PLANNING CHINESE CITIES: THE LIMITS OF TRANSITIONAL INSTITUTIONS¹

Yehua Dennis Wei² Department of Geography University of Wisconsin at Milwaukee

Abstract: China's economic reform is a gradual and exploratory process, which has stimulated the dramatic growth and restructuring of the Chinese cities, but has also made urban master plans quickly outdated and unable to function effectively to guide the development of cities. Through a case study of Hangzhou, the paper argues that the gradual and exploratory nature of China's reform is incompatible with the nature of the urban master plan, which requires a blueprint and the ability to project the future. Rather than guiding development and policies, urban master plans often lag behind reforms initiated at the national and local levels, and have to be revised constantly to follow the new direction of the reforms. Consequently, Chinese cities are in chaos, and much development and new construction lacks proper planning guidance. The paper argues that problems with Chinese cities and planning are related to the incompatible relationship between the nature of urban planning and that of transitional institutions. This dilemma was intensified by the disruption of planning during the Cultural Revolution, problems with planning education, and the slowness in reforming planning systems in China. The analysis highlights the broad transitional contexts underlying urban planning, and the responses of planers to growth and change. The paper also discusses the need for further reform of Chinese institutions and planning systems. [Key words: transitional institutions, transitional cities, urban growth, China.]

INTRODUCTION

Scholars heatedly debate the spatial ramifications of reforms in China. Spatial transformation in China is uneven, and regions exhibit multiple trajectories of development (e.g., Wei, 2000). Chinese cities are undergoing unprecedented growth (e.g., Pannell, 1992; Yusuf and Wu, 1997), and foreign investment is an emerging agent of urban development (e.g., Li and Tang, 2000). Polycentric restructuring, suburbanization, and social stratification are in process (e.g., Zhou and Ma, 2000). The ongoing process of economic reform and dismantling orthodox socialist institutions generates new ideologies and new development agents. A multiplicity of new agents of urban growth and transformation are constantly shaping and reshaping urban spaces in China, making planning and managing transitional cities a challenging task, if not an impossible one. Urban scholars and

¹I would like to acknowledge the constructive comments of the four referees, the able research assistance of Shane Steinfeld, and AAG and NSF support for my participation at the IGU Congress. This research also benefited from a grant from Geography and Regional Science, and China, Taiwan, Mongolia, and Southeast Asia Programs, National Science Foundation (Grant BCS-0004357).

²Correspondence concerning this article should be addressed to Yehua Dennis Wei, Department of Geography, University of Wisconsin at Milwaukee, Milwaukee, WI 53201; telephone: 414-229-3941; fax: 414-229-3981; e-mail: weiy@uwm.edu

planners have questioned the effectiveness of orthodox urban master planning and avenues for improvement (e.g., Yeh and Wu, 1999; Xu and Ng, 1998; Chen, 2002).

The study of Hangzhou in this research reveals the broad reform and transition in China, the dramatic growth and restructuring of Chinese cities, and the challenges to Chinese approaches to urban planning. Analysis highlights the changing institutional contexts underlying urban planning, and the responses of planners to reform and change. The gradual and exploratory nature of reforms initiated by central and local governments (transitional institutions) has created a huge problem for urban planners. The urban master plan (*zongti guihua*) in China requires long-term visibility and the production of a blueprint, which is incompatible with unpredictable, gradualist economic reforms, and the transitional nature of institutions. Consequently, urban planners are forced to readdress development issues by constantly revising, and rerevising plans to follow new reforms and reflect new realities. Because of this, many cities are growing without proper planning guidance.

UNDERSTANDING TRANSITIONS AND INSTITUTIONS IN CHINA

The process and institutional frameworks of transition vary greatly among former socialist countries. Central and Eastern Europe (CEE) countries adopted the "shock therapy" approach to privatization, which is based on the neoliberal view that free markets and central planning are mutually exclusive, and that radical reforms are necessary for effective transition. The transition, however, has exhibited multiple forms, and is characterized by path dependency, partial reform, recombinant property, economic stagnation, and spatial fragmentation (e.g., Buroway, 1996; Grabher and Stark, 1997).

China has adopted a gradual, experiential approach to reform, well summarized by Deng Xiaoping's expression, "crossing the river by groping for stones." China's reform process has brought growth and prosperity to the country, but the transition has various layers and dimensions (McMillan and Naughton, 1996). The reform process is marked by tensions between state and market, within the state units, and between domestic and global forces. Scholars have been debating the nature of reform and transition in China, and are concerned about the social costs and spatial ramifications of reform (Wei, 2000). While some emphasize decentralization of power and the rise of local state corporatism (e.g., Oi, 1992), others argue that the infusion of market mechanisms is fundamental to the changes taking place in China (e.g., Nee, 1989). Rather than either state-centric or market-centric, Wei (2000) synthesized previous work, and argued that the transition can be best understood as a triple process of decentralization, marketization, and globalization.

The transitional institution of decentralization provides local governments considerable power in decision-making and resource allocation, especially in the control over revenue, investment allocation, and granting of land-use rights. Marketization of coordination mechanisms has become especially important since the 1990s, and many bureaucratic coordination organs and vertical control instruments have been removed. China has also restructured Mao's policy of self-reliance and favored opening up its domestic economy. Facilitated by global restructuring, the coastal region has captured the lion's share of foreign direct investment (FDI). The state—municipal and county governments in particular—has become a major agent of urban transformation (Ma, 2002; Wei,

2002), and is increasingly acting as a development/entrepreneur state. The interdependence between local states and enterprises further stimulates the efforts of local governments to spearhead economic reforms. Coastal cities are constantly initiating new policies and restructuring urban spaces to attract FDI and promote growth (e.g., Wei and Jia, 2003; Wu, 2003).

Decentralization was emphasized during the early stage of the reform, and gradually intertwined with the process of marketization. Efforts to open the Chinese economy were not as linked to the reforming of the domestic economy during the early 1980s, but have become more integrated with one another. The triple transition has constantly reconfigured the relationship between state and market, and between domestic and international forces. The local state has become more entrepreneurial and technocratic than its predecessor and the central state. The firm, including development cooperation, is being transformed from a socialist working unit (danwei) to a market-oriented, profit-seeking enterprise. Chinese institutions have shifted from emphasizing egalitarianism, social movement, and self-reliance, toward pursuing growth and competitiveness. Chinese cities have been conceptualized as growth machines centered around mayors and economic bureaus. The transformation, however, does not take place overnight; it is a gradual and experiential process. Chinese institutions—whether the central state or the local state—are themselves evolving, and are transitional in nature. The transitional institutions allow local governments to benefit from the rapid economic growth in multiple ways (Bai et al., 2003).

