

China's Urban Development in the Post-Reform Era

The Chinese City and the Emerging Mega City in Wake of the Open Door Policy.

Ritgerð til BA í Austur Asíufræði

Elfar Pétursson

September 2012

Háskóli Íslands Hugvísindasvið Austur Asíufræði

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Abstract

革开放) or the ODP initiated in 1978 and the ensuing reform era for the modern Chinese city. The economical liberation, resulting from the ODP, has transformed the face of China from a rigorously controlled communist economy to what is often described today as an economical miracle. The modern Chinese city has left behind its ancient city walls and is now evolving into a mega city reaching for the skies with skyscrapers springing up all over the country. There are many problems facing these new cities, ranging from affordable housing to transportation logistics and everything in between. China is a country of some 1.3 billion people whose urban population is still only about 50% of the total. China will without a doubt go through increasing levels of urbanization and therefore it has to look for ways to accommodate this huge influx of people to its cities. China seems to be taking steps to integrate whole cities and even whole provinces into a single metropolis to deal with its growing urban population.

This thesis aims to look at and explain the current trend in urbanization with a look at three major urban areas: Shenzhen (深圳), one of the first experimental city of the ODP; Shanghai (上海), a city with a rich history of foreign relations and currently considered the center of the new Chinese powerhouse; and lastly, Chongqing (重庆), a new municipality created from the merger of regional cities into one. Additionally, the thesis provides a short discussion of the early years of the ODP, considers the problems facing urbanization at such a pace, discusses the appearance of "ghost cities", and looks at the future prospects for the Chinese city as well as the emerging mega city.

List of Abbreviations

BER Bohai Economical Rim Central Business District **CBD CCP** Chinese Communist Party **ECA Economical Coordination Association** ODP Open Door Policy **PRD** Pearl River Delta **Gross Domestic Product GDP** High-Speed Rail **HSR** Municipal directly under the Central Government MCG **PRC** People's Republic of China Special Administration Region SAR Special Economical Zone SEZ 20-foot Equivalent Units **TEU** USA United States of America WWII Second World War Yangze River Delta YRD

Introduction

Over the last three decades, China has gone through enormous economical transformation, which has involved immense changes in social and urban life of the Chinese people. The changes in the last thirty years are so immense that they, in many ways, rival or even surpass the hundreds of years of change the empire had gone through before. China's urban level is already at roughly 50% of the population¹, a relatively low number in comparison with the European average of roughly 70 to 80 percent. However, it is worth noting that the rate of urbanization took a significant longer time in Europe, and it is safe to assume that China will reach similar levels of urbanization in the next few decades.

The Chinese tradition of urban planning is as old and distinguished as any on earth. Classical texts describe the proper rectilinear form of the royal city, and successive dynasties built their capitals and regional administrative cities with ever-closer attention to the classical models. With exceptions dictated by local topography, cities were carefully oriented to the cardinal directions and surrounded with high walls that by the late imperial period were usually faced with bricks or stone. Gates with elaborate guard towers cut through the walls at regular intervals, and wide avenues led from the gates to set the framework for a north-south, east-west grid of streets. Within the walls, the city was horizontal, with only an occasional temple or government office rising slightly above a standard one- or (at most) two- story roofline.²

China has a long history of urban development. Indeed, its cities date back more than 3000 years and not just a single city but dozens of them. Archaeological excavation from the lower Wei river valley (维和谷), primarily at Anyang (安阳), seem to suggest that the first forms of urbanization took place in China around 1600 BCE, during the late Shang (商) dynasty. The excavations from the Western Zhou (西周) dynasty about 1000 years later are more reliable as they seem to point to clear evidence of specified urban planning and urbanization.

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¹'China's Total Population and Structural Changes in 2011'

² Esherick, Joseph W., *Remaking The Chinese City*, p.1

Each of these settlement forms was integrated into the political structure of the Zhou kingdom, and each sooner or later, despite its distinctive origins, assumed a role in the emergence of hierarchy of cities, each unit of which at each level of the system combined ceremonial, military, and agricultural functions³

The once old and stagnated Chinese city, where city planning followed strict traditional guidelines, is currently going through an unprecedented change, in terms of volume and pace, in the entire history of human society.

From the perspective of urban transformation, the Chinese city is becoming capitalist in many respects: the emergence of central business districts (CBDs), the uneven growth of territorial units, and the rise of new urban spaces such as shopping malls, signature architecture buildings and luxury residential enclaves.⁴

Cities are expanding upwards and outwards at such a pace that maps are virtually obsolete the moment they are published and guidebooks require unusually extensive annual revision. For example, subway lines are added annually and stations changed and expanded. This fast paced change can certainly be traced back to built-up entrepreneurial pressure, but even more so to a single event, namely when the leadership of China opened the once tightly sealed door to allow the world a sneak peak and small foothold on the Chinese mainland.

Shenzhen, Shanghai, and Chongqing are three cities that have benefited immensely from the ODP, the first two being among the first opened up to foreign investment, and Chongqing has been given new priorities in the last few years. All three of them are instructive windows to the transformation that is taking place all over China. At the same time, however, the question remains where the development of the Chinese city is going. Indeed, what are the prospects for the Chinese city, and is it overtaking modernity itself by developing towards a true Mega City? A spectator is left to wonder whether there are any negative aspects of such a fast paced development, and, perhaps more importantly, whether it will be sustainable for years to come.

³ Friedmann, John, Chinas's Urban Transition, p.1

⁴ Duanfang, Lu, Remaking Chinese Urban Form, p.1

The Reform Era and the Open Door Policy

The Reform Era began in 1978 with the Chinese Communist Party's (CCP) decision in the National Party Congress (NPC) of that year to launch a new drive for economic modernization. After successful reforms in agriculture, the party had to tackle the overwhelming difficulty of urban reforms in 1984. Even though efforts were made to try to tackle the subject gently, immense changes followed in, among other things, enterprise structure, prices, finance, banking, housing, labor markets, welfare, pensions, and wages. By late 1988 to early 1989, the economy was overheated and following crackdowns on urban unrest in 1989, notably the fateful students' protests in Tiananmen Square (TianAnMen GuanChang 天安门广场), economical and political reforms slowed. Further strengthening of government control was introduced in the years 1989 to 1992 and since then, China has been pursuing a neo-authoritarian approach typical of some Eastern Asian economies. Despite considerable resistance from within the CCP, this approach is still dominant in present-day China, and therefore it is fair to say that China's reforms have gone through several stages of economical and political changes.⁵

A decade into communist rule over China, urban planning was discontinued following the start of the Cultural Revolution (WenHua DaGeMing 文化大革命) 1966-1976, when most of the educated urban planners were sent off to the countryside to be re-educated. Urban planning and the work on city master plans would not be fully reawakened until the city-planning act of 1989 was adopted. With the city-planning act of 1989, which set up a comprehensive urban planning system by law for the first time in China's history, China was once more on the path of a planned urban development. The following 15 years produced a significant increase in the demand for city planners for work on city master plans. In its early years, both before master planning was discontinued in the early 1960s and urban master planning was resumed in the early years of the Reform Era, emphasis was on gearing the urban centers of China into production centers of heavy industries typical of Soviet styled economies. It was not until later on, in the late 1980s early 1990s, that a more modern and "western" style of urban planning took place.⁶

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⁵ Friedmann, John, *Chinas's Urban Transition*, p.22

⁶ Friedmann, John, *Chinas's Urban Transition*, p.111-112

Over the last 25 years, urban planning has changed from the Maoist-Soviet style of urban planning, which focused on de-urbanization, keeping population level relatively low and in line with the countryside. From focusing on gearing cities into production centers of heavy industries typical of soviet economies, to focus on providing adequate public facilities, improve living standards for its residence and promote sustainable development and living.

The Current State of Urban Planning and Land Law in China

Urban development in China is taking place at an astonishing pace and urban planners in China are faced with huge problems as cities are growing and expanding outwards at such a pace that it is hard to keep up. In fact, it is not only the city itself they have to take into consideration anymore, but the neighboring cities as well, as more and more cities are better connected to each other. The result of this is that both inter-city and intra-city transportation are suddenly easier and more efficient than before. Indeed, this gives way to the possibility of the emergence of a true Mega City.

