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Urban Strategy, Urbanization, and Industrialization:
The Case of The People's Republic
of China (1949-1986)

Zhong Feng Liang

A Thesis
in
The Department
of
Sociology and Anthropology

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ABSTRACT

Urban Strategy, Urbanization, and Industrialization: The Case of the People's Republic of China (1949-1986)

Zhong Feng Liang

It is the less developed countries in the world that have shown the greatest activity in urbanization. At the same time almost all the less developed countries have pursued the goal of rapid industrialization. However, while many of these countries have undergone rapid urbanization during the last several decades, the pace of industrialization has been much slower. Deteriorating living conditions have become a serious problem in these countries. China also aimed for rapid industrialization, but it designed and practiced an urban strategy to limit the growth of urbanization and of spatial concentration. This strategy, with a strong connection to the bitter urban experience of the Chinese Communist Party in its early years, was deeply rooted in the Chinese anti-urban tradition.

Has China's experience created a new road, one which leads to rapid industrialization with a decrease in urban problems? In light of the comprehensive theories of urbanization, which propose a positive relationship between

urbanization and industrialization as well as between spatial concentration and economic efficiency, we hypothesized that the Chinese strategy is in conflict with economic efficiency.

By referring primarily to official statistics, we examined the urbanization and industrialization processes of three developmental periods. In each of these periods, the Chinese strategy was practiced considerably differently. We found that the more successful the implementation of the strategy at depressing the growth of urbanization and urban concentration, the less successful the growth of industrialization. The study reconfirmed positive correlations between urbanization and industrialization as well as between urban concentration and economic efficiency. It would seem, hence, the Chinese strategy does not lead to rapid industrialization.

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CHAPTER ONE: INTRODUCTION

Worldwide urbanization has been recognized as one of the most characteristic features in the transformation of societies over the last couple of hundred years. In purely demographic terms, urbanization represents "a process of population concentration involving the multiplication of points of concentration and the increase in size of individual concentrations" (McGahan, 1982:1). As a comprehensive social process, however, urbanization not only transforms populations from rural to urban, but also at the same time involves structural changes to the economic, societal and political institutions of every nation state.

Since the early nineteenth century, the world has become urbanized at an accelerated rate. According to Kingsley Davis (1977: Chapter 3), only 2% of the world's population lived in cities of over 100,000 in the 1350s. This increased to 6% in 1900, to 16% in 1950 and to 24% in 1970. By 1980, according to the United Nations, 41.3% of the world's population had become urban residents (Hauser et al., 1982:11).

Such a trend can also be seen in terms of both absolute and relative increases in urban population. As Table 1

Table 1 Total Population and Population by Urban and Rural Residence, 1920-2000 (in Millions)

| Region | 1920 | 1930 | 1940 | 1950 | 1960 | 1970 | 1980 | 1990 | 2000 |
|---------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| <i>World</i> | | | | | | | | | |
| Grand total | 1860.0 | 2068.6 | 2295.1 | 2508.4 | 2986.0 | 3610.4 | 4374.1 | 5280.0 | 6254.4 |
| Total urban | 360.0 | 450.0 | 570.0 | 712.1 | 1012.1 | 1354.2 | 1806.8 | 2422.3 | 3208.0 |
| Total rural | 1500.0 | 1618.6 | 1725.1 | 1796.3 | 1973.9 | 2256.2 | 2567.3 | 2857.7 | 3046.4 |
| <i>More Developed Countries</i> | | | | | | | | | |
| Total | 672.7 | 757.9 | 820.6 | 857.5 | 975.8 | 1084.4 | 1181.0 | 1277.4 | 1360.2 |
| Urban | 260.0 | 315.0 | 385.0 | 444.4 | 572.7 | 702.9 | 834.4 | 969.2 | 1092.5 |
| Rural | 412.7 | 442.9 | 435.6 | 413.1 | 403.1 | 381.5 | 346.6 | 308.2 | 267.7 |
| <i>Less Developed Countries</i> | | | | | | | | | |
| Total | 1187.3 | 1310.7 | 1474.5 | 1650.9 | 2010.2 | 2526.4 | 3193.1 | 4002.6 | 4984.1 |
| Urban | 100.0 | 135.0 | 185.0 | 267.6 | 439.4 | 651.5 | 972.4 | 1453.1 | 2115.6 |
| Rural | 1087.3 | 1175.7 | 1289.5 | 1383.3 | 1570.8 | 1874.9 | 2220.7 | 2549.5 | 2868.5 |

Source: Hauser et al, prepared for the UN, 1982:3.

indicates, between 1920 and 1980 world urban population quintupled, soaring from 360 million to 1,807 million, while world total population only doubled from 1,860 million to 3,610 million. Furthermore, between 1980 and the century's end, world urban population is projected to increase by 78 per cent from 1,807 million to 3,208 million, while world rural population is projected to increase by only 19 per cent. By 2000, more than half of mankind (51.2%) will live in urban areas.

Clearly, during the two decades between 1980 and 2000, the less developed countries* will play the major role in the urbanization process, since the more developed countries have already become largely urbanized. While the more developed countries experience a 258.1 million urban population increase, the less developed countries will experience a 1,143.2 million increase, equal to 81.59 per cent of total world urban growth. Meanwhile, as shown by Table 2, the less developed countries will undergo a much higher average annual urban growth rate: 3.9 per cent against 1.4 per cent for the more developed countries.

* In this paper, the categories of countries are simply taken from the divisions of the United Nations. The paired categories, such as "the less developed" against "the more developed", or, "the developing" against "the developed", have been set up according to the levels of economic development of countries.

Table 2. Average Annual Growth Rates* for Total, Urban and Rural Populations, Each Decade 1920-2000; 1920-50; 1950-2000; and 1980-2000

| Region | 1920-30 | 1930-40 | 1940-50 | 1950-60 | 1960-70 | 1970-80 | 1980-90 | 1990-2000 | 1920-50 | 1950-2000 | 1980-2000 |
|---------------------------------|---------|---------|---------|---------|---------|---------|---------|-----------|---------|-----------|-----------|
| World | | | | | | | | | | | |
| Grand total | 1.1 | 1.0 | 0.9 | 1.7 | 1.9 | 1.9 | 1.9 | 1.7 | 1.0 | 1.8 | 1.8 |
| Total urban | 2.2 | 2.4 | 2.2 | 3.5 | 2.9 | 2.9 | 2.9 | 2.8 | 2.3 | 2.5 | 2.9 |
| Total rural | 0.8 | 0.6 | 0.4 | 0.9 | 1.3 | 1.3 | 1.1 | 0.6 | 0.4 | 1.1 | 0.9 |
| More Developed Countries | | | | | | | | | | | |
| Total | 1.2 | 0.8 | 0.4 | 1.3 | 1.1 | 0.9 | 0.8 | 0.6 | 0.8 | 0.9 | 0.7 |
| Urban | 1.9 | 2.0 | 1.4 | 2.5 | 2.1 | 1.7 | 1.5 | 1.2 | 1.8 | 1.8 | 1.4 |
| Rural | 0.7 | -0.2 | -0.5 | -0.3 | -0.6 | -1.0 | -1.2 | -1.4 | 0.0 | -0.9 | -1.3 |
| Less Developed Countries | | | | | | | | | | | |
| Total | 1.0 | 1.2 | 1.1 | 2.0 | 2.3 | 2.3 | 2.3 | 2.2 | 1.1 | 2.2 | 2.2 |
| Urban | 3.0 | 3.2 | 3.7 | 8.0 | 3.9 | 4.0 | 4.0 | 3.8 | 3.3 | 4.1 | 3.9 |
| Rural | 0.8 | 0.9 | 0.7 | 1.3 | 1.8 | 1.7 | 1.4 | 1.2 | 0.8 | 1.5 | 1.3 |

Source: Hauser et al, prepared for the UN, 1982:8.

In terms of population, the People's Republic of China (PRC) is the biggest country of the world and, as it often calls itself, it is a developing country. Up to 1980, urban population in the PRC was reported as 191 million (SSBa, 1983:103), which has made it one of the few countries which hold the largest urban populations. At the same time, however, the country's overall urbanization level was still far below the world's average, even below the average of the less developed countries. In 1980 the contrasts among the PRC, the world, more and less developed countries are respectively 19.4% : 41.3% : 30.5% : 70.7% for 1980 (see Table 3). Concerning population size and a relatively low level of urbanization, no one would doubt that China's urban experience in the past, its recent practices as well as its future urbanization are significant to the whole world.

As a matter of fact, since the PRC has designed and implemented an unusual urban strategy, which is largely different from that carried out by most developing countries, the Chinese experience in urban development has begun to attract more and more interest and attention. This study is concerned with examining the impact of the Chinese strategy upon Chinese urbanization and industrialization.

Table 3. Percentage Urban, 1920-2000

| Region | 1920 | 1930 | 1940 | 1950 | 1960 | 1970 | 1980 | 1990 | 2000 |
|--------------------------|------|------|------|------|------|------|------|------|------|
| World | 19.4 | 21.8 | 24.8 | 28.4 | 33.9 | 37.5 | 41.3 | 45.9 | 51.3 |
| More developed countries | 38.7 | 41.6 | 46.9 | 51.8 | 58.7 | 64.8 | 70.7 | 75.9 | 80.3 |
| Less developed countries | 8.4 | 10.3 | 12.6 | 16.2 | 21.9 | 25.8 | 30.5 | 36.3 | 42.5 |
| * The PRC | - | - | - | 11.2 | 19.7 | 17.4 | 18.4 | ? | ? |

Sources: Hauser et al, prepared for the UN, 1982:11.
 * For the PRC, BBSa, 1983:104.

The Research Problem

Almost all developing countries have pursued rapid industrialization. After World War II, so as to guide the direction of their urbanization and industrialization, most developing countries took Western industrialization as a model. This is largely characterized by encouraging growth of large-scale modern plants concentrated in small number of large cities (D. Drakakis-Smith, 1986; R. B. Potter, 1985; R. N. Gwynne, 1986). However, such an approach has come under question because the result from the practices of the developing countries has been considerably different from that of the Western Countries. While in the developing countries large and even extra large cities have quickly emerged, the expected rapid industrialization has seemed to be left far behind. At the same time, conditions of human settlement in both urban and rural places among many of these countries have seemingly deteriorated (Potter, 1985; Mountjoy, 1978; Murphey, 1980). As some researchers described, the typical image of the modern city of these countries is rather ugly: a messy, polluted, over-crowded, dreary, grey and de-humanized metropolis, ringed by shanty areas inhabited by the urban poor and large numbers of the underemployed, blighting the natural environment and damaging the quality of human life (Murphey, 1980:5). Therefore, while rapid urbanization in the majority of

developing countries has been seen as a sign of development with the coming of industrialization, it has also become one of its major problems*.

In sharp contrast, the People's Republic of China has apparently established a different model. Since its early years, the PRC has formulated an urban strategy while it has, like other developing countries, claimed to realize rapid industrialization. It has been recognized (Liu, 1987; Kojima, 1987; Murphey, 1970, 1972, 1976, 1980; Farina, 1980; Kirkby, 1985; Ma, 1979; Paine, 1981; Cell, 1979; Buck, 1981; Chen, 1973; Kwok, 1981; Thompson, 1975) that the Chinese strategy consists of two components: (1) Controlling urban population increases in order to avoid population over-flow from the countryside and restricting the growth of large cities, especially cities with more than 500,000 inhabitants, while favoring industrial growth in smaller urban places and rural-based industries; and (2) promoting the exploitation of urban growth in non-coastal areas while limiting growth in coastal regions, so as to correct a largely imbalanced distribution of resources, which was left from its semi-colonial era**.