Transitional institutions, however, are unstable, and are characterized not only by rentseeking behavior but also by conflicts among different government divisions regarding the power structure and reform process, Reforms in China, especially the gradual shift away from central planning to a quasimarket system, as this research argues, are incompatible with the orthodox urban master planning, which requires producing a long-term blueprint to guide future development. Such a plan then obtains a lawful or semilawful status and is implemented. In theory, planning is forward-looking, seeking to determine future action (Cullingworth, 1997). Chinese planning is even more rigorous and deterministic, and often includes detailed infrastructure planning, conceptual design, and near-term construction projects. Major institutional reforms, which greatly shape the cities and underpin urban planning, however, are formally launched by the central and local governments. It is impossible for urban planners to predict future reform actions, since reform results from experimentation, power struggles, and negotiation. Reform and decentralization have empowered growth-oriented mayors and economic/financial bureaus, which tend to view urban planning as an element of economic planning and an instrument of growth. Such goals often conflict with planners' interests in long-term sustainable development and orderly spatial organization of cities.

Given the fact that broad institutional contexts underpinning urban planning are unpredictable and constantly changing, Chinese planners constantly face new institutions and new problems. Urban planning in China, as in the United States (McCann, 2001), has become complex and increasingly political, rather than a purely technical process. Orthodox master planning, which dates from the era of central planning, is challenged by the reality that Chinese cities are under constant change, and the future of China and its institutions are uncertain. Urban planning is like shooting a moving target: planners are forced to constantly revise previously made plans, which makes planning implementation

difficult and limits the role of urban planning in solving problems of chaos and urban mismanagement. Researchers have revealed a massive increase in construction sites, traffic congestion, and loss of rural agricultural land in China (e.g., Yeh and Li, 1999).

Problems with Chinese cities and planning are related to the incompatible relationship between the nature of urban planning and that of transitional reform institutions and the dynamics of urban growth in China. Such a deep, fundamental contradiction underlies problems with Chinese cities and urban planning. This also indicates that gradualist reform and transitional institutions do have limitations, and are a fundamental cause of the problems of urban planning, and of the chaos of Chinese cities. These arguments will be elaborated and supported through an analysis of shifting planning contexts and planning revisions in Hangzhou.

Hangzhou serves as a case study mainly for three reasons. First, Hangzhou is representative of coastal metropolises that are undergoing dramatic growth and restructuring. It is the capital of Zhejiang Province, known for its rapid ownership transformation and the development of private enterprise (Wei and Ye, 2004). The total population of Hangzhou grew from 1.01 million in 1977 (the year before the 1978 reform), to 3.73 million in 2001, which made Hangzhou the sixth largest city in China. Second, Hangzhou is also a secondary city in an emerging global city region centered around Shanghai (the Yangtze Delta). Hangzhou has been searching endlessly for strategies to survive the competition with Shanghai, as reflected in urban development strategies and planning. However, research on Hangzhou and Zhejiang Province remains limited, despite a huge number of publications on Guangdong and Shanghai. Lastly, starting with a study Hangzhou in the mid-1980s, the author has recently done several rounds of fieldwork in Hangzhou, including interviewing local scholars, urban planners, and foreign investors.³ Since China's master planning is comprehensive, this paper deals mainly with strategy, population, and spatial structure, and deemphasizes urban design, short-term construction planning, and infrastructure planning. This study of Hangzhou will shed more light on the understanding of urban transformation and planning response in transitional countries.⁴

HANGZHOU: DEVELOPMENT PROCESS AND THE PLAN OF THE EARLY 1980s

Located in the Yangtze Delta, Hangzhou is one of the ancient capitals in China (Fig. 1). With more than 2,000 years of history, the city emerged as the largest and the most important commercial center in China during the Southern Song Dynasty (A.D. 1138–

³ Starting with a study of satellite towns in Hangzhou in 1984, I have followed closely the planning and development of Hangzhou. I have visited Hangzhou every year for the last six years, with each visit usually lasting 1–2 weeks (three trips in 2003, totaling more than two weeks). During these visits, I have interviewed numerous people, including the officials administering the planning process, the planners and consultants involved in the making of the master plans, experts invited to evaluate the plans, observers, and concerned citizens. Almost all of the interviews were informal, based on networks. The insider information on players, process, and conflicts in planning is essential for the understanding of the complicated planning process in China, and can hardly be obtained through formal interviews.

⁴The Hangzhou case does have limitations. As a coastal city in the Yangtze Delta, an emerging global city region centered on Shanghai, Hangzhou is at the frontier of market reform and globalization. It leads Chinese cities in the transition from socialism, and has been experiencing more profound changes than interior cities where the states exert greater control and urban transitions have been slower.

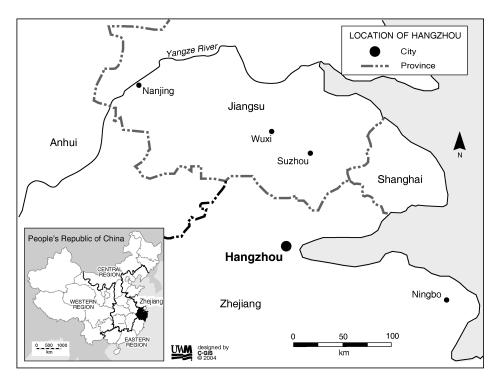


Fig. 1. Location of Hangzhou.

1276) when it served as the national capital. It is known for its beautiful natural land-scapes, historical heritage, and cultural products (Wei and Li, 2002). Hangzhou's economic position in the Yangtze delta, however, has been overshadowed by the rise of Shanghai since its opening by colonists as a trading port in the early 1840s.

After the founding of the People's Republic of China (PRC) in 1949, Hangzhou was under socialist transformation characterized by Soviet-style heavy industrialization, national defense, and class struggle. In the 1950s, Hangzhou began economic recovery and new industrialization programs, with an increasing population (Table 1). In 1953, with the help of Soviet expertise, Hangzhou was planned as a scenic relaxation city, leading to the construction of resorts and hotels around the West Lake. In the late 1950s, however, with Mao's policy to speedily transform capitalist consumer cities into socialist productive cities, Hangzhou underwent socialist industrialization. In 1957-1958, Hangzhou planned to develop 10 industrial districts, and the 1959 Draft Plan of Hangzhou proposed to build the city into an industrial city centered on heavy industry (Hangzhou Local Record Editorial Committee, 1999), followed by the establishment of a group of steel, oil refinery, auto, shipbuilding, paper, and heavy chemical factories. From the early 1960s to the early 1970s, almost no major investment projects were allocated in Hangzhou because of defense considerations and interior construction. Economic stagnation forced Hangzhou to strictly control rural-urban migration, and sent thousands of urban residents to the rural areas (deurbanization), which resulted in population decline

Year	Total population (thousands)	Nonagricultural population (thousands)	Metropolitan area (sq. km)	Built-up area (sq. km)
1950	647.5	493.4	13.1	13.1
1960	969.3	802.0	122.5	_
1970	945.5	707.1	64.9	_
1980	1,130.8	879.3	430.0	53.0
1985	1.249.7	1,000.1	430.0	60.7
1990	1,338.9	1,099.7	430.0	69.2
1995	1,435.2	1,213.8	430.0	102.2
2000	1,791.8	1,436.9	682.9	177.2
2002	3,870.1	2,059.8	3,068.0	_

TABLE 1. GROWTH OF POPULATION AND LAND AREAS IN HANGZHOU, 1950–2002

Source: Hangzhou Statistical Bureau, 2001-2003.