Generally speaking, government officials tend to promote the interests of strong stakeholders rather than those of the general public, at least in the short run. This has caused quite a few problems to accrue where development companies are given favorable contracts that may even be disadvantageous for ordinary citizens, all for the sake of economic development. It is worth looking into the critical arguments put forth by Anthony Yeh and Fulong Wu:

The present planning system should be streamlined and the utopian vision of "comprehensive control" should be abandoned. Efforts should be directed to the strengthening of the statutory status of urban planning; the setting up of the urban planning commission with the local people's congress; and the designation of the urban districts through statutory procedures so as to put all land in the urban fringe under planning control. An independent planning appeal system should be set up to handle disagreements in planning decisions and the reduce administrative discretion of the planning authority. Better coordination between the planning authority and the land authority is needed and more public participation should be introduced. The role of planners in

society and land development should be rethought. Professionalism in urban planning should be formed with the establishment of a professional planning institute to monitor and improve the professional standards and planning education of planners. (Yeh and Wu 1998,247)⁷

Yeh and Wu do not hide their opinions on what they feel needs to be done. They are both strong opponents of the current system and make some interesting statements. 's. Biased or not, they do make some strong points, and what is certain is the need for a review of the current system and that some aspects need to be overhauled and others simply abandoned.

The same can certainly be said of the Chinese system of land laws as they are ever changing and are a confusing jungle of rules and regulations. Indeed, up until the end of the last century, regulations were spread around the constitution along with numerous local regulations. This is, by itself, not uncommon, but there is undeniably a need to streamline the country level and provincial regulations to ensure clashes are not persistent, and in many instances, to improve the legal status of the owners of land and/or property.

The definition and allocation of property especially of the private ownership of the means of production and land, shapes the character of a governmental and economic system. Clear legal conditions for land and buildings are important general conditions for construction projects and business capital spending.⁸

There is a need for a clear definition of ownership of land and property. Further improvements to the Chinese legal system are required to make it more comprehensible as well as to solve issues of land ownership to facilitate further private investment.

It is still a fact that large areas, especially in the cities that are owned by the state, can be repossessed at any moment given certain conditions. However, private ownership of buildings constructed on the land is allowed and thus the builder leases or has rights of usage of the land in question for a certain amount of years. This makes official infrastructure projects and others that may require land to be confiscated by

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⁷ Friedmann, John, *Chinas's Urban Transition*, p.114

⁸ Kögel, Eduard & Meyer, Ulf, Die Chinesische Stad, The Chinese City, p.71

the state easy to implement. It is worth noting that the relative ease of land seizure has enabled big scale urban projects to take off with relative ease, bypassing the problem imposed by a few disgruntled residents that, in many cases, can delay development for many years.

In contrast, London's Heathrow Airport's planned third runway has been locked down in a fierce debate over the fate of about 700 homes needed for demolition for plans to proceed. The constant threat of land seizure has in some instances led to lackluster buildings being constructed, which can lead to a situation where builders and owners are not encouraged to build for the long term. Unfortunately, this tendency can drastically affect the quality and safety of new buildings, as was the case when a 13 story building fell on its side while under construction in the city of Shanghai. The same story building fell on its side while under construction in the city of Shanghai.

Infrastructure

Since the opening days of economic liberalization in 1978, China's investment- and export-orientated economy has grown immensely, fueling and being fueled by massive investments in the improvements of China's infrastructure. Large parts of these improvements have been geared towards boosting China's ability to do international business, to enhance China's competitiveness and to attract foreign investment. Government investment has been focused on improving transportation from the rural but resource-rich inland to the wealthy costal regions where manufacturing and shipping takes place.

In the last 20 years, China has built up an impressive expressway system, reaching a total length of 53.000 km by the end of 2007 and expected to reach a total length of 85.000 km by the end of 2032. It seems that these plans have been quite conservative and that China already reached its goals by the end of 2011, rivaling that of the USA Interstate Highway System. This is even more impressive considering the fact that the very first expressway in China was built in 1988, the Shanghai - Jiading (上海一嘉定) expressway, reaching 18.5 km, the operations of which began in

¹⁰Daily Mail Reporter, Tumbling tower of China: Amazing pictures of 13-story block of flats that toppled over

⁹ Barkham, Patrick, Sipson villagers vow direct action against third Heathrow runway

October 1988.¹¹ The pace of construction of new airports all over the country has been quickened and currently there are between 45–70 new airports under construction, ¹² (the exact number varies between reports). The newly constructed airports bring the total number of civilian airports to 220, and the number of civilian aircrafts to around 4600-4700¹³, capable of carrying 450 million passengers annually. ¹⁴ The three largest airports are Beijing Capital International (Beijing shoudu guoji jichang 北京国际机场), Shanghai Pudong (Shanghai Pudong jichang 上海浦东机场) and Guangzhou Baiyun (Guangzhou Baiyun jichang 广州白云机场). Beijing is the largest concerning passenger turnover, but Shanghai when it comes to cargo. ¹⁵ The majority of China's trade goes through its numerous seaports, and considering China's export orientated and resource-hungry economy, it comes as no surprise that China is ranked number one when it comes to overall cargo tonnage and number of containers handled by its ports. Shanghai's traffic in 2010 rose to 29.05 million, 20-foot equivalent units, or TEUs, and has replaced Singapore as the world's busiest port in terms of TEU. ¹⁶

The country's railway is currently being overhauled, lines being upgraded for higher speed, and new ones built for the new high-speed railway system. Blueprints include four north-south lines and four east-west lines, as well as three inter-city lines to foster integration on the city levels, those being in the Pearl River Delta (PRD), Yangze River Delta (YRD) and Bohai Economical Rim (BER)¹⁷. The high-speed railway (HSR) system already reached an impressive length of 6.800 km by February 2012 and is expected to reach over 22.000 km by 2020.¹⁸ The relative ease and fast pace of implementing new infrastructure projects in the last two decades in China has, in many ways, to do with the favorable land laws in China.

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¹¹ China Overview, China Infrastructure, Expressways

¹² Geoff Dyer, China plans airport building spree

¹³ China to build 70 airports by 2015

¹⁴ China to build 56 more airports in five years

¹⁵ China Overview, China Infrastructure, Airports

¹⁶ Bloomberg, Shanghai Surpasses Singapore As World's Busiest Port As Trade Volumes Jump

¹⁷ Bohai Economical Rim BER referso to the area that encompasses Beijing and the surrounding Bohai sea

sea ¹⁸ Bullock, Richard, Salzberg, Andrew, & Jin, Ying, *High-Speed Rail – The First Three Years: Taking the Pulse of China's Emerging Program*

The City Wall and the Danwei 单位

Throughout the centuries, the traditional Chinese city was based on the wall, cities where defined by them and later on work units enclosed in them. From the massive city walls down to smaller inner walled-off settlements, the population was organized into smaller districts with a predetermined population size. Consider the following description of Chang' an (长安), capital of the Tang (唐) dynasty:

Inside the city, more walls divided it into over one hundred smaller quarters, largely for security purposes. The state compiled household registers for residents in each quarter; it used these to collect taxes and recruiting soldiers. The quarters were separated by internal walls with gates that closed and opened according to curfew. Local officials maintained a complicated system of drum towers that announced the time. Special regulations governed the precise time and order in which gates were to be opened in the morning and closed at night. After the evening drum sounded, all gates were closed and locked, and no one was allowed out on the streets, which were patrolled by soldiers on horseback.¹⁹

While this trend may have undergone changes through the course of history, it nevertheless maintained its dominance in Chinese cities. From the walled-off sections of the ancient city of Chang'an, the massive city walls of Beijing, the danwei, worker communes of pre - ODP China, to the new closed off gated communities of modern day China, walled settlements and walled-off compounds were the basis of urban planning in Chinese cities. Today we see this in the new high-rise residential compounds, which are being built all over China. Not only are they predominantly closed off by walls, but are also policed by round-the-clock security comparable with the western style of gated communities. A gated community is a form of walled of settlement containing strictly controlled entry and exit protocols. The western form usually contains small residential streets, single-family houses with various shared amenities. The Chinese version on the other hand is characterized by high-density residential towers with various amenities.

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¹⁹ Hansen, Valerie, The Open Empire, W. W. Norton & Company Inc, New York, 2000, p.203

²⁰ Duanfang Lu, Remaking Chinese Urban Form, p.19-44

After the founding of the People's Republic of China (PRC) in 1949, most urban work places, including factories, schools and government offices, were organized into a state production unit, also commonly called danwei or a "work-unit", a system for administrative purposes. By 1978, around 95% of workers in the urban areas of China belonged to a danwei of one type or another. The danwei was the basis of everyday life in the Chinese cities, and up until modernization reforms started, the danwei served a unique combination of economic, political and social functions. The danwei offered its employees lifetime employment and provided for public housing along with entertainment, welfare and medical care.²¹

The role of the wall continues even to this day, as work-units are reluctant to tear down their walls or open them up to new residence as they site the increased urban migration from the poorer countryside, since the relaxing of policies concerning migrant workers have lead to increased crime and social disorder in the cities. Maintaining theses reasons, the leaders of these work-units view the wall as an important element in keeping law and order. Despite these objections, the local authorities have been promoting the idea of opening up these work-units to outsiders and give them access to the social services that work-units provide, i.e. on the basis of payment, as most have been privatized. The same walled-off trend can be seen in new office complexes and residential compounds, where walled-off compounds still play an important role.²² The danwei ensured that Chinese cities, despite their massive size and big population, stayed underdeveloped and curbed urban sprawl as there was little need for public transportation since citizens rarely left their local work-unit.