* We will come back to this point and discuss it in more detail in Chapter Three.

** Refer to Chapter Two for further information.

This strategy and its implementation have aroused the interest and attention of an increasing number of researchers. To many researchers, this strategy has had a great appeal. One major reason is that since the PRC has claimed rapid industrialization without parallel growth of its urban population, which has usually caused pathologies of "over-urbanization" in many developing countries, the PRC strategy may provide an alternative model to industrialization for the developing world. Another aspect of the PRC strategy, which has had considerable appeal to these scholars, is its distinctive attempt to guide the regional redistribution of urban population so as to achieve a more balanced disposition of national resources. It has been seen as a possible solution for undesired regional polarization appearing in most developing countries (Shen, 1981; Salter, 1976; Paine, 1981; Pannell, 1981; Ma, 1979; Buck, 1981; Riskin, 1971; Murphey, 1976).

For other researchers, however, such a strategy is open to question. The key problem with the strategy is that it counters orthodox economic rationality. The established comprehensive theories of urbanization link advancing economic growth, which is basically generated by industrialization, especially for developing countries, with increases to large cities and to the level of urbanization. Urban sites, especially large cities, provide large numbers of

people, skills and capital in relatively small spaces so as to facilitate communication among sectors of the economy, which increases productivity. Industrialization leads to the concentrated accumulation of population and capital, while the accumulation of population and capital leads in turn to urbanization (Aldeman and Morris, 1967; Davis and Golden, 1955; Fujii, 1967). If, we followed the line of reasoning of this group of scholars, we would come to the conclusion that, by implementing this strategy, the PRC has put itself in a contradictory position. On the one hand, the country wants to achieve rapid industrialization, which would raise the level of urbanization. On the other hand, however, industrialization must be curtailed since the country wants to restrict urban growth, which is the necessary condition for rapid growth of industrialization. The same kind of problems are involved in the second aspect of the strategy. With advantages of transportation and communication, the coastal areas are more populous and more urbanized, and therefore more conducive to faster industrialization. Promoting growth of the non-coastal areas is at the expense of national economic benefit and efficiency (Kojima, 1987; Kirkby, 1985).

Although there exists a second group who have generally put the strategy into question, most scholars seem to belong to the first group, who look forward to seeing the Chinese

create a new road for development. Some scholars of this group even recommend the PRC's practice as an example other developing countries can learn from (Friedmann and Weaver, 1979; Ma, 1981; Buck, 1981; Kwok, 1981). Interestingly enough, this group even includes those scholars such as John Friedmann who has actively participated in building a comprehensive theory of urbanization, on which the second group's reasoning has been based. It is a surprise that on the Chinese case none of these two groups of scholars has presented a serious analysis according to the comprehensive theories of urbanization. The argument about the relationship between urbanization and industrialization seems to disappear when the scholars face the subject of the Chinese. As a matter of fact, though the Chinese model has caused great attention and has often been cited, the PRC's strategy and its impact on industrialization have never been carefully studied in the light of comprehensive theories of urbanization. This very fact has already suggested that a more insightful examination of the PRC's case is badly needed.

As a result of a series of complex policies on international and domestic affairs, for its first thirty-odd years the PRC had remained as a place rather isolated from other parts of the world. While outsiders were locked out, hardly any statistics were issued and whatever information

was released was fragmentary, with the result that it was impossible to conduct an examination based on continual and systematic data. After Mao Zedong died in 1976, a modernization campaign was widely promoted. With the "door" opened to the outside world, communication became more liberal and efficient. Especially since 1982, the State Statistics Bureau began for the first time in PRC history to publish the ZHONGGUO TONGJI NIANJIAN (Statistical Yearbook of China), which contains systematic and continual information on national economic development and urbanization. Although this series of yearbooks has basically focused on releasing data for the past year and therefore some historical information required for this study must come from other sources*, it is now possible to perform a careful examination of the PRC's case.

This study will focus on examining the impacts of the PRC urban strategy on Chinese urbanization and industrialization. By basically making use of statistics from PRC authorities, which became available just recently, the impact of the strategy on urbanization and the impact on industrialization through controlling urbanization will be assessed.

* A specification on the data sources will be given later in detail in Chapter Four.

The reader should be aware that the statistics from PRC authorities have been made public and examined for our purpose for the first time, and, therefore, controlling for the appropriate variables in order to make this study justify causal requirements would have been a task beyond the scope of an M.A. thesis. This study should consequently be considered exploratory, a typical objective when a subject of study is relatively new and undeveloped.

Organization of the Thesis

This study will include the following major sections:

Historical Background. In order to understand the strategy and its implications, it is necessary to examine the broader socio-political context. We will identify the historical-cultural roots of the strategy. We will also explore the concrete process of the formation and the practice of the strategy. Through such a historical examination, three different periods of the PRC will be identified and will later be used as an operational measurement of the strategy.

Theoretical Perspective. Since the theoretical implications of the Chinese model remain unclear, it is very important to apply the comprehensive theories of urbaniza-

tion to our study. In Chapter Three, we will discuss the process of world urbanization and the development of the comprehensive theories of urbanization. By inspecting the theoretical meanings of the Chinese case, we will set up our hypothesis: that the Chinese urban strategy conflicts with the goal of rapid industrialization, and that implementation of this strategy has harmed the development of the PRC's industrialization.

Methodology. We will test our theoretical hypothesis by basically making use of the PRC official data. Main indicators of national economy, population figures and growth of number of cities will be employed to measure industrialization and urbanization. The impacts of the strategy on these two variables will be assessed by comparing results from three developmental periods, during which the strategy was implemented in considerably different ways. Sub-variables of urbanization and industrialization will be created in order to inspect the impacts of the strategy on regional redistribution.

Based on the results, we will discuss the implications and limits of our study, so that a conclusion can be drawn.

CHAPTER TWO: HISTORICAL BACKGROUND

In order to examine our questions, we have to put the PRC's urban/industrial practices into a historical framework of Chinese social institutions. China is a country with over five thousand years of civilization and this great tradition in modern times has still in one way or another affected the people's ideas and behaviour. The PRC itself has gone through a series of political disturbances and social changes as well. Only with a broad but concrete historical overview founded in a socio-ideological context can our study enter into a deeper level.

The Chinese Traditional Urban System

China is one of the countries which has experienced urbanization longer than any other society. Cities in ancient China stood out as having been in advance of the rest of world in size, number, and complexity of their organization for well over two millennia. Historically, large Chinese cities, such as Xi-An, Peking (Beijing), and Hangzhou have each in their time been the largest city in the world. However, the level of urbanization of the

country probably never exceeded ten per cent until the twentieth century. Traditional China was a vast, self-contained and self-centered country in which agriculture overwhelmingly dominated. Chinese trade with Japan was at several periods considerable, and with Southeast Asia even large, but it never approached the levels of trade between the European countries in the eighteenth or nineteenth century. On the other hand, internal trading moved basically on the great river systems, running east and west, but there was no close interconnection between these river basins as in Europe by sea or across plains (Pannell, 1981). Cities in most cases were founded explicitly by the state and were designed to tax the countryside. Although manufacturing and trading flourished in every city, most commodities were of agricultural or rural origin. The majority of urban employees and residents were various ranks of administrative officials and their sergeants. Only the continual interchange with the countryside kept the cities viable. Most of the imperial revenue came at most periods from the land tax and from the government trade monopolies (Skinner, 1977; Murphey, 1972, 1976, 1984).

Traditional Chinese admiration of nature is very well known. Rural life was idealized in Chinese mainstream ideology. Beauty and kindness could only be sought in the non-urban world, where nature was not disturbed and people

were able to approach an understanding of the universe and to perceive their place and role within it. In the cities it was felt that people disregarded nature, truth was clouded and virtue was weakened. The exploitative accumulation of urban wealth was at the expense of peasants, as corruption and self-seeking became more prominent, especially in the last years of each dynasty in Chinese history. The great sages did not live in the cities, nor did the happiest people. The rural areas were considered as the base for correcting the excesses of the city. The urban-based, decadent dynasty would be overcome and succeeded by a new dynasty which often had significant peasant or rural origins. Briefly, the Chinese vision of the good and the true had a continually strong rural focus (Murphey, 1972, 1984; Skinner, 1977).

Not surprisingly, it has been observed that there seems to be a significant difference in the role of the city between Western civilization and Chinese tradition. As Murphey (1974: 65) pointed out: "The city has been a centre of change in western Europe, while it has been the reverse in traditional China". The English word "city", being derived from the same Latin root as "civilization", indicates its identity as the mover and shaker -- the maker of the modern world. By contrast, the Chinese equivalent word "cheng" stemmed from and still carries the meaning of the

word "wall". Most cities were planned in detail and walled. The walls were designed to awe and affirm the rank and the size of the city, while defence was only a secondary consideration. The cities of Western Europe have been, at least since the high Middle Ages, centers of intellectual ferment, of economic change, and thus, in time, of opposition to the central authority. On the contrary, Chinese cities were administrative centers, and important trading cities at key locations were dominated by officials and the magistrate's office. Even those cities which originally arose primarily as trade or manufacturing centers were governed by the imperial bureaucratic machine. Little urban independence or urban-based revolutionary change appeared. Cities were never the crucial centers initiating economic changes. They functioned as official stations serving and administering the vast countryside. Agriculture was so predominant that it was impossible for merchants to win independence from the system. There was no middle class in a Western sense. Although merchants managed a very large trade, they owed their success to their cooperation with the state and the system. Some of the major commodities such as salt, iron and copper could be traded in only as part of an official state monopoly, by merchants who were also in effect officials. Merchant-official cooperation was mutually beneficial. Major manufacturing and mining were also under official control, to produce metals for coinage

or weapons, or luxury goods for the court and upper classes. The universities were urban but they stimulated little dissent since their function was to train imperial administrators. Thus, the Chinese cities remained centers of the unitary national state and of the traditional order rather than its attackers: epitomes of the status quo (Perkins, 1975; Skinner, 1977; Murphey, 1974, 1984).

Treaty Ports and The Semi-colonial Era

Such a situation scarcely changed until the foreign invasions starting with the Opium War in 1840. Treaty ports were created by their Western masters to promote Western merchandise and values, which represented a sharp contrast to the traditional Chinese urban-economic system. While traditional Chinese cities were inward-facing with concern for their rural hinterlands, the treaty ports were outward-facing with more concern for Western merchants' profits in the international market. "London and New York stock reports and commodity prices were more important in Shanghai than news of what was happening in Szechuan or Hunan" (Murphey, 1984: 196).

Within the treaty ports, private enterprise and property were protected from state control and the Chinese

value of tradition was stood on its head, whereas trade and later, manufacturing, grew and increased their proportional shares of the economy. Chinese traditional cities were no longer able to keep agriculture in order. Within each of the treaty ports foreign control was in practice complete. Foreigners owned or financed a large share of China's shipping and railways, modern-style banking, and modern-style mining. In addition, foreign residents were subject only to the laws of their own countries rather than to Chinese law. Based in the rapidly growing treaty ports, some new Chinese rich appeared, but the majority of peasants and the rural areas suffered and deteriorated. Most of the Chinese living in the treaty ports were poor and exploited workers who in their daily lives confronted foreign racism and discrimination in their own country. For Chinese people such cities did not mean progress but alienation, slums, pollution and foreign control -- a deeply negative and bitter experience in its affront to Chinese pride. A tiny minority, who benefitted from the new business conditions in the treaty ports, were cut off by their careers from their traditional roots and committed to a new and foreign kind of world. Both conservative and radical Chinese called them simply traitors or running dog collaborators with the alien forces which were destroying the soul and body of China (Elvin, 1973; Murphey, 1974, 1984).