(Table 1). In the early 1970s, with the emergence of a pragmatic leadership, some new industries were established. In 1977, the secondary sector (industry) provided 74% of GDP, considerably higher than that in 1950 (34.2%). Hangzhou had been transformed into an industrial city.

In the late 1970s, many urban youth previously sent to the countryside returned to the cities. The nonagricultural population in Hangzhou increased from 756,100 in 1977, the year before reform, to 879,300 in 1980. The growth placed a heavy burden on Hangzhou, which was suffering from economic stagnation and the shortage of urban services common to socialist cities. In 1980, Hangzhou had a built-up area of 53 km², with per capita living area of mere 4.1 m² and per capita residential land of 22.59 m² (Hangzhou Revolution Committee, 1981). Most of the built-up areas established after 1950 were for industrial use, and related transportation and residential activities. The city was facing a shortage of urban services, and poor infrastructure created a serious bottleneck to urban development.

Under such circumstances, China formalized its national urbanization policy as one "strictly controlling the size of large cities, rationally developing medium-sized cities, and vigorously developing small cities" (Wei, 1994). Meanwhile, with reforms and urban growth, the central government directed large cities to undertake planning activities. Provincial capitals like Hangzhou were among the first group of cities in China to initiate urban planning. Socialist ideology and the urbanization policy of controlling the size of large cities had a great impact on the planning of Hangzhou, while some western ideas of urban planning (e.g., functional divisions, satellite towns) were introduced into the planning.

Hangzhou initiated its master plan in 1978, and to a certain extent it was typical of master plans in China in the early 1980s (Hangzhou Revolution Committee, 1981). Approved by the State Council in 1983, it reflects the early stage of economic reforms during which new ideas of reform were generated, although the legacy of socialist systems was also present. It was bold at that time since the plan criticized the leftist ideas and the problems with the Cultural Revolution. While it was comprehensive in scope, it

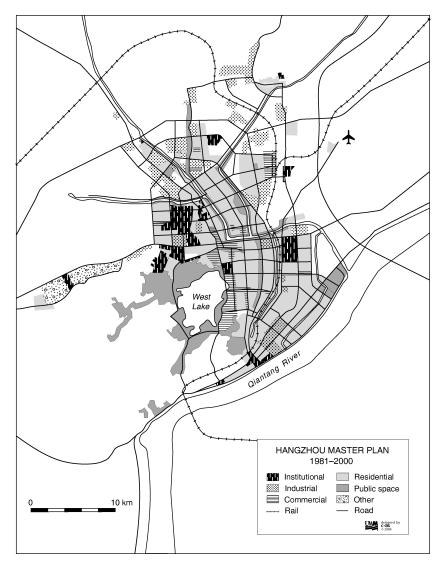


Fig. 2. Master plan of Hangzhou, 1981–2000. Source: Hangzhou (1981).

viewed planning as a technical practice, emphasized physical design, and produced a blueprint for future development (Fig. 2). The planning process assumed absolute power of the state, with little consideration of markets. This reflects the relationship between states and markets in the early 1980s when the emphasis of reform was on decentralization and rural areas.

The plan proposed the development of seven satellite towns, divided the city into five functional districts, and emphasized the order of the city. The plan also proposed to restructure urban land use by providing more land for residential development, transportation, and public usage. It proposed to develop the Wulin District into a new commercial

and cultural center of Hangzhou, replacing the traditional center near the West Lake in order to reduce the impact of overconcentrated human activities on the lake. Areas surrounding the West Lake, considered the treasure of Hangzhou, were to be restructured for tourism purposes. The plan shows signs of functionalism, conservatism, and idealism, and is a mix of legacies of traditional socialist urban planning, western planning theories, and Chinese policies in the early 1980s. It was the first time such a comprehensive plan was made in Hangzhou, and was a big step in the efforts of developing Hangzhou into a modern and sustainable city.

Under the influence of the national urban policy and antiurbanism, the plan stressed the control of urban population and built-up areas. The plan set up control objectives for a total population of 1.15 million in 1985, and 1.2 million in 2000. The population objectives were the basis for the planning of urban spatial organization, land for future growth, and infrastructure. As one of the most important historical and tourist cities in China, the State Council highlighted the strict control of population growth in Hangzhou. Hangzhou proposed several measures to control population growth. First, as industrial growth is considered the driving force underlying urban population growth, and conflicts with Hangzhou's tourism, it was advocated that Hangzhou should limit the allocation of major industrial projects. Some heavy industries should be relocated to the satellite towns, moved to suburban areas, or even shut down. Such a position on industry, however, was opposed by some officials at economic bureaus, since China began to shift toward growth and industry was considered the key to the economy of Hangzhou.

Second, the urban built-up area should be limited to 62 km² in 1985, and can only increase to 90 km² in 2000. The plan declared that the agricultural land in the south and land for tourism purposes should be strictly controlled. The future land expansion was toward the northwest. This was based on the fact that the Qiantang River limits southern expansion, the railway and suburban vegetable production disallow eastern development, and the city already extended toward the north. Given the economic and technological levels of China at that time, railroads and the Qiantang River were considered barriers limiting the spatial expansion of the city.

Third, influenced by western ideas of urban planning, seven satellite towns were designated for Hangzhou (Fig. 3). It was expected that some new projects and factories in Hangzhou would be allocated to these satellite towns. This approach was widely adopted in the planning of other Chinese large cities in the early 1980s, including Shanghai, Beijing, and Nanjing. Most of those satellite towns are within a short distance of Hangzhou. The plan designated functional divisions of the satellite towns, and each was planned as complimentary to Hangzhou (Table 2). Xiaoshan was designated as a major industrial center of Hangzhou, and Fuyang, a center of education and tourism.

Lastly, strict policy was implemented in migration control, late marriage, and family planning. Retired military personnel, transferred government officials, and selected college graduates were given priority in residing in Hangzhou. It would take years for common workers to get their spouses to become registered as part of the population of the city, although a more favorable policy was granted to those with special talents. Those planning ideas and policies were widely implemented in large cities in China in the 1980s. The planning blueprint and population control, however, did not foresee the further reform and dynamic growth of the city, and has been seriously challenged by reforms since the mid-1980s.

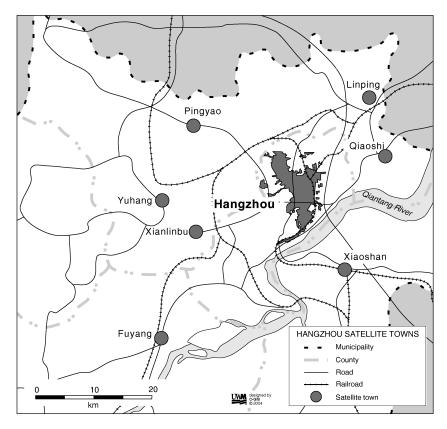


Fig. 3. Plan of satellite towns in Hangzhou, 1981–2000. Source: Hangzhou (1981).