This does not mean that there was no public transportation in place, just that it was not comparable to the public transportation system we know today. The need for public transportation was simply not as great as it now is, mostly because of the organization of Chinese society at that time, and not least because of the extensive social role of the danwei. It was not until after the Reform Era began, and economical liberations started, that the modern Chinese city first came into existence.

Duanfang Lu, Remaking Chinese Urban Form, p.47-48
 Duanfang Lu, Remaking Chinese Urban Form, p.138-139

Shenzhen 深圳: the Open Door Policy

The southern Chinese city of Shenzhen is today considered a pioneering city in the modernizing reforms of China. It is indeed a great success story of the ODP and the opening up of China, a policy implemented with the encouragement of Deng Xiaoping (邓小平) in the late 1970s and early 1980s.

In late 1978, the small border town of Shenzhen, in China's Guangdong (广东) province, was initially no more than a sleepy border check at Hong Kong's (香港) doorsteps, with an estimated population of 30.000 inhabitants. Today, the city has an area of some 2020 km², with six districts home to some 10 million inhabitants both registered and unregistered. The city is characterized by lack of land resources, spreading out in a linear form of some 49 km to east and west and only about 7 km to north and south. It is mostly shielded from typhoons in the summertime by its hilly topography with about 230 km of coastline, where many excellent locations for seaports dot the shoreline. ²³

By the end of the 1970s, China's centrally planned economy was on the verge of collapse, and decades of mismanagement and cultural upheaval left the people demoralized. It was in this atmosphere at the Third Plenum of the 11th Party Congress that Deng Xiaoping's so-called Open Door Policy was reviewed and approved. To put it in Deng's own words: "Central Government has no resources and so you [the SEZs] have to do it on your own to 'find a way out'".24

The Pearl River Delta (PRD) was declared an open economic area and Shenzhen Special Economical Zone (SEZ) (Shenzhen jingjitequ 深圳经济特区) and other special economic zones were established adjacent to the rich and prosperous city of Hong Kong, the crown jewel among the remaining colonies of the British Empire. The simple idea was to attract capital, to learn about free market economy in a controlled way, and to gain access to new technologies and know-how from the west. With its close proximity to Hong Kong, a local powerhouse, Shenzhen SEZ, was identified as a possible site for developing an export-oriented economy based on cheap labor and manufacturing. In 1979, the city of Shenzhen was set up and the

Mee Kam Ng, Shenzhen, p.430
 Mee Kam Ng, Shenzhen, p.431

following year Shenzhen was given status as an SEZ. According to the central government, the new SEZ was tasked with the following three subjects:

- As a "window" for observing global trends in economic, scientific, technological, managerial and market developments.
- As "a training ground" for talents on the Mainland.
- As "experimenting ground" for reforms such as special economical management systems, flexible economic measures for enhancing economic cooperation, and technology interflow between China and foreign Countries.²⁵

This was by no means a small task for any country, let alone for a city level unit. For the first time in the history of the PRC, a city level unit was given the task of running a local economy all by itself, instead of the usual procedure of implementing orders originating from one or many of China's central ministries in the capital Beijing. The city had up until then been regarded as a mere arm reaching from their "home" ministries, but not as an independent entity as was now being implemented. An analogy, "grope for the stones to cross the river," 26 used by Deng Xiaoping to describe the problems facing the local government and planners, is quite fitting, because for the first time local authorities were crossing somewhat blindly into uncharted waters without the strict guidance of Beijing.

Contrary to the symbolic allusion of the Western term "Open Door Policy", implying openness, the real situation was to open up the back door rather than the front gates to foreign investors to enter Chinese markets. The City of Shenzhen and the province of Guangdong were not chosen at random but as a kind of test lab in an area known for being sufficiently far away from the central government in Beijing that if it failed, it would not cause too much problems for the CCP. Furthermore, Guangdong province is a region in which a different language is spoken²⁷ and it has a rich history of its people moving abroad to other nations, and last but certainly not least, it is located at a stones throw away from the economical powerhouse of Hong

Mee Kam Ng, Shenzhen, p.431
 Mee Kam Ng, Shenzhen, p.431

²⁷ Majority of the residence in Gungdong province speak Cantones as their first language

Kong. It was with this in mind that Shenzhen was given the status of a special economical zone, being one of several cities opened up to foreign investment, technology and expertise. The goal of the establishment was to give a safe haven to foreign-owned, joint-ventures and other enterprises without the hassle of dealing with the labyrinth of the Chinese Central Government policies.

From the beginning, the Shenzhen SEZ was planned to attract foreign investment and to be a modern industrial area focusing on production. Lack of legal framework and infrastructure made the initial move to an SEZ difficult as foreign companies were somewhat skeptical about the overall concept and most of them chose to wait and see during the first years. However, domestic interests were sparked and ministry-led and provincial enterprises took advantage of the relaxed rules and low taxation of only 15%, compared to the national norm of 55%. The same can be said of many Hong Kong entrepreneurs, who did not hesitate at this great opportunity. Very quickly they established their foothold in the area and moved much of their light manufacturing in, often gaining favorable contracts from the local government, free land and even factory buildings free of charge.²⁸

Foreign investment in the Shenzhen SEZ, during the construction face of Shenzhen, was mostly geared toward industrial activities of low-value labor intensive industries from Shenzhen's neighboring city of Hong Kong, such as assembling and manufacturing mostly from imported materials, designs and parts. From 1980 to 1985, Shenzhen SEZ surpassed most of its production targets and improved its economical output immensely, and by 1985, there were close to 5000 projects launched by foreign investment in the city.

From 1986 onwards, it became very clear to the local leaders of Shenzhen that to sustain economical growth, a change of play was needed. The best option for Shenzhen would be to develop a true export-oriented economy based on foreign investment. To facilitate the kind of growth wanted by the Shenzhen SEZ, improvements were needed in infrastructure along with administrative reforms. Reforms of the administrative level were carried out to simplify the local government structure, enhance efficiency, and to decentralize power. Improvements were made to improve the government's capability to veil macro-controls and to improve the coordination, consultation and monitoring functions of the government. The biggest

²⁸ Friedmann, John, Chinas's Urban Transition, p.28

change came in 1988 with the ending of governmental executive control over economic enterprises. A government mandated was issued concerning the restructuring of the economy de-linking all economical entities from governmental function, finance etc. "government nurturing market, market liberating government, government liberating enterprises and enterprises liberating productivity."²⁹

In 1986, only about 30-40% of Shenzhen's industrial output was exported, 1983 - 1986 saw an annual trade imbalance that varied from about US\$180 million to US\$662 million. But from 1986 onwards, a trade surplus would be recorded. In order to raise much needed capital for infrastructure projects, Shenzhen looked for inspiration to the land leasing system common in neighboring Hong Kong. As a result, the country's first land market was formulated and put into effect in Shenzhen SEZ in 1987, replacing the socialized housing scheme of the danwei. The local government seized the opportunity to promote high-tech investment over the low-level assembly plants. With the introduction of the land market system and reforms in the housing market, the speed of economical restructuring took off. From 1990 to 1994, prices of housing went up six times, offices by three times, and factories by two and half times. The local government is the housing went up six times, offices by three times, and factories by two and half times.

From 1980 and onwards, Shenzhen was given access to sizable loans from Chinese banks that were then invested in new infrastructure, housing, schools, and other projects deemed favorable for the growth of the city. The city grew at a phenomenal rate in the following years, as big sums of both domestic and foreign capital was invested heavily in the city. As wages increased and the standard of life improved significantly, vast number of workers and professionals from all over China flocked to the city in search of a better life. Shenzhen became a center for factories that produced everything from electronic goods, pharmaceuticals, chemicals and textiles to processed foods.

The close proximity to Hong Kong Special Administration Region (Xianggang tebiexingzhengqu 香港特別行政区)³² and increasing trade undoubtedly helped to improve local infrastructure and big building projects. An example is the new bridge across the PRD at Humen (虎门), connecting to a privately built six lane highway

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²⁹ Mee Kam Ng, Shenzhen, p.433

³⁰ Mee Kam Ng, Shenzhen, p.433-434

³¹ Mee Kam Ng, Shenzhen, p.434

³² Since 1997 Hong Kong has been administered as a Special Administrative Region of China.

owned by a Hong Kong entrepreneur, which has greatly reduced the travel time between Hong Kong and Guangzhou (广州), the capital of Guangdong province. Roads, bridges, railway lines, container ports and airports along with other infrastructure investments, many of which were founded by investors from Hong Kong SAR, have all attributed to the formation of a future megalopolis or a Mega City.