During its semi-colonial period from 1842 to 1949, most of China remained materially unchanged except for the Western-dominated treaty ports. After having examined the city size distribution in 1937, Pannell suggested (1981:98) that compared with the Chinese urban network in 1843, "not a great deal of progress has been made in the emergence of ... a well integrated national network." The treaty ports never functioned as an operative part of the larger Chinese system as a whole, since they never built efficient ties with the vast rural hinterlands of China and remained isolated foreign islands along the China sea and navigable Yangtze River. Partly, it is probably because China's rural areas were simply too huge to be moved by marginal foreign contact in a few spots on the coast. Partly, it may be because urban-based industrialization was still in its early stages, and could not be perceived as a source of a notably better life. There is one clear point: that is, the Chinese, with their rural bias and deep pride, buttressed by millennia when China led the world, hated the foreign nature of treaty ports (White III, 1981; Kirkby 1985; Murphey 1974, 1984).

However, it is important to note that Western industrial civilization was prominently displayed in the treaty ports and made them centers of change and growth in a context of relative Chinese technical backwardness and

absence of institutional change. Chinese frontier intellectuals recognized the treaty ports as an example of success, though it was largely for foreign benefit and at China's expense. It was in the treaty ports that Chinese industrialization began, even though it followed a semi-colonial pattern. It was there that many dissident Chinese including outright revolutionaries fled for refuge from imperial persecution. It was there, in Guangzhou and in Shanghai, the largest treaty ports, that the ultimate successful movement was founded for the overthrow of the old imperial system, and there that modern Chinese nationalism was born as a reaction to the humiliating blows of foreign imperialism. It was in Shanghai that the Chinese Communist Party (CCP) was founded in 1921 by a group of intellectuals convinced that China could never be strong again without radical change, determined to resist and eventually expel the foreign powers in the treaty ports.

The CCP Experience

In its early period the CCP had a very painful experience with the treaty ports. Following the Soviet example, the party tried again and again to organize the urban working class and with their help seized power first in the cities. However, this ended in complete failure, almost wiping out the whole party. More than ninety-five

percent of CCP members in the cities were killed. This is because the treaty ports were the stronghold of the opposing party the GUOMINDANG, which had built its power on a coalition of landlords and treaty port businessmen, with the latter dominant, and which controlled most resources.

The CCP had to retreat to the countryside, where under Mao's leadership it succeeded in building a political base among peasants. There, the Chinese Communists discovered the "real" China, largely untouched by the alien influences of the treaty ports and true to the Chinese tradition, and a Chinese way of revolution. As Mao Zedong stated in his famous essay "The Chinese Revolution and the Chinese Communist Party", written in 1939:

Since China's key cities have long been occupied by the powerful imperialists and their reactionary allies, it is imperative for the revolutionary ranks to turn the backward villages into advanced consolidated base areas, into great military, political, economic and cultural bastions of the revolution from which to fight their vicious enemies who are using the cities for attacks on the rural districts, and in this way gradually to achieve the complete victory of the revolution through protracted fighting*.

There is almost no doubt that Mao himself was influenced by the anti-foreign and anti-urban environment of early twentieth century China. According to his own

* The English translation is cited as published in PEKING REVIEW, No. 36: 21.

account, Li Daozhao, an espouser of nationalist-populist theories, was an important influence on the youthful Mao (Kirkby, 1985:7). It has also been suggested that there are certain remarkable similarities between Maoism and classical Russian Populism (Meisner, 1971:31). The Maoist blueprint for a better world, to counter Western pressure and to solve China's problems, can be seen from its two goals: to eliminate the distinctions between mental and manual labour, and to eliminate the differences between the city and the countryside. In keeping with traditional Chinese attitudes, and further reinforced by the experience of the party's struggle for power, Mao's ideas about cities and the elite they breed is rather negative (Murphey, 1980:27-38).

Since their experiences increased the party's anti-urban legacy, there are many reasons to believe that the orientation of the party on the eve of its national victory was largely towards embracing the cities. When from its rural base of revolution it finally overthrew the GUOMINDANG government and led its peasant armies into cities in 1949, it was easy to imagine that the CCP would badly want to change the nature of the treaty ports.

The PRC Urban Strategy

A fully independent and anti-imperialist new government

came to power with the desire to remake China and to eradicate the "bourgeois poison" and foreign character of large urban places: the former treaty ports. However, the CCP leaders, now the governors of the PRC, never lost sight of their ultimate objective: to realize China's own industrialization and to catch up and overtake the West.

As a nation, China "stood up" (Mao's terms) and regained its pride, but in terms of the national economy and actual strength she was still very weak and backward. The CCP leaders realized that mass welfare could not be served adequately without new technology and industrialization, nor could national strength be achieved. Just as other developing countries, the PRC found the inimical world economic order was always stacked against her, when she stepped into market-places, whether selling labour-intensive products or buying wheat and high technology. Industrialization, which represents a more advanced technical level of production, was the country's overriding goal of development.

Due to its specific historical background, however, the CCP under Mao's leadership designed for the new country an urban strategy which, following a long established Chinese tradition, was fundamentally different from the Western model of urban-industrial concentration. Under such a

strategy, while rapid industrialization was constantly hungrily pursued, urban growth, especially growth in large cities, was not to be encouraged but to be suppressed. Instead of the established large-scale industrial centers in the ex-treaty cities along the sea and the Yangtze river, inland medium- and small-scale centers, which were often the traditional administrative centers, were to be favored. Policies promoting this model of development can best be seen from a statement given by the chairman of the State Planning Commission, Li Fuchun. In 1955, in describing the priorities of the First Five-Year Plan (1953-1957), he indicated:

"Our present task in urban construction is not to develop the large cities on the coast, but to develop medium and small cities in the interior and to restrict appropriately the expansion of the large cities."*

Before the foundation of new China, the treaty ports contained over ninety per cent of China's industrial plants and sixty-five per cent of its total urban population (Murphey, 1980:31; Pannell, 1981:98). It has been reported that in 1949 ten out of the 26 provincial units had no measurable manufacturing capability at all, while the seven strictly coastal provinces had around 40 per cent of China's population and generated two-thirds of the total industrial

* The English version is cited from Lin, 1971:23.

output value (Lardy, 1978:11). Just before the CCP came to power, a survey conducted by the GUOMINDANG government indicated the domination over industrial production exercised by just a handful of coastal cities. Within modern-sector industries, Shanghai with the other seven largest cities in 1948 had 93.0% of total factory units, 92.4% of total employees and 96.6% of the total motive force (Paine, 1981:150). The most typical example is Shanghai, which alone held over a third of China's modern industrial investment, labour force, and output (Shen, 1981:18).

The development strategy aimed at correcting such lopsided distributions of urban population and industries left by the semi-colonial era. At the same time, an equally important part of this strategy was to avoid over-concentration in large cities, which were often the ex-treaty ports in China, created by the West. In the early days of the PRC, there were even talks about actually dismantling the major east coast cities, Shanghai in particular, and redistributing the wealth to serve vast countryside areas and China's hinterland. However, the CCP soon realized that it would cost considerable capital which the PRC needed badly for its industrialization (Murphey, 1980:37).

Thus, it has been observed that the promoted strategy focussed on controlling 1) urban growth in general and

growth of large cities in particular, and 2) urban growth along coastal regions (Liu, 1987; Kojima, 1987; Murphey, 1970, 1972, 1976, 1980; Farina, 1980; Kirkby, 1985; Ma, 1979; Paine, 1981; Cell, 1979; Buck, 1981; Chen, 1973; Kwok, 1981; Thompson, 1975). Through the official media, this strategy was often propagated in a very Chinese way by means of an idiomatic symbolic slogan "xiaojizhong dafensan" (concentrate on the small and break up the large). Definitely, the principles of the strategy, to restrict growth of urban population and urban concentration, were accompanied by favoring small- and medium-sized industries in smaller urban places and rural-based small industries.

It seems clear that the strategy reflects a connection in a close socio-ideological context between the great Chinese tradition and the CCP bitter experience in its early period in urban sites, which reinforced the CCP distrust of urban life. Another crucial factor, however, a strategic-military consideration must have contributed a great deal to this design. Learning from the experience of continual wars, the CCP leaders realized that, because of the concentration and coastal disposition of the large cities, the country's most vulnerable and vital sectors were exposed to maximum risk from destructive enemies. So, after the Korean War (1950-53) and especially after breaking up with the Soviet Union (mid-1950s), the new government was doubly vigilant.

There is no question of China's fear of the Soviet Union's destroying Chinese cities by nuclear attack, as Mao emphasized in 1960, "We must disperse the residents of the big cities to the rural areas and construct numerous small cities, for under the conditions of atomic war this would be comparatively beneficial.*"

In spite of these claims, the PRC could not uniformly implement this strategy in its development over forty years. Based on a combination of observations and classifications of both foreign and Chinese scholars (Liu, 1987; Farina, 1980; Ma, 1981; Kojima, 1987; Kirkby, 1985; Murphey, 1980; Cell, 1979; Chen, 1973), we can identify three periods of urban development for the PRC which are significantly different.

Three Periods of Development

From 1949 to the end of the First Five-Year Plan (1957) was a period in which the CCP adjusted itself to the practice of operating the urban system. With a great deal of Soviet assistance, both financing and personnel, China managed to restore production, commerce and other facets of urban life. Under the strong influence of the Soviet model,

* The English translation is cited From D. Friedman, 1979:826.

and impressed by Soviet achievement in industrialization, this period witnessed intensive development of heavy industries, mainly in the large cities. Attempts were, to an extent, made to carry on the Chinese urban strategy, especially with respect to promoting growth in the non-coastal regions. However, since the national policies were under the strong influence of the Soviet Union and the Chinese leaders were busy adjusting themselves and learning urban management, implementation of the strategy during this period was relatively weak.

By 1958, it was clear to the Chinese leaders that Soviet assistance would not be forthcoming and no other foreign aid could be expected. This circumstance offered the ideal climate for growth and maturity of the Chinese design. Therefore, the strategy was seriously implemented until the death of Mao in 1976. The first important event in the second period of urban development was the Great Leap Forward (1958-60). This campaign carried special emphasis on rural development, especially on the growth of local industries which were based on indigenous methods of production. Therefore, medium- and small-scale industries, most of which were not located in large urban places on the coastal areas, flourished. This period covers two decades and includes three five-year plans designed by the Chinese without assistance of the Soviets, and the Cultural Revolu-

tion. This is the PRC's most isolated era. It is during this period, we have to stress, that a complete set of strong measures to restrict urban growth and urban concentration were derived and put into effect.

With a few minor exceptions, most of the applied measures were not economic but administrative. Roughly speaking, these measures included: 1) registration systems for employment and population, stipulating that people borne in the countryside and without job offers from certain urban enterprises could not stay in the cities, and rural persons had to carry specific permits from the local government while travelling; 2) a rationing system whereby the urban population with valid accounts were supplied by commercial food controlled by the central government while the rural population was excluded; 3) Xia Fang (sending-down) nationwide campaigns, from the end of the 1950s to 1976 whereby millions of urban youth and other urban residents were sent "down" to the countryside under various political slogans*.