HANGZHOU UNDER REFORM: CHALLENGES TO PLANNING

Since the early 1980s, China has launched a series of reforms, which have gradually dismantled orthodox socialist institutions, and stimulated rapid growth and restructuring, which have forced the frequent adjustment of urban master plans. Since the 1981 plan, Hangzhou has been continuously revising the original plan. In fact, even before the formal approval of the 1981 Master Plan of Hangzhou in 1983, scholars already questioned the population control objectives and the effectiveness of policies to control urban growth (Wang et al., 1982).

In 1984, China's economic reform shifted its emphasis from rural reforms to urban reforms and open door policies. While continuing decentralization, reforms began to dismantle the control of the state and extended open door policies from special economic zones to 14 coastal cities. The State Council approved the opening up of Hangzhou to foreign investment and trade, followed by the establishment of an open district for foreign investment (Hangzhou Economic and Technological Development District, or HETDD). Meanwhile, the success of economic reforms stimulated the growth of the urban

Name	Distance to city (km)	Planned population (in thousands)	Planned functions
Xiaoshan	20	100-150	Textile, manufacturing
Linping	26	50	Manufacturing
Xianlinbu	20	30	Manufacturing and heavy industries
Pingyao	26	30-50	Textile and light industries
Fuyang	40	50	Culture, science, and technology, relaxation and tourism
Yuhang	26	30	Health care
Qiaoshi	20	30-50	New industrial district

TABLE 2. PLAN OF SATELLITE TOWNS IN HANGZHOU, 1981–2000

Source: Hangzhou (1981).

economy and the increase of migrants in cities. Hangzhou's population grew rapidly (Table 1), which was beyond the expectation of urban planners.

Those institutional reforms immediately challenged the 1981 plan, since they forced Hangzhou to reconsider the population control objectives, increase land for urban development, and improve urban infrastructure. The area to harbor HETDD was originally planned as agricultural/vacant land use, and the new decision and expected development immediately challenged the plan, and demanded new land development, housing construction, and transportation improvement. In 1984, the regional planning framework for Hangzhou was produced as part of the Plan for the Shanghai Economic Region. The document recognized more rapid population growth and restructuring in Hangzhou (Hangzhou Urban and Rural Construction Commission, 1984). In November 1984, the Chinese Communist Party's (CCP) Standing Committee of Zhejiang Province approved the request of the People's Government of Hangzhou to revise the 1981 plan. The 1986 revision allowed more rapid growth of population and land areas, provided more spaces for foreign investment, industrial development and tourism, and encouraged improvement in education and infrastructure. It also began to shift away from the idea of satellite town development, since planned satellite towns, such as Xiaoshan, Fuyang, and Yuhang (Fig. 3), were capitals of suburban counties, which were not under the jurisdiction of the City of Hangzhou. After further work, the revision was submitted for approval. In November 1991, the People's Congress of Hangzhou approved the revised plan of Hangzhou. In May 13, 1992, the plan was submitted to the provincial government for approval.

However, macro conditions underlying planning of Hangzhou changed substantially in the early 1990s, quickly making the 1986 revised plan outdated. In 1992, Deng Xiaoping toured southern China and pushed for more radical reforms, emphasizing marketization and globalization. Consequently, Hangzhou decided to accelerate economic growth, including the establishment of more development districts. This was also considered necessary since the economic growth rate of Hangzhou had not been as fast as expected, due partly to the challenge of taking effective measures to stimulate economic growth, and partly to the lack of industrial space needed to attract investment.

The State Council approved Hangzhou to host four national-level development districts: HETDD, Hangzhou High-Tech Development District, Xiaoshan Economic and Technological Development District, and Zhijiang Tourism and Vocation District, each with preferential policies. The high-tech district, for example, provided foreign investors with free taxes for 10 years (*Gaige Yuebao*, 1992). The establishment of these districts opened the door for industrial and residential development. These new developments once again were beyond the master plans, and also substantially increased the built-up area and changed urban spatial structure, making the 1981 plan and its 1986 revision obsolete.

Another major challenge was the rapid growth of population in Hangzhou. In 1985, the total population of Hangzhou reached 1.25 million, including a non agricultural population of 1 million, which surpassed the control objective set up for that year by the 1981 plan (Table 1). The control objective for total population for the year 2000 was surpassed in 1983, and the 2000 objective for non-agricultural population was surpassed in 1988. In 1990, the total population was 1.34 million and nonagricultural population was 1.1 million. According to the 1990 census, the residential population in Hangzhou reached 1.47 million. The built-up area in Hangzhou increased from 53 km² in 1980 to 69.2 km² in 1990, although at a mild level of growth.

Several major factors have contributed to the population growth of Hangzhou (Wei and Li, 2002). First, decentralization has provided local governments, enterprises, and individuals more decision-making power, and marketization has reduced governmental control. The household registration system has been largely disbanded, and no longer controls employment. The development of housing and land markets breaks the control of states over housing and the food supply. Consequently, migrants do not have to rely on the government for jobs and daily living. Second, the increase of foreign investment and trade also contributes to job and population growth. HETDD, for example, is planned to occupy an area of 27 km², greatly increasing urban space and population size. Third, economic reforms and growth have stimulated urban growth and restructuring. As the provincial capital and the economic center of Zhejiang, Hangzhou has attracted vast amounts of investment, stimulating job creation and drawing in migrants looking for better living conditions. Shortages in urban services have been gradually rectified through the development of the service sector, and rural migrants are taking jobs as nannies, repairers, vendors and construction workers. Lastly, spatial development and restructuring have also affected urban population growth. Like other cities in China, the suburban areas (or urban periphery) have been experiencing rapid growth, and the city has gradually become polycentric.

Hangzhou embarked on another round of planning revision in August 1993. The Master Plan of Hangzhou (1993–2020) (draft) was finished in March 1994 for discussion and suggestions. The plan proposed an objective of a total population of 1.45 million in 1995 and 1.5 million for 2000, and an urban population of 1.22 million and 1.31 million in 1995 and in 2000, respectively. However, planning activities to detail those ideas did not materialize, since Hangzhou was still in the process of annexing land from suburban counties, which could have greatly affected the plan of the city. Rather than dispersing development to suburban counties, Hangzhou abandoned the concept of satellite town development and attempted to centralize resources by annexing land from suburban counties.

With the acceleration of reforms, Hangzhou has recorded dramatic population growth since the early 1990s. In 1995, Hangzhou had a total population of 1.44 million and a non-agricultural population of 1.21 million. The built-up area of Hangzhou increased rapidly from 69.2 km² in 1990 to 102.2 km² in 1995. All this growth was beyond the expectation of previous plans, and made the planning process difficult, and plans quickly became obsolete.