Another stepping stone on the creation of a PRD Mega City is the "smart" city. The notion of a "smart" city refers to an urban area where its inhabitants would be able to seek out public services all over the Mega City by means of modern technology, such as cell phones and laptops, to find, for example, the shortest waiting time for consulting a doctor and its location. A good example of a smart city system is the Octopus card used in Hong Kong SAR, an all-in-one card, allowing its users to pay for services ranging from ordering food or boarding a bus, all with a simple swipe of the card above a wireless sensor. To realize the dream of the smart city, transportation would need to be cut down to less than an hour between districts of the new city.³³

Shenzhen has become a true twin to Hong Kong SAR, its population of migrants from all over China enjoying some of the highest wages in the country. The huge success of the project prompted the Chinese central government to expand the SEZ model to include more cities along China's coast and to encourage modernization in different fields.

With steep competition from new SEZ such as Shanghai, Shenzhen has been forced yet again to reinvent itself, this time as a major world city. The reestablishment of the stock market took place in Shenzhen and the first of the new stock exchange was built up there. Shenzhen has also moved into areas of high-tech industries and is seeking further development as a tourist destination. Shenzhen's ultimate goal is to be classed as a world city rivaling those of Singapore and Hong Kong SAR, to move away from a pure manufacturing base and to become a hub of financing, tourism and higher learning.³⁴. It is also estimated that Shenzhen has the highest percentage of PhDs in the country, a staggering 20%.³⁵

Malcolm Moore, China to create largest mega city in the world with 42 million people
 Mee Kam Ng, Shenzhen, Cities, p440
 Friedmann, John, Chinas's Urban Transition, p.29

Shanghai 上海: the Dragon's Head

In November 1843, the small trading center of Shanghai was formally opened up to foreign trade following China's defeat at the hands of the British Empire in the first Opium War. It did not take long for Shanghai to dwarf its neighbors Hangzhou (杭州) and Nanjing (南京), both in population and in economic power. By 1900, little more than 150 years after its opening up to the world, Shanghai stood out with New York, London and Paris, as one of the world's greatest metropolitan centers. A population around 500.000 in 1843 had reached a million by 1880 and over 4 million in 1935. The absolute symbol of Shanghai's wealth was the Bund (外滩), a waterfront boulevard with the Huangpu (黄浦) river on one side and a collection of tall neoclassical buildings on the other. Banks, hotels, warehouses, and nightclubs lined the banks and, in fact, the Bund was Shanghai's Wall Street. Shanghai's glory would slowly fade after the foundation of the People's Republic.

With Jiang Zemin's (江泽民) ascendancy to power in March 1993, Shanghai's star began to shine anew. Across the Huangpu river lies Lujiazui (陆家嘴) in Pudong (浦东) (i.e. Huangpu east bank), the new financial center of Shanghai and the foremost symbol of Shanghai's growth. The plans for Pudong's new skyline date back to a vision held by Sun Yatsen (孫中山), the first president of the Republic of China, founded in 1911, consisting in the construction of a new city center across the river from the foreign built Bund. 37 Sun did not live to see his dream become a reality, as construction did not begin until the early 1990s. The Pudong district would be the dragon's head of the new Chinese dragon as the area gained even more favorable attention from the central government, with a series of preferable policies making the area an even more attractive place for investments than the existing special economic zones.

Shanghai is located on the banks of the Huangpu river in the Yangzi river (长江) delta. Historically one of China's largest seaports, the city is located next to the resource rich Jiangsu (江苏) and Zhejiang (浙江) provinces, which are some of the most populated areas of China. Shanghai consists of 18 districts and the city

³⁶ Campanella, Thomas J., *The Concreat Dragon*, p.59

³⁷ Campanella, Thomas J., *The Concreat Dragon*, p.65

encompasses about 6.200km2 of land³⁸. Shanghai is one of China's largest cities with a metropolitan population exceeding 14 million inhabitants and as many as nine million unregistered migrants.³⁹ The modern day metropolis of Shanghai is going through immense changes as it aims at becoming East Asia's economical powerhouse and claiming its historical place as one of the great cities on the planet.

Compared to most Chinese cities, Shanghai was kept on a particularly tight leash and did not enjoy the urban autonomy that many other cities had gained under the Communist rule in China. However, once the shackles were removed in the early 1990s, Shanghai took off on a mission of rebranding itself as the center of China and as the center of trade and financing in Asia. Shanghai is a pioneer in the land market economy following Shenzhen's example set forth during the early days of the ODP, and today, Shanghai leads in attracting foreign capital.

Since the early 1990s, housing improvements have been made possible through an annual increase in housing investment by double digits. The growth of the population, however, has far outpaced the growth in available housing, and thus the per capita living space by 1995 was at about 8m², a relatively small increase from pre-reform times. The big influx of new residents from 1985 to 1995 was due in large part to returning youth from remote areas, which were displaced during the Cultural Revolution 1966—1976. To cope with increasing pressure from the swelling population, the municipal government invested heavily in new infrastructure projects. In fact, from 1991 to 1996, about US\$ 10 billion was invested in infrastructure programs, such as the Huangpu (黃浦) and Nanpu (南浦) bridges across the Huangpu river, and the new inner ring road connecting both parts of the city, once separated by the Hungpu river, and new elevated highways as well as a new subway system.

Shanghai's central districts are characterized by high density of housing and industry sporadically located and often encircling each other as a relic of the past. Shanghai was cut up into foreign concessions under foreign jurisdiction and as such, Chinese jurisdictions ended at the entrance of each of these concessions making urban planning chaotic and inefficient. Additionally, a lack of central planning in the years following the founding of the PRC was to blame for this random and disorganized approach to city building. Problems facing the local authority, when it comes up to

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³⁸ Shanghai, Encyclopædia Britannica

³⁹ Wang, Hongyi, Shanghai population may top 23 million

⁴⁰ Weiping Wu, City profile: Shanghai, p.209

⁴¹ Weiping Wu, City profile: Shanghai, p.239

redevelopment of the inner city, range from extreme conditions of high density, dilapidated housing, inadequate infrastructure and a dizzying patchwork of land usage. Relocation of inner-city residence, to make way for new high-rise buildings and infrastructure programs, has met with some resistance as new homes in the suburban and satellite towns offer less service and fewer opportunities for employment than the dense city center. However, living standards have significantly improved, with indoor plumbing, electricity and other modern amenities. For those not willing to relocate, a solution that is fair to all parties involved is needed. A possible solution would be to offer the residents new apartment units in the redeveloped property. This has been done on a number of redevelopment projects in Beijing, but is still not common since most new developments are of a higher luxury than the previous buildings and thus developers are reluctant to hand over units to the poorer residents and prefer relocating or buying them out.

Shanghai municipal authorities have emphasized the relocation of industrial activities from the central city to the surrounding neighborhoods with the creation of industrial and high-tech parks, many of which are located in the Pudong New Area. Pudong New Area is vital for Shanghai to regain its leading position in China and East Asia, as many of the industrial production facilities located in Puxi (浦西) (i.e. Huangpu west bank) are outdated and dilapidated. Indeed, for many of these companies the move across the river offers prime land for low prizes and still within an acceptable distance from the city center. Several restrictions have, however, been placed on development in the Pudong area; development of high polluting industries are restricted since the prevailing wind direction would blow pollution over the old city center in Puxi. High prices in the new finical CBD of Luijiazui have had the effects that many companies cannot afford to set up offices there and choose to remain or set up offices in the already crowded Puxi side of the river. Minhang (闵行) district is a good example. A satellite town with excellent access to harbor facilities, rail lines and Hongqiao airport (Hongqiao jichang 虹桥机场), it benefits from the high prices on the Pudong side. It is indeed home to many companies specializing in electronics, medical supplies, and high end construction,



The fact that Pudong is separated from the city by a vast river poses some logistical problems for transporting people to and fro both parts of the city. A series of bridges were built in the early 1990s and a new ring road set up making both parts of the Huangpu river the *de facto* downtown area, instead of being on the edge of the city as it had been for generations. The bridges and tunnels that followed are today near or even over capacity requiring the city to invest in even more infrastructure to make sure that traffic flows easily. 42 International consultation took place for the urban planning of the new CBD in the Lujaizui area of Pudong, but the Shanghai government was not bound by any of the proposed ideas. The choice to go with a consultation rather that a competition gave the local authorities the freedom to pick and choose from competing designs, rather than commit themselves to a single winning design. As a result, the Shanghai government got the opportunity to use the consultation as an advertisement for the whole project in order to bring in potential investors, 43 along with the already built Oriental Pearl Tower (Dongfang mingzhu ta 东方明珠塔). The Oriental Pearl being the first major construction that took place on the east side of the Huangpu River. A super tall television and radio tower came to dominate the skyline, with its ultramodern sphere shape and glass facade equipped

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⁴² Campanella, Thomas J., The Concreat Dragon, p.77-78

⁴³ Campanella, Thomas J., *The Concreat Dragon*, p.72-73

with a rotating restaurant, a small hotel, and an observation deck that provides an impressive view over the entire city.