After Mao, the PRC entered a new historical era. When the door opened, restoring communications with the outside world, information on rapid growth of industrialization and economy in other countries shocked both the Chinese people

* Refer to Kirkby, 1985: Chapter 2, for a detailed description of these measures.

and their leaders. Promoting modernization became a major consideration of the CCP. The growth of medium- and small-scale industries has become less favored whereas economic efficiency is emphasized. The measures to control urban growth and concentration have gradually lost a great deal of their strength. Some major measures, such as the "sending down" campaign, or requiring rural persons traveling or working in cities to hold certain official certificates, have completely ceased to be in force.

CHAPTER THREE: THEORETICAL PERSPECTIVE

Approaches of Urban Studies and Some Related Terms

Since there are always different interpretations among researchers, it is important, first of all, to define some major terms we use in our discussion. Certainly, the search for clear and unambiguous definitions brings insights into our entire study as well.

Broadly speaking, urbanization as a dynamic process carries two concepts which are distinct but related. On the one hand, urbanization commonly refers to the geographic concentration of population and non-agricultural activities in urban environments of various sizes and forms. On the other hand, the second meaning of the term refers to urban modes of living, and thinking, originating in these urban centers and spreading from these to outlying towns and rural populations (Friedmann, 1973:65). The second aspect is often directly interchangeable with the word "urbanism" (Wirth, 1938), which is not the focus of this study. The first aspect is usually analyzed from two types of concentrations in urban settlement: population (demography) and socio-economic activities (spatial transformation). In each case, and as these complex processes continue, the social meanings

of landscape evolve profoundly.

Thus, a comprehensive urbanization process can be analyzed from three perspectives. First, it reflects changes in the size, density and composition of population in different areas. Secondly, it indicates fundamental spatial changes in the economic-institutional structure of a society. And thirdly, it causes changes in human behaviour. Lampard (1965:519) has recognized that there are basically three approaches to urban studies: "the behavioral, the structural, and the demographic." Obviously, these three approaches have a mutual rather than exclusive relationship.

In demographic studies, the word "urbanization" is used to describe the proportion of the population living in urban settlements; the latter is officially defined differently from one country to another and so we will return to it later on. The level or degree of urbanization (U) is measured by an index as shown below, which demonstrates some sort of ratio between the urban population(Pu) and total population (Pt):

$$U \% = \frac{P_u}{P_t} \times 100$$

To avoid confusion, it is better to reserve the term "urban growth" to describe either the absolute increase of urban population or the physical expansion of the urban fabric, but not necessarily an increase in the degree of urbanization.

The structural approach focusses on the analysis of changing patterns of socio-economic activities of a total population. Urbanization is specifically analyzed in the light of the spatial movement of people out of agricultural areas to non-agricultural areas. This movement, based on the surplus of agricultural products created by a sufficient increase of agricultural productivity, causes and reflects a series of social-economic changes; therefore some kind of social control and redistribution is to be considered. In other words, with this approach, studies investigate socio-economic processes of urbanization.

Under the behavioral approach, urbanization is examined with a focus on the evolution of personal behaviour, therefore certain thoughts, behaviours and actions are regarded as significant characteristics of societal transformation from rural to urban. Wirth (1938) in his well-known paper "Urbanism as a way of life" presented a classical analysis of the behavioral perspective.

In our study, the term "urbanism" will refer to the third aspect of the urbanization process; the terms "spatial development" or "structural changes" to the second aspect; and the term "urbanization" sometimes particularly to the first aspect, especially to the increase in the proportion of the urban population as indicated above, and sometimes generally to covering the three aspects of the whole process.

Since our major interest is to explore the relationship between the urbanization process and industrialization, little attention will be given to changes in personal behaviors. Rather, a structural approach with close demographic context has been adopted here. Urbanization will be regarded as both a dependent variable, to which a range of social, demographic, and, economic variables give rise, and an independent variable, which brings about socio-economic changes.

The Process of World Urbanization and Industrialization

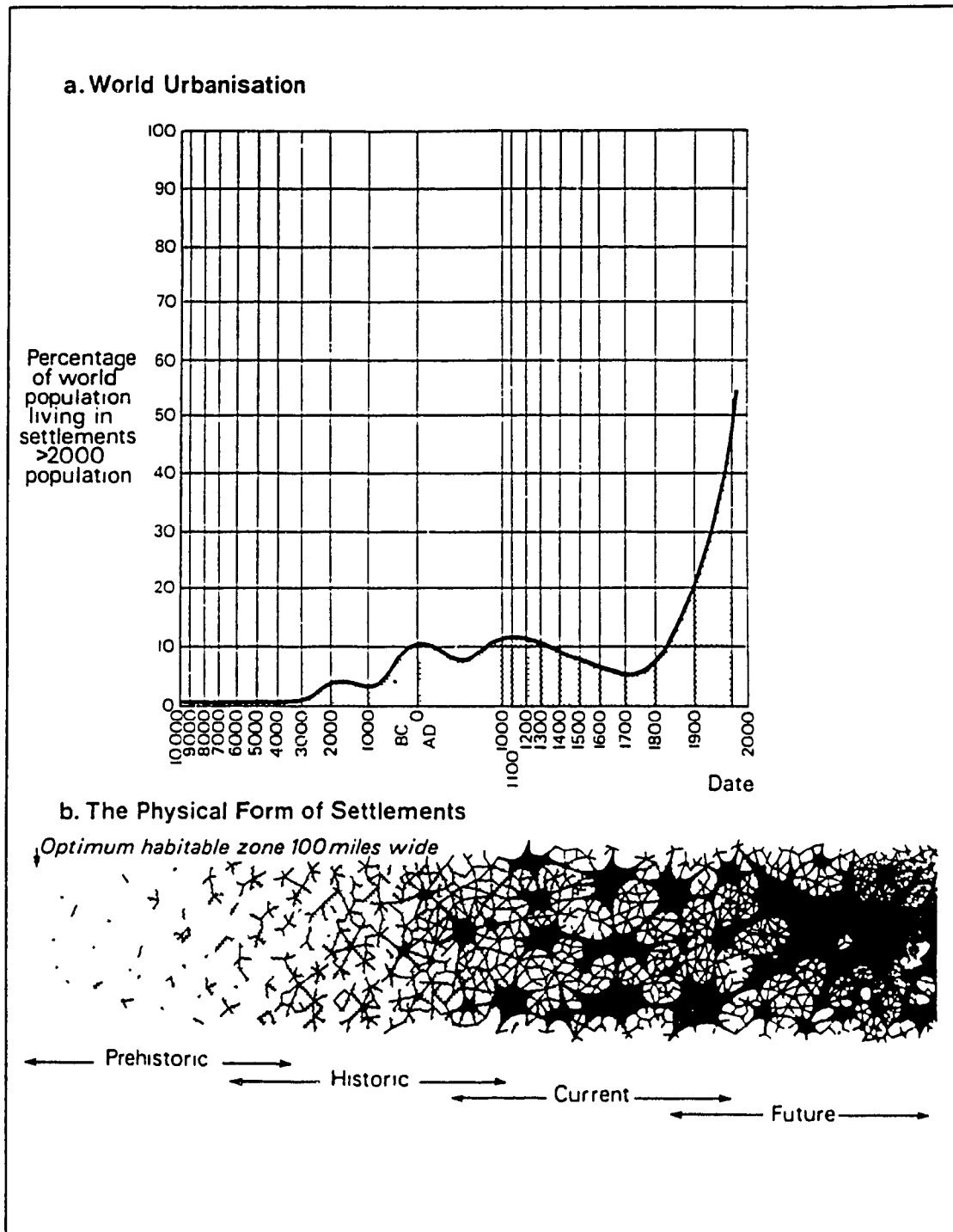
Historically, urbanization processes are by no means new. There existed complex urban systems in the ancient civilizations of the world and it can be said the notable process of urbanization began over five thousand years ago

(roughly around 3,000 BC). However, it was the rise of industrial capitalism in the eighteenth century that made the urbanization process accelerate and brought the onset of the modern phenomenon of global urbanization (see Figure 1).

As we mentioned in the introduction, before the Industrial Revolution only a very small proportion of world population was to be found living in an urban environment. The enormous increase of urbanization emerged only following the Industrial Revolution. The steam engine, which was the key invention leading to the factory system, and the following technical-scientific development and institutional changes in the initial stage of the Industrial Revolution, contributed to both the development of industry and a parallel increasing productivity in agriculture. With all these crucial changes, humankind began to assemble in industrial cities. To some extent, urbanization in its contemporary sense is a consequence of the world's increasing industrialization, which has spatially taken place in urban areas (Hauser and Schnore, 1967).

Although a few scholars have argued that there is no necessary "technical" relationship between industrialization and urbanization (Kuznets, 1963:99-100), the majority of urban-industrial researchers have observed and readily accepted "a direct correlation" between the two (Breese,

Figure 1: World urbanisation trends and settlement form 10 000BC - 2 000AD



Source: Potter, 1985: 27.

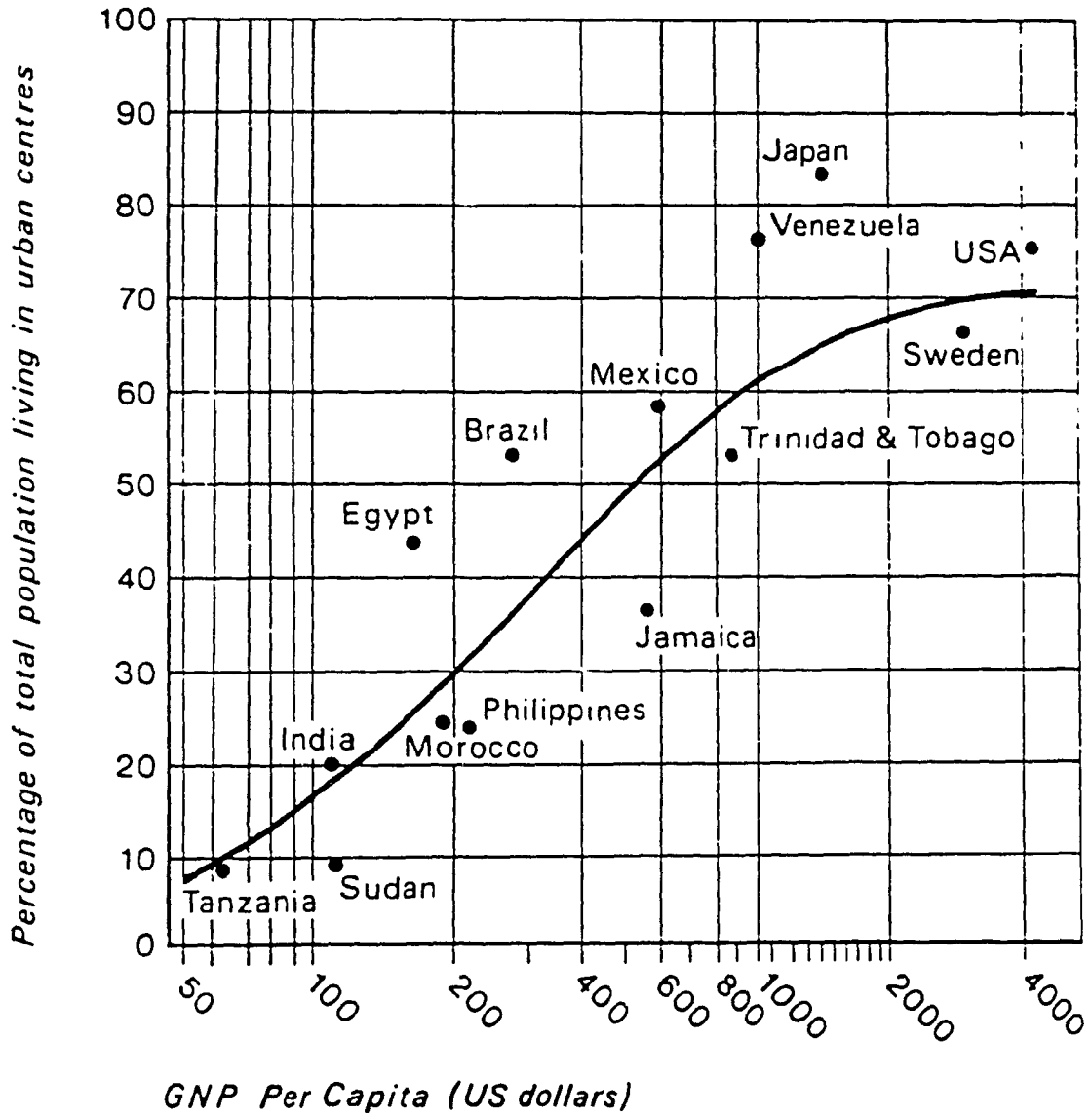
1966:51-52; and, for a review, see Cell, 1979:63). Probably it is difficult to establish a causal relationship between industrialization and urbanization by available empirical evidence, but it still is more likely than not that there is substantial mutual impact between these two variables. Industrialization is definitely likely to affect the rate and the type of urban growth. On the other hand, urbanization as an instrument must have an impact on industrialization. As a complex process, rapid development of industries, extensive and heavy industries in particular, needs to grow in a basis with concentration of sources and substantial infrastructure which, consisted of both supporting light industrial activities and specialized services.