PLANNING HANGZHOU: RECENT EFFORTS

In April 1996, Hangzhou succeeded in gaining control of six townships from Xiaoshan and Yuhang counties, which provided more space for urban development. With the inclusion of these townships, the city had a population of 1.63 million and a nonagricultural population of 1.26 million. The number of migrants increased from 37,857 in 1982 to 161,755 in 1990 and 987,303 in 2000 (Hangzhou Planning Bureau, 2002). Temporary residents increased from 138,100 in 1985, to 172,527 in 1991 and 454,453 in 2000. Those figures substantially surpassed the population control objectives for the year 2000 set up in the previous plans, and needed a new plan to guide the development.

Rapid growth requires more land for urban development and facility allocation. The city expanded dramatically toward the east, the north, and the northwest, with massive construction underway in the south side of the Qiantang River. Most of those developments were beyond the scope of the master plans. The spatial structure of the city has been changed from a compact city, to a dispersed, multinuclei structure. Industrial land use was further pushed toward newly developed areas, such as the HETDD in Xiasha, focusing on foreign-invested enterprises and the relocation of industries from the central city. Many new commercial spaces have been developed in both old city districts and newly developed areas. Projects like the Future World, the new railway station, the Xiaoshan International Airport, the Song Dynasty City, were beyond urban master plans and occupied a substantial amount of land. Decentralization allowed district governments to establish local development districts, which were also beyond urban master plans and caused the conflict between municipal and district governments over their structure and management. Hangzhou has been struggling to provide urban spaces for investment projects and the rapidly increasing urban population.

With low per capita urban land, Hangzhou has a severe shortage of open space, transportation land use, and residential space. The city is experiencing an unprecedented real estate boom, making Hangzhou one of the most expensive cities in China in which to live. Areas near the West Lake are among the most expensive neighborhoods in China. Market prices for most apartments in the central areas of Hangzhou increased from about 4,000–5,000 yuan per m² in 1995 to 7,000–8,000 yuan per m² in 2000, which was comparable to prices in Shanghai, and much higher than Suzhou and Nanjing, two other major cities in the Yangtze Delta. Housing prices in some near-suburban areas, such as Jiangcun, have more than doubled in the last five years. The huge profits made in the real estate market by developers and local governments have stimulated more investment in the sector. Much suburban agricultural land had already been lost to urban development, and little vacant land is available for future development. Rapid growth has also put tremendous pressure on urban infrastructure and intensified environmental problems. The sizable

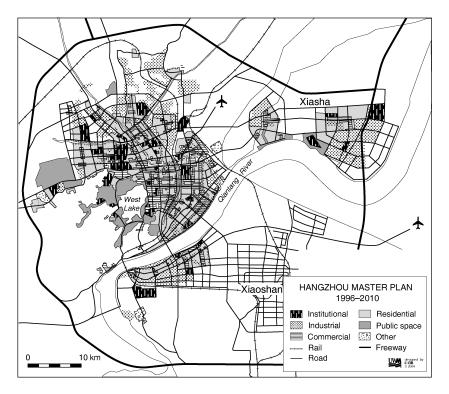


Fig. 4. Master plan of Hangzhou, 1996–2010. Source: Hangzhou (1998).

urban and tourist populations have placed a great pressure on the capacity of the West Lake, despite the efforts of the government to reduce pollution and to protect the environment.

With urban problems becoming more serious in Hangzhou and many other cities, the State Council called for strengthening urban planning. After annexing six townships, Hangzhou started a new round of planning activity in June 1996. The Master Plan of Hangzhou (1996–2010) was evaluated by planning specialists from the Ministry of Construction, and was exhibited to the public for suggestions. In November 1997, Hangzhou completed revising the master plan, and a full document was produced in March 1998. The plan set up a population of 1.76 million in 2000 and 2 million in 2010, considerably higher than previous plans (Hangzhou People's Government, 1998). The plan also substantially increased the planning area to include suburban counties, and dramatically increased the space for urban development by expanding towards the east and south (Fig. 4).

In late 1998, however, a better educated, more professional, more pragmatic, and open-minded leadership emerged in Hangzhou. At the provincial level, a new leadership also emerged, which accepted the inevitability of urbanization and argued for agglomeration, growth, and globalization. Accelerating urbanization was promoted as an effective way to achieve rapid economic growth and sustainable development (Zhejiang Province,

Development Planning Commission, 2000). The Hangzhou Party Committee and Municipal Government announced the decision to accelerate urbanization in Hangzhou, which proposed bold reforms to stimulate economic growth and transition, and to position the city in the globalization and information age. The document directed that Hangzhou should accelerate the process of urbanization, strengthen agglomeration and central city functions, and promote education and high-tech industries. It also proposed specific goals for population and GDP growth, industrial restructuring, and the development of high-tech industries (Hangzhou Yearbook Editorial Committee, 2002b). The city launched a series of local initiatives, such as "infoport," "going west," "expanding east," and "the Qiantang River age," which were beyond the 1996 plan. Urban planning is considered a tool for stimulating economic growth and preparing Hangzhou for globalization and new competition. The plan of 1996 was considered too conservative and lacking in vision. While continuing to make efforts to improve the physical environment of the city, the Planning Bureau was under pressure to revise the 1998 plan before it was submitted to the Ministry of Construction for approval.⁵

With the emphasis of the new leadership on higher education and the high-tech industry, almost all universities and colleges in Hangzhou demanded new campuses. At the beginning of 2000, the Hangzhou Party Committee and Municipal Government announced the "Number One Project" for high-tech development, which stated "by 2010 Hangzhou should be Zhejiang's high tech R&D center and the center for the exchange of results, a high tech commercialization base area, a high tech products export base area, and one of the country's high tech sector concentration zones (quoted in Hartford, 2002). With the support of the new leadership, four higher-education districts have been designated. The Xiasha Higher-Educational District began construction in November 2000 in the north of the HETDD. With a planned area of 10 km² and an investment of 8.6 billion yuan, in 2010 it is expected to host 15 colleges and harbor 140,000 students. 6 The Xiaoheshan Higher-Educational District occupies 4.96 km², and hosts five universities and colleges led by Zhejiang Industrial University, where new students arrived in fall of 2001. Binjiang Higher-Educational District is located in the south of the Qiantang River neighboring Xiaoshan development zone. It is planned to have a land area of 1.82 km² and host six universities and colleges. Lastly, Zhejiang University has constructed its Zijingang Campus, which occupies 2.06 km² and is promoted as a garden-like campus. In fall 2002, a total building space of 530,000 m² was put into use, mainly by freshmen, sophomores, and selected departments. Almost all of these developments were beyond the master plans, and required assessment and planning guidance.

Moreover, with the emerging global city status of Shanghai, Hangzhou can feel itself being squeezed. Hangzhou's efforts to attract foreign investment face serious competition from Shanghai and Jiangsu, especially for those investors with headquarters and R&D functions. Mary Kay, for example, has production in Hangzhou, but its headquarters and sales offices are in Shanghai; even the general manger of the Hangzhou factory has his

⁵The planners informally interviewed in summer 1999 felt uneasy with the revision, since some preferred minor revision, while others wanted a major revision. Many strategic issues, such as the future CBD and relations with Xiaoshan, were still vague.