Another step to make Shanghai into the super city that the local and national government were seeking was to give the city a landmark in the form of a skyline recognized all over the world. The idea for the landmark came from the French consulting group that had been tasked with advising and helping the local government with urban planning. The French team came up with the idea of tying the whole area down with three towers or the tri-tower landmark, a landmark of three immense skyscrapers in close proximity to each other, which are supposed to give a visually stunning impact.⁴⁴ Ironically, the lack of American architects and urban planners involved in the design of Lujiazui, whether intentional or not, does not seem to have prevented the kind of "American" styled city from being formed, surprisingly even with a team of French architects and urban planners at their hands. Luijaizui looks and feels more like an American city rather than a French one or a Chinese one. It is a pedestrian unfriendly environment that favors automobiles over the walking civilians, with big open spaces and tall buildings all around, not to mention the lack of street vendors and the everyday hustle characterizing Puxi. All this contributes to the look and feeling of the area's emptiness; the overall feeling is that of a postcard city or a city intended to be looked at from afar but not really lived in.⁴⁵

One of the biggest changes in the housing market in Shanghai and in China as a whole is the gradual movement from the state-supplied housing benefit scheme to a market-based housing market. In the early 1980s, reforms of the housing market started in Shanghai, when funding for housing construction became a joint effort of the municipal government and enterprises. The municipal government also began experimenting with the selling of housing units to enterprises and individuals.

In the late 1970's most of Shanghai's 6 million urban residence lived in crowded apartments with few amenities. A majority shared bathrooms with neighbors, and many used public latrines. Three-generation households were typical. Even married couples that lived independently of their parents or in-

⁴⁴ Campanella, Thomas J., *The Concreat Dragon*, p.79-80 ⁴⁵ Campanella, Thomas J., *The Concreat Dragon*, p.80

laws rarely had the luxury of a private bedroom separate from their children. In the entire metropolis only five buildings exceeded twenty floors.⁴⁶

In 1991 a comprehensive plan was formed stipulating a shift to a more western housing market from the socialist market, rents were hiked up and housing purchase was promoted with accessible loans. People were given the option of purchasing their homes that they had acquired under the old welfare system at reduced prices and in 1998 further options were added, including the option of putting their property up for trade for a new apartment.

The densely packed city is, in some ways, splitting at the seams and the population is simply expected to rise. The city is looking into numerous ways of dealing with this problem, and one solution that is being pursued is the creation of satellite cities. Shanghai "One City Nine Towns" is a plan to set forth nine small cities designed to house approximately 500.000 people on the outskirts of Shanghai, each of which should be modeled according to different locations around the world, Italy, Spain, England, the United States, Sweden, the Netherlands, Australia, New Zealand and Germany. This is meant to celebrate Shanghai's rich history as a global city, while undeniably being somewhat ironic considering the long history of subjugation by western powers. Each town will represent its historical architectures in different ways, from copying architectural styles to architectural trends originating from the representative country. From American suburban homes, old English countryside, Amsterdam's canals, and even to the Althing in Iceland and the little mermaid of Copenhagen, each city has a little of the world to show:⁴⁷

The changes in the years following economical liberation have been astonishing, to put it mildly. In the years from 1979 to 1989, more that 830.000 households moved to new or renovated apartments, similar in numbers between 1992 and 1996, and another 800.000 households moved residence. More that 4.5 million changed addresses and the average space per capital more than doubled. The average apartment for a new construction by the late 1990s is a three bed-room apartment looking over a jungle of high rise towers in the new urban jungle of Shanghai. Shanghai today is a city of millions, the economical powerhouse of the Chinese economy, and a showcase city of the bright future ahead for the Chinese people.

⁴⁶ Friedmann, John, Chinas's Urban Transition, p.80

⁴⁷ Campanella, Thomas J., *The Concreat Dragon*, p.88-91

Chongqing 重庆: Gateway to the Interior

The modern mega city of Chongqing, home to some 30 million people, is today one of the largest cities in the world, both in terms of population and overall land usage. The roots of this Mega City can be traced back to 1983 when it was selected as one of the first experimental cities of the modernization and restructuring plans of the Chinese economy, and granted provincial economic administrative authority. Historically, some 3000 years ago, the site of modern Chongqing was the capital of the state of Ba (巴) that was later on, in 316BC, conquered by the feudal state of Qin (秦). Qin was the state from which modern China takes its name from, and is considered the first true Chinese dynasty as it was the first to unite the whole of China. In World War II, during the height of Japan's occupation of Mainland China, the city of Chongqing was the wartime capital of unoccupied China.

After the end of WWII and the Chinese civil war, Chongqing remained a municipality until 1954 when it was demoted to a sub-provincial city. In 1984, the formation of the Economical Coordination Association (ECA), made up of the provinces of Sichuan (四川), Yunnan (云南), Guizhou (贵州), Guangxi (广西), Tibet (西藏) and the cities of Chengdu (成都) and Chongqing, with its head offices located in Chongqing, gave increased significance to the city.

A significant move that further strengthened Chongqing as the hub of southwest China was the formation of the Economic Coordinating Association (ECA). In 1984, Sichuan, Yunnan, Guizhou, Guangxi, Tibet, and two cities (namely, Chengdu and Chongqing) formed this association with its head office in Chongqing. What was significant and new about the association was that it broke the traditional communication and reporting structure of the political system that was restricted only to vertical communication channels. By establishing ECA, representatives of local governments and enterprises formed a nongovernmental organization which brought together the interests of six provincial governments and developed joint projects to facilitate regional development. As a result of the associations work about 9100

collaborative projects were undertaken in the period 1991-1998, involving more than 20 districts bordering two or more provinces.⁴⁸

On March 14th 1997. Chongging regained its status as a municipality and was granted the status of the fourth Municipality directly under the Central Government (MCG), along with Beijing, Shanghai, and Tianjin (天津). Chongqing is the only MCG in western China. Restructuring of the cities' territories shortly followed and boundaries were greatly expanded. Chongqing city absorbed Wanxian (万县) city, Fuling (涪陵) city, and Qianjiang (黔江) prefecture, which were subsequently renamed Wanxian district, Fuling district, and Qianjiang district. Currently, Chongqing is administering 15 districts, four county-level cities and 23 counties.⁴⁹ Although Chongqing is officially defined as a city, and has a population of over 28 million, it must be taken into account that the entire area comprises roughly 82,300 km² compared with the 6340 km² that make up Shanghai. The actual urban population of the city stands at roughly 4,700,000.

The Chinese communist party had a clean slate when it came up to wartime restoration after the end of the Chinese civil war. From 1938 to 1942, the city was heavily bombarded and nothing really remained of the old city by the time the Communist party had consolidated power. By the time Chongging was given special municipality status in 1997, its main focus had been on heavy industry. Chongqing is now seen as the entrance of prosperity into the deep mainland.

Chongqing's rural area comprises 16,220,000 km², and therefore agriculture plays a big role in its economy and will continue into the near future. There has been a further strengthening of the industrial backbone and speeding up of new methods of development, which includes electronics, information, construction, tourism, and food industry to name a few. 50 The master plan for 1996-2020 has placed great emphasis on the growth of commerce, finance and real estate establishments. Chongging is planned to become the largest trade center on the upper Yangtze River as well as south-west China. 51 Chaotianmen (朝天门) waterfront district of Chongging, a traditional river gateway, is a project that has benefited directly from increased economic

⁴⁸ Sun Sheng Han, Yong Wang, *Chongqing*, p.116 ⁴⁹ Sun Sheng Han, Yong Wang, *Chongqing*, p.117 ⁵⁰ Sun Sheng Han, Yong Wang, *Chongqing*, p.117 ⁵¹ Sun Sheng Han, Yong Wang, *Chongqing*, p.118

development. Chaotianmen is evolving into a commercial center, serving south-west China, and what was once a chaotic small bazaar is now a multi story plaza accommodating such diverse activities as sightseeing, eating, and a good port facility.52

Rapid construction of housing raised the living space from 7m² in 1995 to 8.94m² in 1999. This increase, however, does not necessarily show the true face of the housing market since statistics from 1996 to 1999 showed that 7.58 million m² of floor space remained unsold.⁵³ Although these statistics are relatively old, they still reflect a common problem all across China where insufficient purchasing power, and, even more so, a lack of affordable housing seem to dominate the market.