Although it has been argued that industrialization should not be seen as "the panacea" development of the less developed countries (Mountjoy, 1967:62-79), industrialization has broadly been recognized as the key dynamic, contributing to rapid economic growth (Hoselitz and Moore, 1963; UNIDO, 1975; Hughes, 1978; Ghosh, 1984). Roughly speaking, the more developed countries are industrialized, and the less developed countries are less industrialized. Identical with other social-economic indices, a country's degree of industrialization is a major measure of national development. In order to catch up to the more developed countries, nearly all developing countries center rapid in-

dustrialization in their national development strategies. Industrialization has been recognized as the crucial instrument which encourages modernization, indicating the level of national economic growth while in turn national economic growth also reflects the development of a country's industrialization (UNESCO, 1974; Murphey, 1980). Thus, since our main purpose is to examine the possible relationship between urbanization and industrialization, variable industrialization sometimes represents the process of growth of industrial production in the national economy, and sometimes simply replaces the concept of national economic growth.

It is apparent that there is a correlation between the levels of economy of countries and their levels of urbanization, although the technical causal relationships are not necessarily to be found. Figure 2 shows a clear relationship between the level of urbanization and the Gross National Product per capita, a variable most often used to measure the degree of industrialization and economic development. Significantly, a country with a greater degree of industrialization maintains a higher degree of urbanization, and vice versa. The degree of urbanization has been regarded as the spatial dimension of the industrial and technological revolution of the past two centuries (Hauser and Schnore, 1967).

Figure 2 : Relationship between urbanisation and gross national product



Source: Potter, 1985:40.

However, it seems that the more developed and the less developed countries have had different experiences with this industrialization-urbanization pair. This phenomenon has also been observed by almost all researchers in this field and has become one of the major objectives on which they have worked.

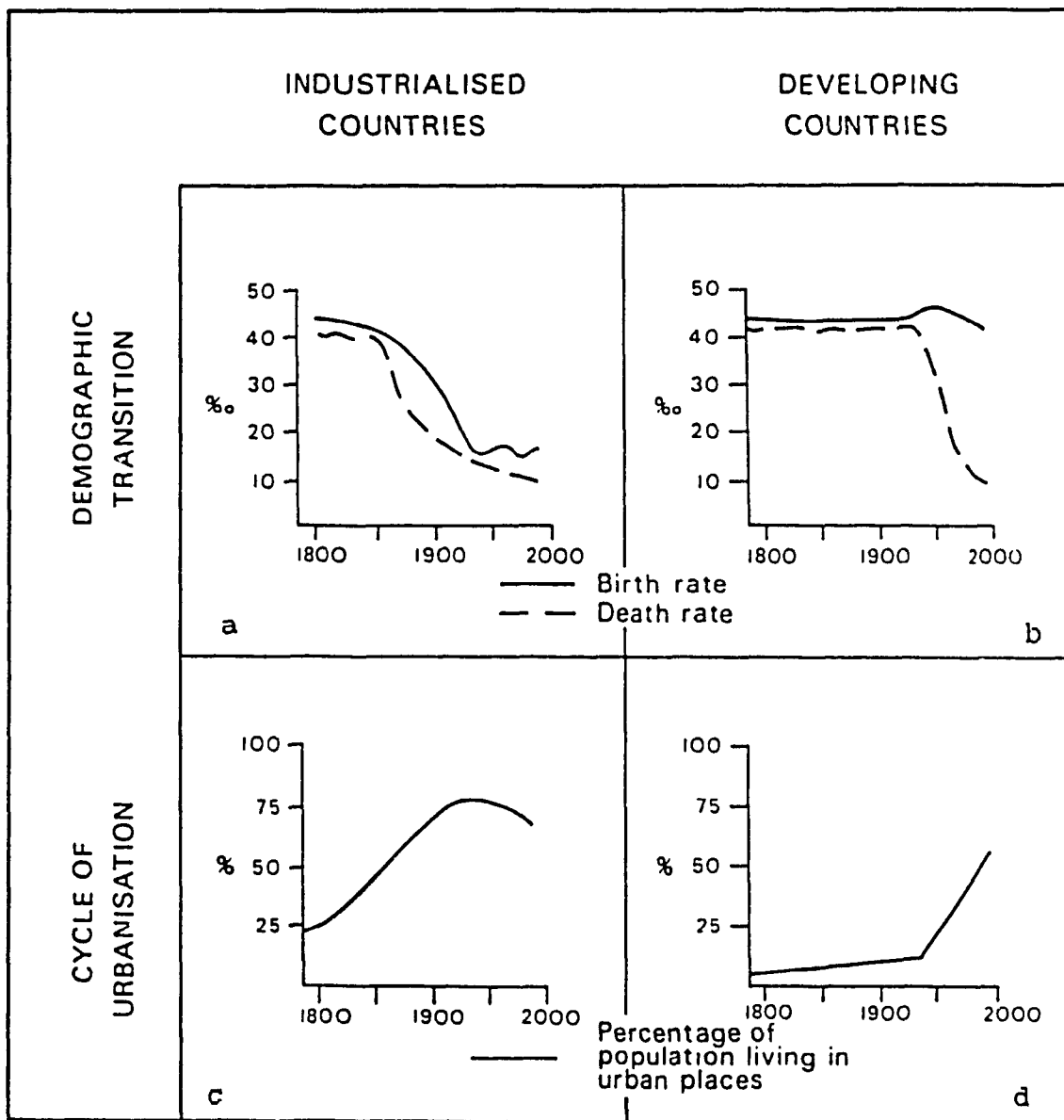
During the late eighteenth- and early nineteenth-centuries when the developed countries of Western Europe and North America were undergoing industrialization, rapid growth in demand for labour emerged while simultaneously technological developments in agriculture released a great amount of rural population from food production. Since health and sanitary conditions in the cities were miserable, the natural increase of urban population was very small. Migration from agricultural areas to non-agricultural ones was the major reason for urban growth and the increase in the degree of urbanization. In these countries the course of urbanization then progressed relatively smoothly (Potter, 1985:Chapter 2).

Rapid urbanization in most developing countries is more or less a product of the post-war period. In contrast to the historical experience of the more developed countries, the urban population has increased in these countries much more

rapidly than in the developed countries during their hey days. According to Davis's (1965) calculation, in the 1940s and 1950s urban population in the less developed countries gained 4.5% annually, compared to a 2.1% average annual gain for the periods of most rapid urbanization in the nine selected European countries. On the other hand, a very dramatic increase of total population has been a characteristic for the less developed countries for periods after World War II. During the 1950s, 1960s, and 1970s, the less developed countries experienced respectively an average annual increase of 2.0%, 2.3% and 2.3%, in comparison with 1.3%, 1.1% and 0.9% for the developed countries (Hauser et al., 1982:8).

The "revolution of rising expectations" (Murfhey, 1980:8) has been regarded as one of the main reasons causing the great contrast in the patterns of urbanization between the less and the more developed countries. As Figure 3a and Figure 3b demonstrate, contrasting with the experience of industrialized countries, a sharp decline of the death rate has been accompanied by a birth rate remaining at traditional high levels in the less developed countries. This is due to the better health and social facilities in the post-war periods. Since urban areas generally contain better medical care and social welfare facilities than rural areas, rapid urbanization in the less developed countries has been

Figure 3: The demographic transition and the cycle of urbanisation



Source: Potter, 1985:34.

characterized by the combination of pre-industrial fertility with post-industrial mortality. This results in the highest rate of natural increase of urban population ever found (Dwyer, 1975). Most frequently, natural increase and immigration contribute in equal proportion to the extraordinary rapid increase of urban population. The result is a straight soaring in the degree of urbanization, as demonstrated in Figure 3d. On the other hand, the rate of urbanization in the more developed countries has recently largely decreased and, after reaching 75 per cent, the curve has started to flatten and even to decline (see Figure 3c). Suburbanization of population or "counter-urbanization" has been described as a later stage of the urbanization process happening in the more developed countries (Davis, 1965; Berry, 1976).

Now, rates of growth in urbanization are no longer related to the levels of industrialization, while a positive relationship between levels of urbanization and economic development are confirmed. Then, the question here is: "What roles do city and/or urbanization play in contemporary socio-economic development?"

Comprehensive Theories of Urbanization

Urbanization has traditionally been studied by demog-

raphers skilled in the measurement of rates of change in urban growth, the components of this growth, and the changing ratio of rural and urban populations. Until quite recently, however, such studies offered rather meager intellectual fare and remained at a descriptive level, leaving almost everything unexplained (Friedmann and Wulff, 1975:10-11).

Bertram Hoselitz, an economic historian, was the first to examine urbanization in the context of national development (1960, chapter seven; original publication dated 1953). Later on, Redfield and Singer (1954) proposed the classification of cities into centers of ORTHOGENETIC and HETEROGENETIC transformation. Orthogenetic (parasitic) centers were pre-industrial cities, which extracted surplus products from surrounding regions, but, by widening out economic development over a more extensive area and an increasing proportion of the population, they would eventually become heterogenetic (generative) cities. This process of transformation has been seen in the western world. During this process the cities are the loci and, by overtaking the great tradition of agricultural civilization, the civilization of industrial capitalism would emerge triumphant in all parts.

A more comprehensive understanding of the relationships

between urbanization and national development was undertaken in 1971 through the cooperation of several scholars*. For a comparative study of urbanization, a paradigm is presented by a framework of spatial systems (Friedmann, 1973b:68). The focus is primarily on national systems, upon which the wider context of an hierarchical system of international relations can be expanded. Based on an asymmetrical relationship of urban/rural (core/periphery; dominance/dependency; or center/periphery), the paradigm brought together four major articulated spatial processes: decision-making and control, capital flow, innovation diffusion, and migration. Each of these processes corresponds to a spatial pattern: the spatial distribution of power, systems of activity location, modernization surfaces, and settlement patterns. Thus, urbanization is no longer perceived as the simple growth of urban population but a complex of spatial processes and their associated patterns.