⁶Interview with an investment promotion officer at HETTDD Administrative Commission, June 2001.

family in Shanghai. Hangzhou's status as the capital of Zhejiang Province is being challenged, since many cities in Zhejiang, such as Ningbo, Shaoxing, and Jiaxing, are more eager to build networks and collaborations with Shanghai. For many years, Jiaxing has been claiming that it is the hinterland of Shanghai, not Hangzhou. Shaoxing and Ningbo have announced aggressive measures to build bridges across the Qiantang River to connect and integrate with Shanghai. In August 2002, the State Council approved a bridge project connecting Ningbo with Shanghai, with an investment of 10.7 billion yuan and a length of 36 km. Moreover, since both Wenzhou and Hangzhou have less available land in their open districts than that in Shanghai's Pudong and suburban districts, many firms in Wenzhou have established headquarters or branch plants in Shanghai. 8 To remain competitive and capitalize from globalization, Hangzhou proposed a new CBD in the south side of the city—Qiantang New Town (Qiantang Xing Cheng), where a new city hall, an opera house, an exhibition center, and many high-rise office and residential buildings will be built. The new exhibition center will be one of the largest in the world. With total investments of 170 billion yuan, the leadership expects the new center to rebuild Hangzhou's image as a globalizing metropolis and an economic powerhouse of the Yangtze Delta.

The annexation of the six townships from suburban counties was still not enough to lessen the stress of the city-suburban relationship, nor did it provide enough space for urban development. In 1998, per capita living area in Hangzhou was 9.6 m², among the lowest in China (Hangzhou Local Record Editorial Committee, 1999). With the popularity of annexing whole suburban cities/counties in China (Wenzhou and Ningbo, for example, both succeeded in annexing a whole suburban county/city within its administration), Hangzhou argued for the annexation of Xiaoshan and Yuhang cities.

Meanwhile, in March 2000, the Provincial Government of Zhejiang approved the 1996 revision, followed by the submission to the Ministry of Construction for approval. The ministry in principle approved the plan (Hangzhou Yearbook Editorial Committee, 2001), and reported its evaluation of the plan to the State Council in January 10, 2001 (Hangzhou Planning Bureau, 2002).

However, in February 2001, the State Council approved Hangzhou's request to annex Xiaoshan City and Yuhang City. Both became districts of Hangzhou, and the total population of Hangzhou more than doubled (Table 1), making Hangzhou the sixth largest city in China. The land area of Hangzhou increased immediately from 683 km² to 3,068 km², and therefore the annexation has provided a substantial land area for urban expansion. Xiaoshan in particular has provided a huge space immediately south of the Qiantang River for industrial and residential development. Under the request of the Ministry of

⁷ Interview with the general manager of Mary Kay (Hangzhou) in July 2002.

⁸Interviews in Wenzhou in September 2003. Shanghai Nanda Group was originated from Yueqing City of Wenzhou Municipality. It established its new factory and headquarters in Shanghai to take advantage of Shanghai's global city functions, mainly in management, sales, and human resources.

⁹Fieldwork, Xiaoshan, July 2001. Xiaoshan competed directly with Hangzhou in many areas. Xiaoshan's economy, based on nonstate enterprises, made it one of the richest counties (county-level city) in China, while Hangzhou was struggling with old state-owned enterprises. With local revenue support, Xiaoshan was able to provide favorable policies for foreign investors and competed with Hangzhou.

Construction, new planning efforts were once again initiated (Hangzhou Yearbook Editorial Committee, 2002a).

Since the late 1990s, urban planners in China have been exploring modern, flexible, and strategic planning approaches, and further strengthening urban research as the foundation of urban planning. Hangzhou Planning Bureau invited leading planning institutions in China (e.g., Beijing University, East China Normal University, Nanjing University, Tongji University, Zhejiang University, Chinese Academy of Urban Planning and Design, and Shanghai Academy of Urban Planning and Design) to participate in the efforts. Their fieldwork started in March 2001, and the project reports were submitted, and evaluated by experts in July 2001.

Based on this research, Hangzhou Planning Bureau invited three leading planning institutions—China Institute of Urban Planning and Design, Nanjing University, and Shanghai Institute of Urban Planning and Design—to conduct conceptual plans (Hangzhou Yearbook Editorial Committee, 2002a). Three conceptual plans were produced at the end of October and evaluated by planning experts in late November 2001, signaling the new direction of urban planning in China, i.e., the introduction and practice of conceptual planning.

In 2002, Hangzhou Planning Bureau assigned Hangzhou Institute of Urban Planning and Design to integrate the three conceptual plans and draft a new master plan. The draft document was evaluated by experts in the field and distributed to varied government organizations for feedback. With the changing of the leadership of the city in 2002, and at the province in 2003, new projects in tourism and industrial development were proposed, which once again affected the planning activities. After further revision, the official document—Hangzhou City Urban Master Plan (2001–2020) was produced in August 2003.

According to the plan, in 2020, Hangzhou is expected to have a total population of 5.3 million and an urban population of 4.45 million. The plan proposes more land in suburban districts, newly annexed Xiaoshan and Yuhang in particular, for industrial use to strengthen economic base of the city. More suburban land has been allocated for residential use to lessen the dramatic rise of housing price. Meanwhile, district planning has been under way in Hangzhou, including master plans of the Xiasha District, and the West Lake District. However, many strategic issues, such as the future CBD of Hangzhou, the size and location of industrial land use, and the organization of transportation network, remain debatable. Hangzhou is also expanding beyond its administrative boundary. In December 1, 2002, Hangzhou signed a contract to purchase the user right of 3000 mou (about 494 acre) land with Haining City at 60,000 yuan per mou, which requires planning to integrate the area with Hangzhou and to provide services. Hangzhou Tourism Commission has embarked Hangzhou tourism planning, which will test the effectiveness of the new master plan. We expect institutions in Hangzhou launch more reforms and initiatives, which will certainly affect planning and implementation.

¹⁰Interview with planners in Hangzhou, September and October 2003.

PLANNING TRANSITIONAL CITIES: A DIFFICULT MISSION

The constant change of planning in Hangzhou, as well as other Chinese cities, reflects the difficulty and dilemmas associated with the planning of transitional cities. Under orthodox socialist systems, urban planning was mainly based on socialist ideology and economic planning (e.g., heavy industry-led development, egalitarianism in distribution), and emphasized socialist construction and project allocation (e.g., Xie and Costa, 1993; Yeh and Wu, 1999). The state had absolute power over urban land use. Reforms have led to the dismantling of traditional socialist institutions, the empowerment of the localities, the infusion of foreign investment, and the pursuit of growth, technocracy, and entrepreneurship. Socialist ideology and national planning, although still exerting a great impact, no longer act as the sole foundation on which urban planning relies. Those changes have challenged orthodox socialist planning systems, and required the formation of new planning approaches.