Chongqing is the largest metropolis in China, measured both by population and land area. By 2020, the total population is expected to reach 32 million and urbanization to reach 47% up from 18.99% in 1996.⁵⁴ In order to facilitate housing production, the municipal government needs to play an active role in regulating the housing market through such measures as development control, land use planning, and fiscal management.⁵⁵

The master plan from 1996-2020 stipulates that Chongqing city will consist of a city the size of 82,300 km² with a municipal or an urban belt of 2500 km² containing most of the current and future Chongqing MCG population. The central city of Chongqing covers 600 km², split into three zones and 12 settlements. The current CBD is located in Yuzhong (渝中) district of the central city, but a new one is under construction in Guanyingiao (观音桥) located in the northern zone of the central city.⁵⁶

Since 1997, the physical aspect of Chongqing has changed immensely, especially the central city area. Large redevelopment projects have been carried out and even more are in development in such areas as the CBD and the Chaotianmen Port. New residential apartments are being erected and development zones set up for manufacturing and high tech industries. Some 280 foreign investment projects and 300 high tech enterprises have set up shop in the first phase of The High-Tec

⁵² Sun Sheng Han, Yong Wang, *Chongqing*, p.119

Sun Sheng Han, Yong Wang, Chongqing, p.119
53 Sun Sheng Han, Yong Wang, Chongqing, p.123
54 Sun Sheng Han, Yong Wang, Chongqing, p.123
55 Sun Sheng Han, Yong Wang, Chongqing, p.124
56 Sun Sheng Han, Yong Wang, Chongqing, p.121

Industrial Development Zone.⁵⁷ Numerous new infrastructure projects have been implemented since the creation of the new municipality, both from the Central and municipal government. Five new bridges were built over the Yangze river in 1998 and three more were rebuilt.

While Chongqing is still considered quite poor compared to the three other cities directly under the central government, there is much room for expansion. The city's port is accessible by ships up to 3000 tonnage, and the city itself is located at an intersection of major railway lines from north to south and from east to west. The city also has an impressive international airport and immense natural resources located in and around the municipality. All of these factors contribute to Chongqing's future growth possibilities.

Mega Cities

The future of the Chinese city seems to be continuous growth and in some cases the emergence of a Mega City or Megalopolis. A Megalopolis/Mega City is defined as a cluster or chains of cities in close proximity with more than 10 million inhabitants. A possible future for the Chinese cities seems to consist in these Megalopolis-styled cities that are connected together through transportation corridors, including highways, rail, HSR, and possibly subway systems as well. China's huge population is an important driving force for the emergence of the true Mega City, with a population already surpassing 1.3 billion people, and still at a rather low level of urbanization at roughly 50%. The birth pains of these new Mega Cities can already be seen prominently along the shoreline predominantly in the rich delta areas of the Pearl River The Yangzi River and to a lesser extent in the Bohai corridor around Beijing and inland at the Chongqing municipality.

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⁵⁷ Sun Sheng Han, Yong Wang, *Chongqing*, p.121

Pearl River Delta 珠三角

Population 63,000,000-120,000,000

The Pearl River Delta seems the logical choice for experimentation and implementation of the Mega City project, as it is already a province with high population, close proximity between cities, and high level of regional integration. It appears that there are already ideas being put forward of the merging of nine cities in the Guangdong province to form together one Mega City with a total population of 42 million.⁵⁸ Shortly after this news broke, local government clarified that these plans were only working ideas on increasing regional cooperation in public services and to strengthen transportation links, rather than blueprints for a single governing body or a unified city.⁵⁹



China Daily reported an official denial citing Guo Yuewen: "The reports were totally false. There is no such plan". 60 Currently these plans seem to be more of a dream and speculation, but Guo was also quoted by China Central Television website: "I can only say that Guangdong province is improving integration of infrastructure, industries, urban-rural planning, environmental protection, and basic public services

⁵⁸ Malcolm Moore, *China to create largest mega city in the world with 42 million people*

⁵⁹ Jessie Huang, Official Clarifies Rumors of Megacity Plan

⁶⁰ Qiu Quanlin, No ambitious merge plans in S China province

in the delta region,"61 This statement points to further unofficial integration that is taking place or can take place in the PRD. Although there is not a plan yet for a singular city at the moment, the ideas put forward are quite interesting. If further along an idea of full integration were to appear, the proposed city would include Guangzhou (广州), Shenzhen (深圳), Foshan (佛山), Dongguan (东莞), Zhongshan (中山), Zhuhai (珠海), Jiangmen (江门), Huizhou (惠州), and Zhaoqing (肇庆). The best known of these are Guangzhou, the capital of Guangdong Province, and Shenzhen, the first of the open door cities. The main idea behind the formation of a single major city is said to be to ease everyday life for residents in the cities, so that they can seek public services in any one of these cities. To achieve greater integration, a great deal of infrastructure projects must be undertaken to ease and shorten the commute inside and between areas of the proposed Mega City. Ideally, according to said article, no distance in the city should take more than one hour to cover. If the region is looked at as a whole, questions arise about the possibility of future integration into a true Mega City with the inclusion of Hong Kong SAR and even Macau SAR and other smaller outlying cities with a total population exceeding 120 million inhabitants.

Yangzi River Delta 长江三角洲

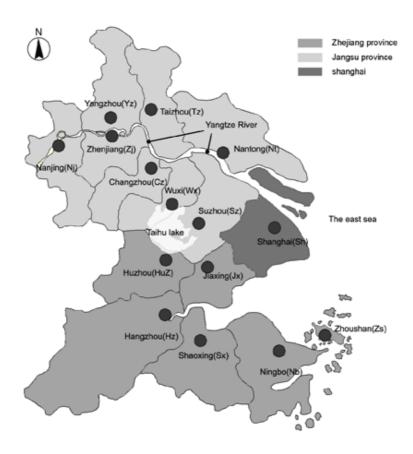
Population 105,000,000

The Yangzi River Delta (YRD) covers eastern China's Shanghai, Jiangsu (江苏) and Zhejiang (浙江) provinces. While home to some of the country's most prosperous cities, it is to a lesser extent ready for the level of integration envisaged for PRD. Nevertheless, there are certainly some signs of further integration taking place. Shanghai is already constructing a series of satellite cities, as has already been mentioned, but further integration possibilities lie on its doorstep with its neighboring cities. The cities of Shanghai (上海), Nanjing (南京), Hangzhou (杭州), Ningbo (宁波), Suzhou (苏州), Changzhou (常州), Wuxi (无锡), Jiaxing (嘉兴), along with smaller cities in between, are all located within a possible new Mega City. With the introduction of HSR and the Hangzhou bay bridge, the cities in the region are

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⁶¹ Xiong Ou, Guangdong denies ambitious megacity plans

becoming more and more intertwined. Indeed, there are already HSR linkages in place connecting Nanjing – Shanghai and Shanghai – Hangzhou, significantly reducing travel time between them. Being designed for a speed of 350 km/h, a non-stop trip between Nanjing and Shanghai takes 73 minutes down from 120 minutes, while such a trip between Shanghai and Hangzhou takes only 45 minutes down from 78 minutes.



Thus, there is already in place a short HSR trip taking about an hour in each direction. Whether towards Hangzhou or Nanjing, such speedy commutes give rise to the idea of the Mega City of the Yangzi river delta. Hangzhou is at the mouth of the Yangzi river delta, Shanghai on the north shore and Nanjing is to the North. But there is also the possibility of adding a high speed rail line next to the Hangzhou bay bridge towards Ningbo in the south, all connected with high speed rail to unify the area and reduce travel time and intergrade economies. The delta is to grow into a global metropolitan area by 2020. It covers some 2.1% of China's land mass, but accounts for 22.5% of the country's GDP, 31.5 % of tax revenue, and holds a whooping 35% of all foreign investment. 62 (2008 statistics).

⁶² Mu Xuequan, China's Yangtze River Delta to attain modernization by 2020, says official

Chongqing 重庆

Population 30,000,000

Chonqing Municipality is perhaps a reversal from the other emerging Mega Cities in the sense that the city and surrounding cities have already been merged into a Mega City under a single authority but lacking the infrastructure and ease of commute enjoyed by the other regions discussed here. Chongqing Municipality absorbed neighboring cities and integrated them as new districts in the new Mega City. A city the size of 82.300km² although most of its residence live in an urban belt of about 2500km². According to the Master Plan (1996-2020), residence will be accommodated in one Mega City consisting of the existing central city, two large "city districts" of Wanzhou and Fuling, eight middle size "city districts", and numerous smaller once. He different path taken towards creating the Chongqing Municipality, compared to the other emerging Mega Cities of the PRD and YRD, is quite interesting seeing that the other regions seem to favor infrastructure and public integration ahead of full integration. Chongqing has, however, taken that step and is now fielding improvements in transportation, utilities and public services.