Following this direction, by looking at urbanization in the context of national economic development, an open systems model of urbanization which explains the transformation from "narrow impact of urban life-styles to total immersion in urbanism" was introduced by Friedmann (1973b, Chapter Two), who has contributed a great deal of work and

* The original work was written in French by Friedmann, J., McGlynn, E., Stuckey, B. and Wu, C. and an English version can be seen in Friedmann, 1973b: Chapter Four.

become a very important scholar in this research field. According to his formulation, cities were spatial organizers of economic, cultural, and political activities. Thus, more specifically, they were centers of innovation, environments of opportunity, and seedbeds of democratic change.

In the same line of thinking, another famous scholar Brian Berry (1971) also appreciated cities as "instruments" articulating sub-regions in a national space-economy. He saw cities as

"the centers of activities and of innovation, focal points of the transport network, locations of superior accessibility at which firms can most easily reap scale economies and at which industrial complexes can obtain the economies of localization and urbanization." Even agricultural enterprise "is more efficient in the vicinity of the city" (Berry, 1971:115).

The progressive development of a system of cities would further lead from imbalanced to balanced spatial systems, from urban enclaves to total spatial integration. In short, urban places and the urbanization process play a very positive role in national economic development. This is a positive view for the less developed countries, since it is based on the premise that "developing" countries would become "developed", in the sense of becoming more autonomous, more affluent, more participant, and more spatially integrated national societies.

However, the basic theses of this group of scholars

have been under serious attack. Terry McGee argued (1971) that, in contrast to what Hoselitz and Friedmann had believed, cities on the whole were more likely to be parasitic than generative of economic growth. He stressed that

"in the context of the majority of the Third World countries, it seems that a theoretical framework which regarded the city as the prime catalyst of change must be disregarded." (McGee, 1971:31)

As a matter of fact, there are two contrasting views on the role of cities in national economic development in less developed countries. Brian Berry (1971:140-141) once classified them as the "modernizers" and "traditionalists". To facilitate further discussion, we will make use of this pair of labels. The sharp controversies between these two groups are substantially reflected on three major issues: over-urbanization, ideal city size and economic efficiency, and regional development.

"Over-urbanization" and Primacy

"Over-urbanization" is a concept created by "traditionalists" and is generally defined as involving a situation in which "larger proportions of ... [a country's] population live in urban places than their degree of economic develop-

ment justifies" (Hauser, 1963:203). In less developed countries, urbanization has usually increased at a rate surpassing the development of industrialization. Both the expansion of employment opportunities and the provision of housing and public services are left far behind. Furthermore, urban growth in most developing countries has tended to concentrate in a small number of large cities. In many countries, Latin American countries in particular, these large cities have often appeared as the only large city in a country --- much bigger than the second biggest city, and have been defined as "primate" cities*. A primate city, often a capital city, is superordinate to the country in politics, economic activities and social life, holding an extraordinary large percentage of capital investment and output of production as well as urban population. They also experience the fastest growth of economy and population. Within these primate cities, there seem to be the most serious problems of over-urbanization.

Instead of being a sign of development, the traditionalists argued that over-urbanization is a sign of economic illness because it stands for a "perverse" stream of migration, sapping the economic strength of the hinterland without providing large benefits to national production

* Urban primacy was formally recognized by Jefferson (1939) and defined as a condition where the largest city in a country is superordinate in both size and national influence.

(Myrdal, 1957). Many socio-economic problems in less developed countries, especially those problems involved with underemployment, housing and infrastructure, have been described as over-urbanization. Contrasting with the Western experience of industrialization in the eighteenth and nineteenth centuries, where farmers were "pulled" to cities for better opportunities of employment and life standards, continuing in-urban migration in less developed countries today has been caused more by "push" factors (Firebaugh, 1979:199). The reason for farmers to move to cities is not because the living conditions there are better but because the conditions in the countryside, which receives harmful effects from the city are even worse. Besides, cities do not necessarily actually offer what farmers expected: better living (McGee, 1973; Breese, 1966; Linn, 1983; El-Shakhs, 1972).

In the view of the "modernizers", urbanization in less developed countries occurs under conditions of greater population pressure than was the case in nineteenth century Europe and is a phenomenon explicable by the rapid rise of population as well as by the capital-intensive nature of new industrialization (Lee, 1966; Linsky, 1965). Whatever the reason for the "push" or "pull" of rural-to-urban migration, what causes migration is the different livelihood opportunities between rural and urban areas. The fact that

migration into urban areas continues shows that there is a continuing difference between the levels of livelihood opportunities. If restrictive measures were taken to slow down migration, the potential migrants would be condemned to a lower living standard (Wellisz, 1971). On the other hand, it was argued that, "there is no sound statistics proving that primate cities have slowed down the growth of small urban places and humbled national economic development" (Wellisz, 1971:41). Concentration of socio-economic activities in small numbers of large cities is not necessarily a bad thing for national development. According to Berry's research (1961) on a possible connection between city size distributions and economic development, there was no clear statistical relationship between a country's city size distribution and its level of urbanization, nor between city size distribution and the relative economic development of countries. Again, according to Berry (1964:579), "there is no relationship between the type of city size distribution and the degree to which a country is urbanized", and those countries with primate cities are not necessarily at their "early" stages of development. Hence, in economic terms there is no substantial reason to see a primate city as an unpardonable evil, let alone to consider that there is a relationship between city size and economic efficiency.

City Size and Economic Efficiency

Perhaps more crucially, there has been a continuing debate on whether city size is an aid or impediment to development of industrialization and economic growth.

According to the "modernizers", economic development and modernization need the development of urbanization, especially the growth of large cities. Increased concentrations of sources and population are vital to the industrialization process. To explain "the positive association of urbanization with industrialization", Adelman and Morris (1967:25) indicated:

Cities provide concentrations of population from which industrial labors may be drawn; they also contain a greater variety of skills and resources than do rural areas. Even more important perhaps, urbanization promotes values favorable to entrepreneurship and industrial growth; in particular, cities typically tend to favour a propensity to analyze traditional institutions and to innovate and accept change since, in a relatively impersonal and fragmented setting of urban life, the all-embracing bonds of traditional community system are difficult to maintain.

Fujii (1968:23) has further traced the essential link between urbanization and industrialization based on the experience of Japan in particular and found that there is an

interrelated pattern of developmental events:

(a) Specialization of labors increases productivity; (b) the specialization of functional division of areas ... increases the efficiency of an urban economy, for it concentrates large numbers of people, skills, and capital in relatively small spaces so as to facilitate communication among sectors of the economy; (c) there is a relationship between capital density and the efficiency of space; as more capital is invested in a given space, the economic efficiency of that space is increased; (d) industrialization leads to the concentrated accumulation of both capital and labors; (e) the accumulation of the labors and capital leads in turn to urbanization.

Thus, economic scale and city size are identical and mutually need and support each other. Economic scale and city size influence not only materials production in modern industry but also (and probably more important) the production of knowledge -- whose accumulation is the basis of modernization including both economic development and the ideological-institutional transformation of a society. Obviously, these thoughts are in line with and support Friedmann's theoretical model of urbanization stated earlier. An oft-cited investigation on city size and economic development, with special reference to South and Southeast Asia (Berry, 1971), has also supported the thesis of positive correlation between urbanization and economic development in general, and between concentration of large scale economy (large city) and efficiency in particular. In a general sense, Hoch (1972) and Alonso (1972) as well as Richardson (1973) have also found that, from the standpoint

of national economy, larger cities are more efficient than smaller cities.

However, the "traditionalists" have argued that economic efficiency should not be the only consideration of urban development. Human conditions of living, the ecological environment and cultural traditions should obtain appropriate attention (Agnew et al, 1984; Vapnarsky, 1969; Ma, 1979, 1981). Concentration of urbanization in large cities tends to reinforce real or imagined disparities in social and economic prosperity between urban places and the countryside. Therefore, the growth of large cities, especially primate cities, tends to paralyze the growth of other cities (Johnson, 1970).

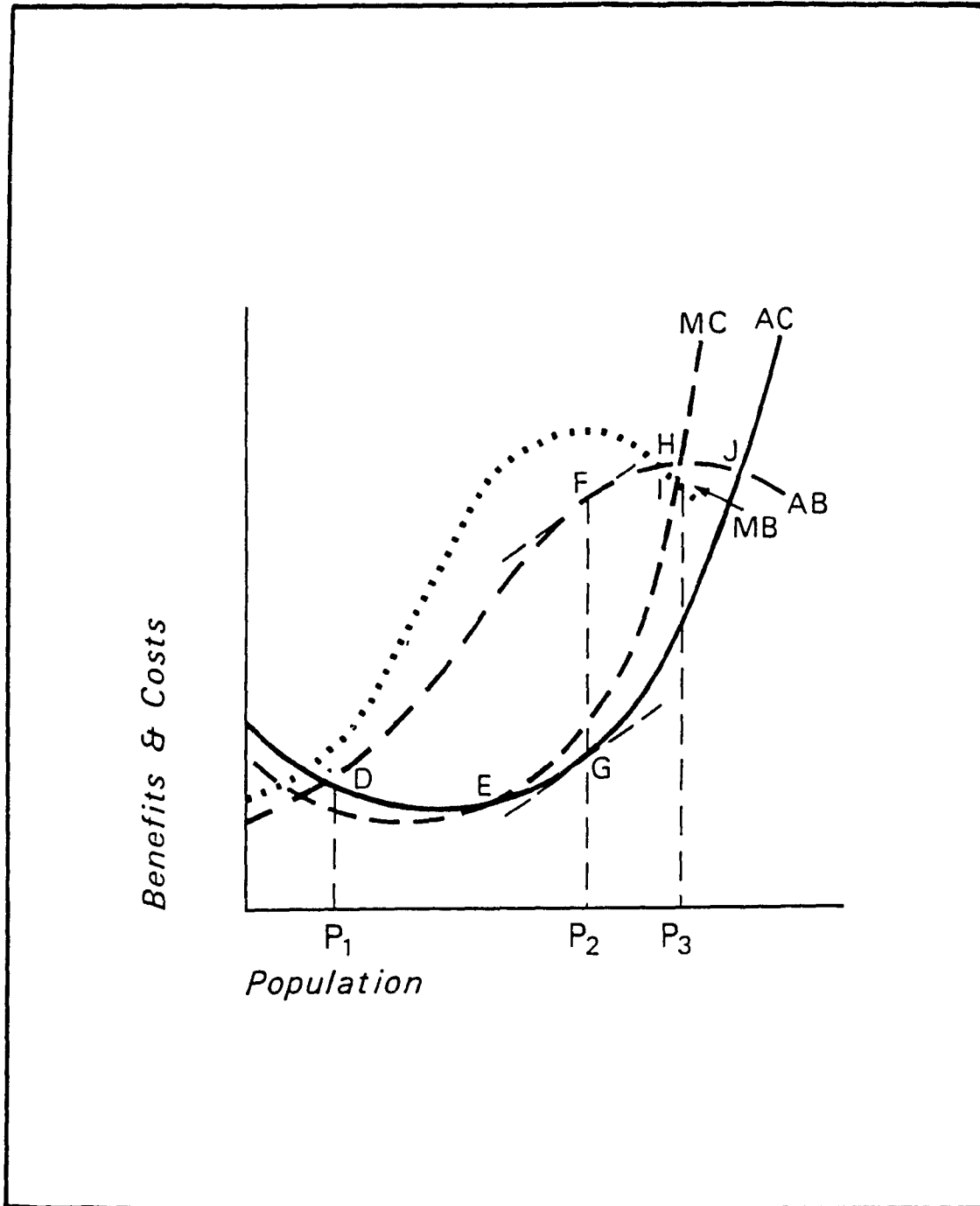
Besides, argued the "traditionalists", an economically efficient size for cities may probably be obtained for population thresholds much lower than those of existing major centers of urban concentration (Neutze, 1965; Spengler, 1967). Upholders of the concept also argued that large (especially primate) cities may tend to be inefficient because of the diseconomies which assume significant importance after a city reaches a certain size (Spengler, 1967). According to this argument, after a city reaches an optimum size, the per capita cost of infrastructure would rise and efficiency would decline. Such an assumption was

illustrated by a figure of curves of benefits and costs. As Figure 4 demonstrates, in the early period (P1) while a city has a smaller population, both its average costs (AC) and its maximum costs (MC) per capita product as well as the average benefits (AB) and maximum benefits (MB) are low. In the second period (P2) while the population in the city achieves an optimal size, the level of maximum benefit reaches the highest point and the levels of costs remain low. After the population in the city passes the optimal size, however, the benefits start to drop while the costs begin to quickly increase (P3).

