable because of
	expand their property with	rent
	commercial	-China Merchant should lobby when
	-Projects planned in a top down	there is not enough money
	way by city and local government	
Geographical location	-Bad location means better options	-Infrastructural opportunities
5 1	for reuse	-Location of great influence if
	-Da Lang only commercial area	government cares about vacancy
	miles around	-Bad location, better options for reuse
0 1 10 1		· · · · · · · · · · · · · · · · · · ·
Costs of Rent	-Not a real vacancy problem, land	-Cheap rent kinder garden
	en space is still worth a lot	-Factories easy moveable because of
	-Result of modernization	rent fluctuations
	-Popular areas huge increase in	
	rent	
Historic Value	-Also a lot of crap has been built	-Shekou, unique building, pureness
	-Not necessary to keep all	that not will get outdated
	-Keep some icons	-OCT unique style
	-OCT Unique style, not essential	
Condition Building	-Distinctive and monumental	-Not that noisy
Containion Dunamb		·
	I hilliding	L -DISTINCTIVE AND MODILMENTAL NUMBER
	building	-Distinctive and monumental building
	-Interventions should be made to	-Former warehouses
	-Interventions should be made to make it useful for new function but	-Former warehouses -Functionality
	-Interventions should be made to make it useful for new function but also physical improvements	-Former warehouses -Functionality -Can be used for different functions
	-Interventions should be made to make it useful for new function but also physical improvements -Improvements because of adding	-Former warehouses -Functionality -Can be used for different functions -Outside physical improvements often
	-Interventions should be made to make it useful for new function but also physical improvements -Improvements because of adding unique style to typical warehouse	-Former warehouses -Functionality -Can be used for different functions
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	-Interventions should be made to make it useful for new function but also physical improvements -Improvements because of adding unique style to typical warehouse -Depends on the building how much work it is	-Former warehouses -Functionality -Can be used for different functions -Outside physical improvements often initiated by big companies or
	-Interventions should be made to make it useful for new function but also physical improvements -Improvements because of adding unique style to typical warehouse -Depends on the building how much work it is -Restrictions on what could be	-Former warehouses -Functionality -Can be used for different functions -Outside physical improvements often initiated by big companies or
	-Interventions should be made to make it useful for new function but also physical improvements -Improvements because of adding unique style to typical warehouse -Depends on the building how much work it is -Restrictions on what could be changed inside or outside	-Former warehouses -Functionality -Can be used for different functions -Outside physical improvements often initiated by big companies or