China's Empty Cities: the Ghost of Growth

With such massive growth, problems are sure to follow. China is growing at such an extraordinary pace that the building industry is frantically trying to keep up. According to unofficial numbers, as many as 64 million households stand empty and as many as 20 new cities are constructed each year, according to a report published by the *Daily Mail*. ⁶⁵ Western newspapers have been publishing articles and satellite images of empty or extremely under-capacitated cities. The major problem seems to consist in overpriced new apartments that are out of reach for the average city dweller. According to the Chinese Academy of Social Sciences "Of the 35 major cities surveyed, property prices in eleven cities including Beijing and Shanghai were between 30 and 50

Garage Sun Sheng Han, Yong Wang, Chongqing, p.121 Sun Sheng Han, Yong Wang, Chongqing, p.124

⁶⁵ Daily Mail Reporter, China's ghost towns: New satellite pictures show massive skyscraper cities which are STILL completely empty

percent above their market value....⁶⁶ This property bubble is in part fueled by builders and real-estate speculators. Families and individuals are purchasing apartments and renting them out and holding out for a higher profit.

Stimulus packages approved by Beijing, during the turmoil of late 2008 to fend off the financial crisis, have been blamed for fueling real estate prices. Beijing has introduced some measures to try to curb this development by raising minimal down payment for an apartment to 30% and instructing banks not to provide loans for third home purchases. This measure, however, does not come into effect against regional governments across China that have been heavily investing in urban infrastructure and massive real estate projects, all for the sake of maintaining current level of growth.

In the city of Ordos (E'erduosi 鄂尔多斯), located in Inner Mongolia, lies the new district of Kangbashi (康巴什), located approximately 25km from the central city, a new district built far away from the Ordos desert and closer to a new water reservoir. Kangbashi is indeed a good example of the development of a ghost city. It is meant to be the new administrative center of Ordos city, with a population of about 1,5 million, filled with modern office towers, administrative buildings, museum, sport facilities, theaters and residential towers which remain virtually empty.

Zhengzhou (郑州) New Area is another of these so-called ghost cities, a new urban district to the north-east of the capital city of Henan (河南) province Zhengzhou. According to the same article by the *Daily Mail* sited before, the district is severally under populated⁶⁷. Although this is true, to call the city a "ghost city" might be over-dramatic as it has a slowly increasing urban population.

Ever since news broke of the apparent ghost cities in China, points have been made to show that this is not a problem associated only with China; similar cases of "abandoned" cities can be found all over the world, notably in the housing bubble of the USA and the overheated housing market of Spain and Ireland, although on a much smaller scale⁶⁸.

It is interesting to look at the ghost city of Angola, a Chinese built and financed city some 30 km outside of Luanda, Angola's capital. Nova Cidade Kilamba

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⁶⁶ Daily Mail Reporter, The ghost towns of China: Amazing satellite images show cities meant to be home to millions lying deserted

⁶⁷ Daily Mail Reporter, The ghost towns of China: Amazing satellite images show cities meant to be home to millions lying deserted

⁶⁸ Heckle, Harold, Spain Ghost Towns Develop From Real Estate Crash

Was designed to be the future home of some five-hundred-thousand residents. This new city seems to be suffering from the same under-population brought on by housing out of reach for the average citizen of Angola, built for a middle class that doesn't exist.⁶⁹

Fears of an economic crash, similar to those of Tokyo in the 1980s, Hong Kong in the 1990s, and most recently the housing bubble burst in the USA, which brought on the full force of the 2008 economic crises, are emerging. There seems to be little or no ease in the building sector, and prices continue to rise, although at a much slower rate, but it is still the case that the price of most new development is still far out of reach for the average Chinese citizen seeking a new home.

Conclusion

After closely examining the current state of urban development in China with the historical context in mind, it is indeed true that the Open Door Policy did precisely what its name promised: opened the doors to China's cities in more ways than one. In one aspect, the relaxing of regulation of the individual freedom that followed gave increased momentum to China's urban development. And as Chinese citizens were given increased personal freedom, the need for urban housing increased dramatically. In 2003, China put up 26 billion square meters of new housing, which is one-eighth of the housing stock of the United States. And in 2004, some \$400 billion was spent on construction projects in the People's Republic, nearly the total gross domestic production (GDP) of sub-Saharan Africa that year.

The prospects for the Chinese city seem to be endless, and the rate of growth and overall prosperity is depending largely on favorable locations. However, most Chinese cities have built up tremendous entrepreneurial pressure with a rather low level of urbanization, so even the cities with the least favorable locations can expect growth in population and with that the growth of taxation. On the other hand, a bigger population brings in the problems of providing for basic public services. There are certain strengths in numbers, and higher density cities offer the opportunity of more

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⁶⁹ Redvers, Louise, Angola's Chinese-built ghost town

efficient public service sectors, whether it is in public transport or other fields, but that in turn requires large investments by the municipalities themselves.

The modern Chinese city seems to be heading for a further integration, the creation of true Mega Cities, or a close knit networks of sister cities, all connected by transportation and utilitarian superhighways to facilitate growth. Whether this integration will be official or unofficial remains to be seen. Currently, the approach seems to be in favor of unofficial integration along the lines of public transportation and public services, but not at the administrative level. In order to achieve this level of integration, and to create a singular city, it is important that no destination in the city should take more than an hour to reach from any given location. This will most certainly require massive investment in public transport. With the introduction of HSR, the possible size of these future cities has been greatly expanded. Whether or not the dream of a mega city will be realized in the next few years or the next decade, everything seems to point to an emerging Mega City. All indications seem to suggest that at least some of the cities in China are developing towards a Mega City status, the most prominent of those being the PRD, YRD, BER, and Chongqing municipality.

When it comes to the growth of China and the Chinese city there are some inherent problems that are associated with such a fast paced development as is seen in China today. There are numerous negative aspects with development at such a speed, and those are not just associated with China but wherever fast paced construction is taking place. There have been numerous incidents where dodgy construction has caused property damage, and in some cases even the loss of life. The incident where a whole apartment building fell on its side in the city of Shanghai is an extreme case, but it reveals the potentially dramatic consequences of cutting corners in the pursuit of fast growth. The same can be said of the Wenzhou (温州) High-Speed rail accident, involving two HSR trains and resulting in the death of 40 people. Although still under investigation, preliminary reports state that the accident occurred due to severe defects in the design of control center equipment, lack of equipment inspections, and failure to adequately respond to equipment malfunction caused by a lightning strike. The "ghost cities" of China are yet another example of where the rush for economical gain without enough time and planning take place. It has led to massive sites of towering offices and residential towers that are almost empty of all life, and they will remain virtually empty for years to come as the Chinese middle class expected to live in these new cities cannot afford the housing units.

One has to wonder though whether the tremendous growth of the Chinese city and the Chinese economy will be sustainable for the years to come. There is, of course, no simple answer to this speculation, but what seems to be obvious is that there is still sufficient room for the Chinese city to grow. It is still in a process to catch-up with the west, and an urban population of only 50% suggests that there is still great room for growth to reach the European urban average of 70-80%. The question is, however, whether the Chinese economy can turn around fast enough from the export orientated economy to an economy driving, at least to some extent, on domestic consumption.

These questions aside, it is clear that the ODP reversed the slow decline of the Chinese city seen under Communist rule and gave a new momentum to urban planning, allowing the great cities of China to once again reclaim their status as some of the largest and most magnificent in the world.

Shenzhen grew from a small border town, giving home to thirty thousand people, to a major metropolis of some ten million people in just 30 years. With strong backing from the central government, free hands as a special economic zone, not to mention the close proximity to the already mature Hong Kong market, the sky became the limit. The unbelievable growth of Shenzhen SEZ would not have been possible without the economic freedom given by the ODP.

Once the pearl of the east, sidelined during the first few decades of communist rule and finally reawakened, Shanghai has gone from a slow decline and stagnation to what is called today the Head of the new Chinese Dragon. It is the economic powerhouse of the nation and the symbol of rebirth and re-emergence of the Chinese state on the world stage. Pudong, the new CBD, is the symbol of China and the futuristic skyline is featured in everything from Hollywood blockbusters to business advertisements in the Economist magazine.

Chongqing went from obscurity, as a place of heavy industrial production, to a city of gleaming skyscrapers, which became the gateway to the heartland of China. Chongqing is today the door to the eastern hinterlands of China, the door to prosperity. Chongqing will be the bridge between the resource rich but poor inland provinces and the rich coastal sites and will facilitate the much needed foreign investment to build up the interior of the country. Chongqing is, in many ways,

different from the other two cities discussed in this essay, as it is already classified as a Mega City although lacking the infrastructure needed to be a true Mega City. Administrative will has created a singular city but what is lacking is the infrastructure.