However, the "modernizers" have argued that such a theoretical approach is no more than pure guesswork for which there is no supporting evidence. It is "extremely difficult to determine the optimum size of any particular city" since the situation of each city on topographic, socio-economic and other conditions varies greatly from area to area and from country to country (Wellisz, 1971:42). Moreover, it has been pointed out (Estall and Buchanan, 1961:107):

"At some time or other most of the world's great industrial complexes have been thought to be beyond the point where economies are offset by the extra cost incurred in various ways ... industry continues to expand in these centers, showing that many industrialists themselves still think that the major concentration retains numerous advantages."

Figure 4 : The theory of optimal city size



Source: Richardson, 1978:152.

As a matter of fact, the concept of optimal city size has fascinated urban and regional analysts for years. This is because, if a concrete optimal city size could be ascertained, the concept would be very constructive for understanding urban process and its relationship to industrialization. Richardson has been one of those who have been interested in and contributed a lot to the study of this issue. He began by favoring the concept. However, after several years' intensive research, examining many conceptual confusions and logical objections, he concluded that optimal city size is neither a useful problem to deal with nor a suitable basis for guiding national urbanization. Therefore he finally came to reject this notion (Richardson, 1972, 1973, 1976, 1977, 1978). Once, he even called it the "optimal city size game" since it is "fun" but "it gets nowhere" (1978:322).

Regional Development and Spatial Integration

Closely related with the issues of the "over-urbanization" and "city size and efficiency", the third major debate between the two groups is on the objectives of regional development and national integration.

As we have mentioned earlier, very much due to

colonial history, the industrial urbanization process in most less developed countries is spatially concentrated on a small region of a country. There have been sharp contrasts in socio-economic landscape between other parts of the country and this concentrated region which usually consisted of former colonial cities. Most of these concentrated regions are along the coast, or very close to it, partly reflecting the origins and/or recent growth of colonial outcomes of imperialist powers. Within most developing countries, the oft-cited problem between this small core region and its vast periphery regions is that socio-economic inequalities not only remain but also keep increasing.

The "traditionalists" disapprove of such a regional growth pattern associated with the concentration of urban process since it caused "both absolute and relative neglect of the potential resources, and the needs, of most people and most areas" (Murphey, 1980: 11). By controlling the resources of modern facilities and growing fast alone, they argue, the primate city as a core creates increasing socio-economic differentials between itself and peripheral areas and leaves the latter underdeveloped. The development of the vast periphery and the rural areas are not improved at all and the new urban-generated wealth comes to the countryside only in exploitative forms, making use of rural labor for urban profit. Therefore, such regional development in-

creased the contrast between the city and countryside, between the core region and the peripheral region as well as between the rural rich and the rural poor (Murphey, 1980; Vapnarsky, 1969; Firebaugh, 1979; Breese, 1966).

The "modernizers" see no sound reasons against such a concentrated pattern of regional growth. Related to the logic of urban spatial concentration, most industrial production is cheaper when it is based in large concentrated units and near large existing markets which also offer ready capital, skilled labors, legal, banking, insurance and transportation services. Transportation in most developing countries is backward and expensive. And modern transport has to be focused on the large cities, especially on the coasts where sea transport, which is the cheapest device, is available.

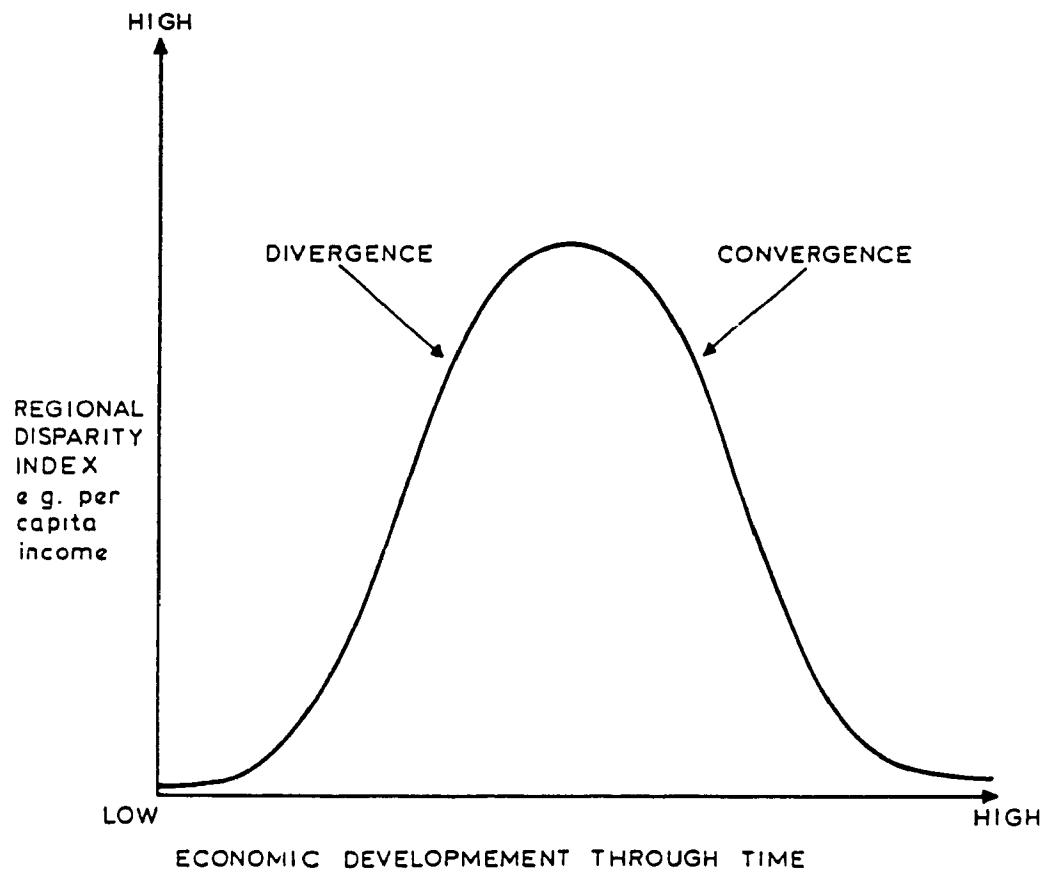
Actually, as early as the 1950s an "unbalanced" regional growth was argued (Hirschman, 1958), which recommended the concentration of investment in a limited number of industrial sectors. It was believed that the growth generated by these sectors would create increasing demand and stimulate growth in other sections of the economy through processes of backward and forward linkage.

With respect to this issue, the "modernizers"' proposi-

tion is best expressed by Williamson's well-known thesis: regional income differences tend to grow larger during the early stages of economic development, then level off, only to decline again with growing maturity and spatial integration of the economy. Based on data taken from twenty-four countries, of which six were categorized as less developed, Williamson (1965) found that the nations with the largest regional differentials were drawn from a group of countries with intermediate levels of per capita income. Highly developed nations and those countries which had experienced only limited economic growth exhibited relatively small regional disparities. By analyzing historical data on seven of the countries, he argued (1965:41) that from their experience "increasing regional inequality is generated during the early development stages, while mature growth has produced regional convergence and a reduction in differentials." This is regarded as a necessary and essential process for "successful" development. Figure 5 demonstrates this concept. As economic development begins to increase from a low level, relative disparities begin to widen. However, this period of divergence is followed by a period of convergence after a mature economy has been achieved. His thesis has therefore often been cited in support of inherently inequalitarian spatial policies.

According to this model, given long enough time,

Figure 5 : Williamson's Model of the Relationship Between Economic Development and Regional Disparities Through Time



Source: Williamson, 1965 : 3-45.

regional differentials in development levels (especially in per capita income) will even out through normal adjusting mechanisms and factor movements. The crucial role here, the "modernizers" stress, is to be played by one of the major dynamic functions of urban process -- spatial innovation diffusion.

Priorities of Strategy Design

Concerning the process of urbanization and its relationship to industrialization and/or national economic growth, there are two major issues involved in the policy-making and planning of less developed countries. The first has to do with the rate of urbanization. Should it be accelerated, arrested, or maintained at current levels? The second relates to the spatial distribution of urban growth and its implications for economic, social, and political development at both the national and regional levels. Should the trends toward primacy and polarized development and their associated regional imbalances in the structure of development be combatted? What should a rational industrial/urbanization strategy for less developed countries be? At the outset, the two groups of researchers differ in their points of view.

Generally speaking, the "traditionalists" view rapid

urbanization, primacy and imbalanced regional development negatively. They insist that migration from rural areas should avoid primate cities and industrially concentrated regions to other cities and regions. Since the spatial imbalance of economic development is undesirable in terms of social equity and national integration, selective deconcentration through government intervention is recommended (Johnson, 1970; Agnew et al., 1985).

The "modernizers" view the problems involved in the spatial process as "growing pains" (Potter, 1985:261). Associated with rapid urbanization and spatial concentration, the city plays a positive and constructive role. As Laquian once concluded (1982:94): "Despite many problems, cities continue to be the productive centers and the hubs of trade and commerce. They also accelerate social change and contribute to the nation-building process." From the point of view of economic efficiency, the "modernizers" argued that industrial activities should, at least initially, be concentrated in large cities and other industrially advanced areas. Hence, rapid urbanization and spatially concentrated development should not be seen as an unmixed evil (Lefebvre, 1964; Rodwin, 1967; Alonso, 1968; Friedmann, 1970). Meanwhile, they agree that growth centers besides existing large cities should be promoted, but they stress, such centers have to be large enough in order to reap the benefits of

economies of scale and agglomeration (Roninelli, 1982; Friedmann and Weaver, 1979; Richardson, 1978).

Economies of scale, agglomeration and the innovative capacity of large urban places are regarded as the major advantages of urbanization. Friedmann (1970) once even advocated a policy of deliberate and accelerated urbanization. As large cities are powerful modernizing agents with great abilities to generate and adopt innovations, and through their impact of diffusing modern factors, development of the hinterlands will sooner or later increase. In Alonso's words (1968:9), an "invisible hand" will in the long run bring about regional balance.

As we have seen, there is no consensus about how urbanization should be treated. However, by reviewing the debates between these two groups, it is not difficult to recognize that both groups share the same standpoint that cities are associated with the generation of wealth, and what they disagree on is the final assessment of outcomes. The arguments for economies of scale and efficiency are the focus for the "modernizers", while the non-economical considerations are in most cases the reason for which the "traditionalists" argued in favour of de-centralization and slower urbanization. Accordingly, the distinction between the two groups is reflected in their attitudes to the

existing social-regional problems. While the "traditionalists" suggest immediate government intervention, the "modernizers" place their hope on the gradual economic evolution in the long run.