China's reform is a gradual process and does not have a preconceived blueprint for the future. Each time a major reform program is implemented, the contexts underpinning urban planning change as well. Each time a new local leadership emerges, new projects and initiatives are launched, often without careful planning, research, and project evaluation, and beyond the scope of existing master plans. The massive transformation of Chinese institutions is beyond the expectations of urban planners who are caught by gradualism, uncertainty, and the lack of guidance for future development. Consequently, even before a plan revision is finished, institutional changes force the planners to start another round of planning revision. Planning has become an endless, self-learning, and increasingly political process. Planning in China has become a crucial site of political struggle, like its western counterparts (McCann, 2001). Planning Chinese cities has become a mission difficult to accomplish.

The constant revision of plans has made Chinese cities grow without proper plans. Even if such a plan exists, it quickly becomes outdated, and unable to provide effective guidance for urban development (Chen, 2002). Many new problems have emerged in Chinese cities, which, otherwise, could be at least partially solved by urban planning and management. Shortly after a new street is built, often a project to broaden it has to be launched because the original plan did not expect such rapid growth in urban population and traffic flows, causing massive demolition and waste of resources. In Hangzhou, many new buildings were poorly regulated and constructed in haste. The drive for economic growth and the lack of proper institutional frameworks guiding urban development process have also led to the loss of numerous historical sites in the city (Hangzhou Planning Bureau, 2002). When Chou became the mayor in the late 1990s, one of the major actions he took was to demolish the buildings violating regulations or improperly constructed. Chou's courage was widely applauded by the people of Hangzhou, since previously no administrators of the city dared to touch some of the buildings owned by the higher-level governmental organizations.

Hangzhou also faced intense relationships with its suburban counties, since those counties were worried that the city's insatiable demand for land would lead to more annexation. In 1996, Hangzhou succeeded in the annexation of six townships from suburban counties. To reduce the loss of land resources to Hangzhou, Xiaoshan, and Yuhang sold the user rights of much of the land to developers, who turned much of it into

industrial and residential spaces, leading to a further increase of the built-up area and chaos in construction. Facing the danger of losing more land to Hangzhou, suburban counties had been developing and leasing land adjacent to Hangzhou to gain short-term profits, often without the consideration for planning future growth. Meanwhile, due to rapid growth, Hangzhou struggled constantly in providing land for development, and demanded more spaces for industry and public usage.

Urban dilemmas in China are also coupled with the problems of planning itself. First, the current urban planning approach in China still partially follows the Soviet model, emphasizing physical planning and state power. Urban planning in China originated from the allocation of industrial projects, and planners were trained by Soviet experts. With the termination of Sino-USSR relations and the "Cultural Revolution," urban planning was abandoned, and planning organizations were dismantled. Since the late 1970s, great improvements have been made, through the increase of personnel, funding, and decision power. However, China's urban planning system has been contested by liberalization and globalization, and planning achievement is limited by transitional institutions. Planners are caught by the transition between plan and market, and have difficulty dealing with uncertainty, the emerging market forces, and globalization. On the other hand, orthodox western planning theories rarely address planning in such a transitional context, and can only provide limited usage while dealing with China.

Second, planning is often isolated from development strategies, planning implementation, and urban and regional management. While the state has ownership of the land, the use right belongs to many different enterprises, individuals, and government organizations. Urban planning often assumes the strong power of the state, but planning implementation is challenged by the weakening of the state apparatus and the emergence of markets and private property rights. Poor coordination also exists among different ministries, departments, bureaus, and their branches (Tang, 2000), which is common to both developed and developing countries. Chinese cities have been transformed into growth machines. Municipal officials have become intimately involved in urban growth and financial health through the development of private and foreign enterprises. They have become development/entrepreneur states and tend to deemphasize the "public interest" objectives of good urban planning. City managers blame urban planners for project delays and poor planning, while planners feel uneasy about uncertainty and unpredictability. Consequently, planning has been less effective in providing guidance for urban development and growth management (Xu and Ng, 1998).

The third problem is that some of the Chinese planners are narrowly trained as technocrats and lack the ability to deal with issues in development strategies, resource management, environmental protection, citizen participation, regulation, and mechanisms of implementation—issues critical to contemporary urban planning. While China's economic system has experienced dramatic change, China's urban planning system still needs restructuring. Many planners tend to view themselves as apolitical technical experts, and are obsessed with urban design and utopian planning ideas, which were common to the early postwar planning in western countries (Taylor, 1998), but are less compatible with the new reality of China in the age of market transition and globalization. Some planning scholars and practitioners are eager to make money by drawing the blue-prints for future cities, with little interest in planning theory, development strategy, and mechanisms of implementation. Meanwhile, many cities do not have well-established

urban geographic information systems to monitor the urban development processes. More efforts should be made along lines that improve the transparency and accountability of government policies, further reform planning systems and education, and welcome meaningful public and international participation in the planning process.

Lastly, reforms and globalization have opened a paradox, and led to a new political reality. Planners have to carefully evaluate global change, national reforms, and local dynamics. Many issues affect planning-making and implementation, such as the role of the state and law, the functioning of markets and property rights, citizenship and social justice, the environment, intergovernmental relations, the global and the local, planning values, the nature of planning, and planning and power. This also means that many social problems cannot be solved by planning alone, and further reforms in urban public finance and administrative systems are necessary to improve planning and management of Chinese cities. Some of those problems with planning could be avoided or lessened if Chinese planners studied western experiences carefully and with an open mind, since most of these problems existed in western countries and have been well studied (e.g., Friedmann, 1987; Hall, 1992; Taylor, 1998). These problems point to the need for further reform of planning institutions.

SUMMARY

This paper has explored the rapid growth and changes taking place in Hangzhou, which have constantly shaped and reshaped planning activities. China's transition has brought profound changes to the roles of the state, localities, and global forces. Dramatic changes on the global, national, and local scales have led to dramatic urban growth and spatial restructuring. Hangzhou and many other Chinese cities have grown rapidly since the late 1970s, which was beyond the expectations of urban planners and mangers. Reforms since the mid-1980s in particular have dramatically changed institutional contexts underpinning urban planning in Hangzhou, forcing planners scramble to revise earlier plans to reflect changes and new realities. Hangzhou has recently been making great efforts to lessen the conflicts and solve urban problems, and in 2001, it received an award from the United Nations for radically improving the urban environment.

Urban planning under traditional socialist systems assumed the absolute power of the state, emphasized project allocation, and viewed planners as apolitical technical experts. Such a system of planning, however, has been undergoing restructuring, greatly impacted by reforms. In this article I have argued that the need for predictability and long-term blueprints for urban planning are incompatible with the nature of reforms and transitional institutions in China. In other words, problems with Chinese cities and planning are related to the incompatible relationship between the nature of urban planning, and that of reforms and transitional institutions. Such a contradiction is a deeper, more fundamental problem underlying discrepancies with Chinese urban planning. Planners are caught by the changing relationships between the plan and market, between technical and political contexts, and between internal and external forces. Planning has become a passive response to reforms, and a mission that seems difficult to accomplish. Consequently, planning is less effective in guiding urban development and growth management. This further confirms that gradualist reform and transitional institutions do have limitations.

The complexity and rapid change of Chinese cities has necessitated the reform and strengthening of urban planning and management.