China and its cities have at their fingertips the opportunity to reclaim their position on the world stage, and, even more so, the opportunity to create something new, to create cities with the population of entire countries within their boundaries, cities of immense sizes but still made for the people. It remains to be seen how China will tackle its ever increasing urban population, but what is almost certain is that we will be seeing new and exciting forms of human settlement emerging. Whether it be a dystopian Mega City typical of science fiction, utopian city of gleaming skyscrapers or an entirely new form of human habitat is uncertain, but it is obvious that something new is needed to incorporate over a billion urban residents.

Works Cited

Books

Chongqing Mystical three gorges and glamorous municipality, Foreign Languages press, Beijing, China 2006

Duanfang. Lu, Remaking Chinese Urban Form, Routledge, Abingdon, Oxfordshire, 2011

Esherick, Joseph W., Remaking The Chinese City, University of Hawaii Press, York, Pennsylvania, 2009

Friedmann, John, Chinas's Urban Transition, University of Minnesota Press, Minneapolis, 2005

Hansen, Valerie, The Open Empire, W. W. Norton & Company Inc, New York, 2000

Kögel, Eduard, & Meyer, Ulf, *Die Chinesische Stad, The Chinese City,* Offizin Andersen Nexö, Leipzig, 2000

Thomas J. Campanella, The Concreat Dragon, Princeton Architectural Press, New York, 2010

Tang, Wenfang, & Parish, Willam L., *Chinese urban life under reform*, Cambridge university press, Cambridge, England, 2000

Viktor F, S, Sit., *Beijing The Nature and Planning of a Chinese Capital City*, John Wiley & Sons ltd, Sussex, England 1995

Zhang Li, In Search of Paradise, Middle-Class Living in a Chinese Metropolis, Cornell University Press, New York, 2010

Online Journals

Mee Kam Ng, *Shenzhen, Cities, Volume 20, Issue 6, December 2003, Pages 429-441*, Accessed April 13th 2012 http://www.sciencedirect.com/science/article/pii/S0264275103000817

Sun Sheng Han, Yong Wang, *Chongqing, Cities, Volume 18, Issue 2, April 2001, Pages 115-125*, Accessed April 13th 2012, www.sciencedirect.com/science/article/pii/S0264275101000026

Weiping Wu, City profile: Shanghai, Cities, Volume 16, Issue 3, June 1999, Pages 207-216, Accessed April 13th 2012 http://www.sciencedirect.com/science/article/pii/S026427519800047X

Webpages

'China's Total Population and Structural Changes in 2011', National Bureau of Statistics of China, 2012, retrieved March 3rd 2012,

http://www.stats.gov.cn/was40/gjtjj_en_detail.jsp?searchword=urban+population+&channelid=9528&record=5

Barkham, Patrick, Sipson villagers vow direct action against third Heathrow runway, 2012 Guardian News and Media Limited, retrieved August 14^{th} 2012 ,

http://www.guardian.co.uk/environment/2009/jan/16/heathrow-third-runway-sipson

Bloomberg, *Shanghai Surpasses Singapore As World's Busiest Port As Trade Volumes Jump*, 2012 BLOOMBERG L.P, retrieved March 10th 2012, http://www.bloomberg.com/news/2011-01-08/shanghai-surpasses-singapore-as-world-s-busiest-port-as-trade-volumes-jump.html

Bullock, Richard, Salzberg, Andrew & Jin, Ying. *High-Speed Rail – The First Three Years: Taking the Pulse of China's Emerging Program*, 2012 The World Bank Group, retrieved May 12th 2012, <a href="http://www-

 $wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2012/04/05/000333038_20120405014021/Rendered/PDF/667980BRI0P12500Speed0Rail0Final0EN.pdf>$

China Overview, China Infrastructure, Expressways, China Knowledge Online, retrieved March 10th 2012, http://www.chinaknowledge.com/Business/CBGdetails.aspx?subchap=1&content=6>

China Overview, China Infrastructure, Airports, China Knowledge Online, retrieved March 10th 2012, http://www.chinaknowledge.com/Business/CBGdetails.aspx?subchap=1&content=6>

China Overview, China Infrastructure, Rail, China Knowledge Online, retrieved March 10th 2012, http://www.chinaknowledge.com/Business/CBGdetails.aspx?subchap=1&content=6>

China to build 70 airports by 2015, Telegraph Media Group Limited 2012, retrieved March 10th 2012, http://www.telegraph.co.uk/finance/newsbysector/transport/9323617/China-to-build-70-airports-by-2015.html

China to build 56 more airports in five years, China Daily Information Co (CDIC), retrieved March 10th 2012, http://www.chinadaily.com.cn/china/2011-04/07/content_12288202.htm

Chongqing, Encyclopædia Britannica Inc. 2012, retrived March 22 th 2012, http://www.britannica.com/EBchecked/topic/117016/Chongqing>

Daily Mail Reporter, *Tumbling tower of China: Amazing pictures of 13-story block of flats that toppled over*, Associated Newspapers Ltd, retrieved March 12th 2012, http://www.dailymail.co.uk/news/article-1196064/Tumbling-tower-China-Amazing-pictures-13-storey-block-flats-toppled-over.html

Daily Mail Reporter, *China's ghost towns: New satellite pictures show massive skyscraper cities which are STILL completely empty*, Associated Newspapers Ltd, retrieved March 15th 2012, http://www.dailymail.co.uk/news/article-2005231/Chinas-ghost-towns-New-satellite-pictures-massive-skyscraper-cities-STILL-completely-empty.html

Daily Mail Reporter, *The ghost towns of China: Amazing satellite images show cities meant to be home to millions lying deserted*, Associated Newspapers Ltd, retrieved March 15th 2012, http://www.dailymail.co.uk/news/article-1339536/Ghost-towns-China-Satellite-images-cities-lying-completely-deserted.html

Geoff Dyer, *China plans airport building spree*, The Financial Times LTD 2012, retrieved March 10th 2012, http://www.ft.com/cms/s/0/aa8aa0b8-4013-11e0-811f-00144feabdc0.html#axzz21NsumShE

Heckle, Harold, *Spain Ghost Towns Develop From Real Estate Crash*, 2012 TheHuffingtonPost.com, Inc, retrived Agust 12th 2012, http://www.huffingtonpost.com/2012/02/16/spain-ghost-towns-real-estate-crashn1281032.html

Jessie Huang, *Official Clarifies Rumors of Megacity Plan*, 2006-2009 Guangzhou Interactive Information Network Company, retrieved March 15th 2012, http://www.lifeofguangzhou.com/node_981/node_989/node_997/node_1006/2011/01/31/129644429284574.shtml

Malcolm Moore, *China to create largest mega city in the world with 42 million people*, Telegraph Media Group Limited 2012, retrieved March 15th 2012,

< http://www.telegraph.co.uk/news/worldnews/asia/china/8278315/China-to-create-largest-mega-city-in-the-world-with-42-million-people.html>

Mu Xuequan, *China's Yangtze River Delta to attain modernization by 2020*, says official, 2009 Xinhua News Agency, retrieved March 15th 2012, http://news.xinhuanet.com/english/2008-10/17/content 10206478.htm>

Redvers, Louise, *Angola's Chinese-built ghost town*, BBC online, retrieved August 12th 2012, http://www.bbc.co.uk/news/world-africa-18646243

Shanghai, Encyclopædia Britannica Inc. 2012, retrieved March 22 th 2012, http://www.britannica.com/EBchecked/topic/538506/Shanghai>

Shenzhen, Encyclopædia Britannica Inc. 2012, retrieved March 22 th 2012, http://www.britannica.com/EBchecked/topic/539823/Shenzhen>

Wang, Hongyi, *Shanghai population may top 23 million*, China Daily Information Co, retrieved August 15th 2012, http://www.chinadaily.com.cn/china/2011-02/23/content_12060936.htm

Lubin, Gus, *NEW SATELLITE PICTURES OF CHINA'S GHOST CITIES*, 2012 Business Insider, Inc, retrieved March 23rd 2012, http://www.businessinsider.com/chinese-ghost-cities-2011-5

Rathod, Chandni & Lubin, Gus, *And Now Presenting: Amazing Satellite Images Of The Ghost Cities Of China*, 2012 Business Insider, Inc, retrieved March 23rd 2012, http://www.businessinsider.com/pictures-chinese-ghost-cities-2010-12

Mcdonald, Duff, *Ghost town, Inner Mongolia: Inside China's empty cities*, News Network. A Time Warner Company, retrieved March 23rd 2012, http://finance.fortune.cnn.com/2010/12/21/ghost-town-mongolia-inside-chinas-empty-cities/

Day, Peter, *Ordos: The biggest ghost town in China*, BBC 2012, retrieved March 24th 2012. http://www.bbc.co.uk/news/magazine-17390729