REFERENCES

- Bai, C. E., Li, D. D., and Wang, Y., 2003, Thriving on a tilted playing field: China's nonstate enterprises in the reform era. In N. C. Hope, D. T. Yang, and M. Y. Li, editors, *How Far Across the River? Chinese Policy Reform at the Millennium*. Stanford, CA: Stanford University Press, 97–121.
- Buroway, M., 1996, The state and economic involution: Russia through a China lens. *World Development*, Vol. 24, No. 6, 1105–1117.
- Chen, B. Z., 2002, The change of master planning in the transitional period. *Chengshi Guihua* [City Planning Review], Vol. 26, No. 2, 49–51.
- Cullingworth, B., 1997, Planning in the USA. New York, NY: Routledge.
- Friedmann, J., 1987, *Planning in the Public Domain*. Princeton, NJ: Princeton University Press.
- *Gaige Yuebao* [Reform Monthly], 1992, Preferential policies for Hangzhou high-tech development district. Vol. 5, 18–19.
- Grabher, G. and Stark, D., editors, 1997, *Restructuring Networks in Post-Socialism*. Oxford, UK: Oxford University Press.
- Hall, P. G., 1992, Urban and Regional Planning. London, UK: Routledge.
- Hangzhou Local Record Editorial Committee, 1999, *Hangzhou Shizhi* [City Record of Hangzhou]. Vol. 4. Hangzhou, China: China Bookstore Press.
- Hangzhou People's Government, 1998, *Hangzhou Shi Chengshi Zongti Guihua* [Master Plan of Hangzhou]. Hangzhou, China: Author.
- Hangzhou Planning Bureau, 2002, *Maixiang Qiantangjiang Shidai* [Toward the Qiantang River Age]. Shanghai, China: Tongji University Press.
- Hangzhou Revolution Committee, 1981, *Hangzhou Shi Chengshi Zongti Guihua* [Master Plan of Hangzhou]. Hangzhou, China: Author.
- Hangzhou Statistical Bureau (HSB), 2001–2003, *Hangzhou Tongji Nianjian* [Hangzhou Statistical Yearbook]. Beijing, China: China Statistical.
- Hangzhou Urban and Rural Construction Commission, 1984, *Hangzhou Shi Shiyu Guihua* [Regional Plan of Hangzhou]. Draft. Hangzhou, China: Author.
- Hangzhou Yearbook Editorial Committee, 2001, *Hangzhou Nianjian* [Yearbook of Hangzhou]. Beijing, China: Local Record Press.
- Hangzhou Yearbook Editorial Committee, 2002a, *Hangzhou Nianjian* [Yearbook of Hangzhou]. Beijing, China: Local Record Press.
- Hangzhou Yearbook Editorial Committee, 2002b, *Hangzhou Shi Chengxiang Jianshe Zhi* [Record of Urban and Rural Construction in Hangzhou]. Beijing, China: China Press.
- Hartford, K., 2002, West Lake wired: Shaping Hangzhou's information age. In C-C. Lee, editor, *Chinese Media, Global Contexts*. London, UK: Routledge, 177–195.
- Li, S. M. and Tang, W. S., editors, 2000, *China's Regions, Polity, and Economy*. Hong Kong: Chinese University Press.
- Ma, L. J. C., 2002, Urban transformation in China, 1949–2000. *Environment and Planning A*, Vol. 34, No. 9, 1545–1569.

- McCann, E. J., 2001, Collaborative visioning or urban planning as therapy? The politics of public-private policy making. *Professional Geographer*, Vol. 53, No. 2, 207–218.
- McMillan, J. and Naughton, B., editors, 1996, *Reforming Asian Socialism*. Ann Arbor, MI: University of Michigan Press.
- Nee, V., 1989, A theory of market transition. American Sociological Review, Vol. 54, 267–282.
- Oi, J. C., 1992. Fiscal reform and the economic foundations of local state corporatism in China. *World Politics*, Vol. 45, No. 1, 99–126.
- Pannell, C. W., 1992, The role of great cities in China. In G. R. Guldin, editor, *Urbanizing China*. New York, NY: Greenwood, 11–39.
- Tang, W. S., 2000, Chinese urban planning at fifty. *Journal of Planning Literature*, Vol. 14, No. 3., 347–366.
- Taylor, N., 1998, Urban Planning Theory since 1945. London, UK: Sage.
- Wang, C. J., Ma, Y. X., and Zhou, F. D., 1982, An analysis of urban population size of Hangzhou at the end of the century. *Zhejiang Renkou Tongxun* [Zhejiang Population], No. 3.
- Wei, Y. H., 1994, Urban policy, economic policy, and the growth of large cities in China. *Habitat International*, Vol. 18, No. 4, 53–65.
- Wei, Y. H. D., 2000, Regional Development in China: States, Globalization, and Inequality. London, UK: Routledge.
- Wei, Y. H. D., 2002, Beyond the Sunan model: trajectory and underlying factors of development in Kunshan, China. *Environment and Planning A*, Vol. 34, No. 10, 1725–1747.
- Wei, Y. H. D. and Jia, Y. J., 2003, The geographical foundations of local state initiatives: Globalizing Tianjin, China. *Cities*, Vol. 20, No. 2, 101–117.
- Wei, Y. H. D. and Li, W. M., 2002, Reforms, globalization, and the growth of Hangzhou, China. *Eurasian Geography and Economics*, Vol. 43, No. 6., 401–417.
- Wei, Y. H. D. and Ye, X. Y., 2004, Regional inequality in China: A case study of Zhejiang Province. *Tijdschrift voor Economische en Sociale Geografie*, Vol. 95, No. 1, 44–60.
- Wu, F. L., 2003, The (post-) socialist entrepreneurial city as a state project: Shanghai's regionalisation in question. *Urban Studies*, Vol. 40, No. 9, 1673–1698.
- Xie, Y. C. and Costa, F. J., 1993, Urban planning in socialist China: Theory and practice. *Cities*, Vol. 10, No. 2, 103–114.
- Xu, J. and Ng, M. K., 1998, Socialist urban planning in transition: The case of Guangzhou, China. *Third World Planning Review*, Vol. 20, No. 1, 35–51.
- Yeh, A. G. and Li, X., 1999, Economic development and agricultural land loss in the Pearl River Delta. *China. Habitat International*, Vol. 23, No. 3, 373–390.
- Yeh, A. G. O. and Wu, F. L., 1999, The transformation of the urban planning system in China from a centrally-planned to transitional economy. *Progress in Planning*, Vol. 51, No. 3, 167–252.
- Yusuf, S. and Wu, W., 1997, *The Dynamics of Urban Growth in Three Chinese Cities*. New York, NY: Oxford University Press.
- Zhejiang Province, Development Planning Commission, editor, 2000, *Chengshihua* [Urbanization]. Hangzhou, China: Zhejiang People's Press.

Zhou, Y. X. and Ma, L. J. C., 2000, Economic restructuring and suburbanization in China. *Urban Geography*, Vol. 21, No. 3, 205–236.