Empirically, there should be no question that less developed countries' pursuit of rapid industrialization has been associated with rapid urbanization. And, with reason, the speed of urbanization has overtaken the growth of industrialization. Even so, economically speaking, evidence indicates that, as it is so for the more developed countries, in the less developed countries the degree of urbanization is positively correlated with a country's level of economic development (Adelman and Morris, 1967: 281-293; Potter, 1985:40). Although some "traditionalists" may disagree, it is still more likely that city size is positively correlated with economies of scale and efficiency. Associated with concentration in large cities, imbalanced regional distribution also has its economic rationality. By increasing large cities' capacities, the overall level of economy will increase initially and modern factors will possibly spread into backward regions and correct the imbalance in the long run.

Then, as a matter of fact, the less developed countries face a serious dilemma: a fast rate of urbanization might

lead to the creation of large city concentrations, and primate city concentrations in many countries, especially in Latin America, and thus drain the countryside and create serious social problems; a slower rate of urbanization and a neglect of needs of urban dynamics might slow down economic progress and cause dangerous deterioration of the urban environment. Concentrated development of industrial-urbanization will enjoy a higher growth rate, but the country will probably suffer more social-regional problems. In contrast, deconcentration may ease urban problems and reduce social and regional inequities, but, at the same time, it may lead to a decline in the overall rate of economic growth. Whereas the large cities, associated with imbalanced regional distribution, create more differentials among different social groups within the cities and among regions, the small urban places provide relatively smoother social settings but fall short of enough scale of production to keep industrial growth at a rapid rate. This in turn will not offer help to solve the country's socio-economic problems as a whole.

Thus, if a country endeavours to produce more equal patterns of economic welfare through programs of industrial decentralization and agricultural development, the country will probably have to sacrifice its rate of overall economy for the advantages of greater social justice. On the other

hand, if a country pursues a rapid rate of industrialization, which will in many developing countries be associated with "over-urbanization", primacy and imbalanced regional development, the country probably has to tolerate, at least in a short term, the inequities between core and periphery and between rural and urban as well as between social classes.

Summary and Hypothesis

The PRC's strategy and its implementation have been frequently cited as a successful model, in contrast to the dominant pattern of the less developed countries. This strategy and its practice have been given different names or identities. Some call it "anti-urban" (Ma, 1976), "deurbanization" (Cell, 1979; Farina, 1980), the counter-urbanization (Murphey, 1976), and "agropolitan" (Salter, 1976; Friedmann and Weaver, 1979). However, surprisingly enough, the nature of the strategy in relation to national economic growth has never been made clear. Certainly, since the PRC has for a considerable period of time remained beyond the investigation of outsiders who had to rely on scattered messages from the CCP political propaganda and self-advertisement on its achievements, it is understandable that some urbanists with bright expectations held the hope that the PRC's urban practices would provide the developing world with an ideal

solution to the conflicts between economic growth and its consequences on social-regional problems.

According to our theoretical perspective, however, such a solution is hardly possible. It is apparent that the Chinese design is not much economically based. The implementation of the strategy would produce harmful effects to national economic growth. On the other hand, it is important to emphasize that, as we have gone into great detail to describe the background in Chapter Two, the formulation and practice of this strategy has a complicated but concrete context of socio-ideological history. The strategy was probably not only formed as a conscious alternative to socio-regional equality, but also owed much to the CCP's lack of substantial knowledge of industrialization and urbanization. The implementation of the strategy has been even more determined by historical situations.

To properly understand the background in which the strategy was produced and was put into practice, there are several significant facts which must be fully considered.

A) Modern industrial production first came to China in the semi-colonial era, associated with the spatial pattern of the treaty ports, symbolizing Western invasion to China.

B) Unquestionably, even before achieving the national power, the CCP leaders recognized industrialization as the chief commitment for rebuilding a strong China. Industrialization has been a matter of

prime importance in the PRC. However, the CCP came to power from agricultural areas without management knowledge and experience of modern industrial production on a huge scale and complex structures.

C) After the withdrawal of Soviet economic-technical assistance in the middle 1950s, the PRC was absolutely isolated from the outside world, and even international communication with respect to industrial production and scientific-technical development was largely blocked out.

D) As reviewed in the last chapter, China had a strong tradition favoring the countryside. Over thousands of years of history, the urban place was never a center of change and was never favoured by the great tradition. The semi-colonial era was a bitter experience for most Chinese and Chinese pride. As well, the CCP, the designer of the strategy, underwent a very bitter experience with large urban locations during its struggle to power while its major leader Mao was more closely rooted with rural rather than urban areas and was influenced by his populist elders. Thus, to a significant extent, distrust of urban places, especially of large cities, must have blocked the CCP's vision of the all-round dynamic functions of urban systems. It is notable that the strategy has been explained by authorities not only in socio-political and military terms, but also in economic terms. Associated with restricting the growth of urban population and large cities, industrial development in smaller places and rural-based industries were promoted. Even after the failure of the "Great Leap Forward", an extremely typical Chinese pattern of attempts at industrialization with a focus on promoting rural-based industries, policies favoring rural-based industries and industries in smaller urban places were emphasized and put into practice (Riskin, 1971; Buck, 1981).

E) The strategy was fully put into practice only when the PRC was truly isolated from other parts of the world and without any help. Before the withdrawal of the Soviets, the PRC had carried on the strategy only to a very limited extent. After re-establishing connections with the outside world in the late 1970s, this strategy has been implemented much less strongly.

Based on the background analysis and theoretical discussions, issues of the PRC's strategy we have dealt with

can now be summarized. The appearance of the PRC urban strategy is either because the CCP leadership might have referred more to the non-economic requirements of the country, or because the leadership might have had no substantial knowledge of the all-round dynamics of urban systems. More likely, these two circumstances occurred together. Whatever the reason the strategy was formulated and put into effect, it is clear that this urban strategy was in conflict with the PRC's attempts at rapid industrialization. It can be imagined that there has been tension between implementation of its urban strategy and its urban needs for rapid industrial growth. As spatial concentration of urban systems creates economic advantages, achievements in deconcentration and the spatial redistribution of resources at both national and regional levels are inevitably to be paid for by sacrificing the rate of growth on the national level. The strategy should reduce the economies of modern production scale and economic efficiency which the PRC needed badly for rapid industrialization. Implementation of this strategy would have directly restrained urban growth and spatial transformation of urbanization and therefore, through depressing urban growth, the strategy would have indirectly slowed down national growth of economy. On the other hand, by carrying on this strategy the PRC might have gained more in non-economic aspects of national development. Conflicts between rural and urban areas, as well as between

the needs and supplies of jobs and living stocks in urban areas would have been more or less controlled, compared to the process taking place relatively more smoothly than in most developing countries. Meanwhile, a more balanced regional distribution would, to some extent, be achieved.

Thus, concerning the relationship between industrialization and urbanization, our theoretical hypothesis is, in short, that the implementation of the strategy would 1) at the national level directly restrain urbanization and indirectly slow down economic growth; and 2) at the regional level somewhat adjust the former imbalanced distribution of the resources by sacrificing the growth of the coastal area and the overall rate of national industrialization.

CHAPTER FOUR: METHODOLOGY

Data Sources and Limits

To examine our hypothesis, various statistics and information from both English and Chinese literature will be used. However, the different sources will not be treated equally, with priority given to PRC official sources. As a matter of fact, we will make use the available information in a four-rank manner.

First of all, we will take the official figures published by the State Statistical Bureau in the annual Statistical Yearbook of China (SSBa, 1982-1987) and the Statistical Yearbook of Chinese Cities (SSBb, 1986, 1987). After keeping national statistics top secret for many years, the PRC started in 1982 to release statistical data by publishing yearbooks. The annual books contain continual and systematic information on population changes, economic growth and regional development. Although contemporary statistical work in China is new and less matured than the standard of more developed countries and, whether for political or technical reasons, the data may be inaccurate, these remain the best sources since official data are more complete and more likely to be accurate than those estimated

by individual researchers or organizations. Unfortunately, however, the yearbooks in most cases only indicate figures for the past year. Only very limited sets of figures were filed from the foundation of the PRC in 1949 until the early 1980s. Besides, some important indicators such as the composition of National Income by Provinces and/or Regions, have only become available since 1985, which makes it necessary to utilize information from other sources. Some detailed problems with the data from the yearbooks will be discussed with the specifications of variables.

The second main source of information is other Chinese official publications: atlases, newspapers and magazines.

In third place are figures collected by the United Nations. These figures in most cases will be used to describe general urbanization patterns across the world and to make cross-nation comparisons.

Lastly, the work of both Chinese and foreign researchers, who have made important contributions in this field, will be used when the first three sources do not provide any information.

In order to be precise, and since the major source of information only provides data up to the end of 1986, we

will limit our study to the period between October of 1949 and the end of 1986. In addition, our examination of the PRC's industrialization and urbanization will be basically considered within a domestic scope. In the study, the terms "China" or "the Chinese" refer only to the PRC and the population living within the PRC.

Method and Operational Definitions

Our chief task is to explore the PRC's urban strategy in the light of a theoretical framework of industrial urbanization. There are three theoretical variables involved: strategy, urbanization, and industrialization or national economic growth. Since the subject we are dealing with consists of two levels of questions, which, needless to say, are closely related, we will conduct our examination level by level.

We will first examine the impact of the strategy on the national industrial-urbanization process and then examine the impact on the process at the regional level. The two sets of results will be analyzed together in context. In order to conduct these examinations, it is necessary to create sub-variables and specify operational terms.

The strategy contains two different but related

aspects, of which one indicates the general urban policy at the national level, (sub-variable Strategy[N]), and another directs spatial redistribution among regions, (sub-variable Strategy[R]). In operational terms, we will examine these two sets of sub-variables with the degrees to which the PRC has actually implemented the strategy in the three different historical periods. The more restricted the implementation of the strategy, the stronger the impact. According to what we have reviewed in the chapter regarding background, the degree of the strength of the strategy practiced in the three developmental periods can be described as: (1) weak, for the period of 1949-57, since the strategy did not receive much emphasis; (2) very strong, for the period of 1958-77, because the strategy was fully operative then; and (3) rapid decline, after 1978 to 1987.

The variable Urbanization will be measured by four indicators: (A) urban population growth in the absolute number of urban residents; (B) degree of urbanization, whose formulation was stated earlier; (C) growth in the number of designated cities; (D) urban concentration in large cities in terms of 1) the proportion of the number of large cities in total cities and 2) the proportion of urban population of large cities in total municipal population. Specifications of the "urban" and "urban population" as well as classification of city sizes are presented later in

a separate section.

The variable industrialization is very complicated and very difficult to describe. However, since industrialization in the present study is considered as a key generator and indicator of national economic growth and national economic growth in turn reflects the growth of industrialization, we will measure this variable by using several main indicators of national economy: (1) Total Product of Society, a Chinese concept similar to the Western concept of the Net Domestic Product. The latter is not available in the Yearbooks. A major difference between the two is that the former does not count the value generated from so-called "non-material-productive" services and other tertiary sectors. (2) National Income in the Chinese term, Guominshouru. This is also a Chinese concept which is similar but different from the Western concept National Income since it does not include the value from the tertiary sectors*. (3) Gross Output Value of Industry and Agriculture. (4) Gross Industrial Output Value. (5) Gross Agricultural Output Value. (6) Labour Force (national employment). (7) Total Population.

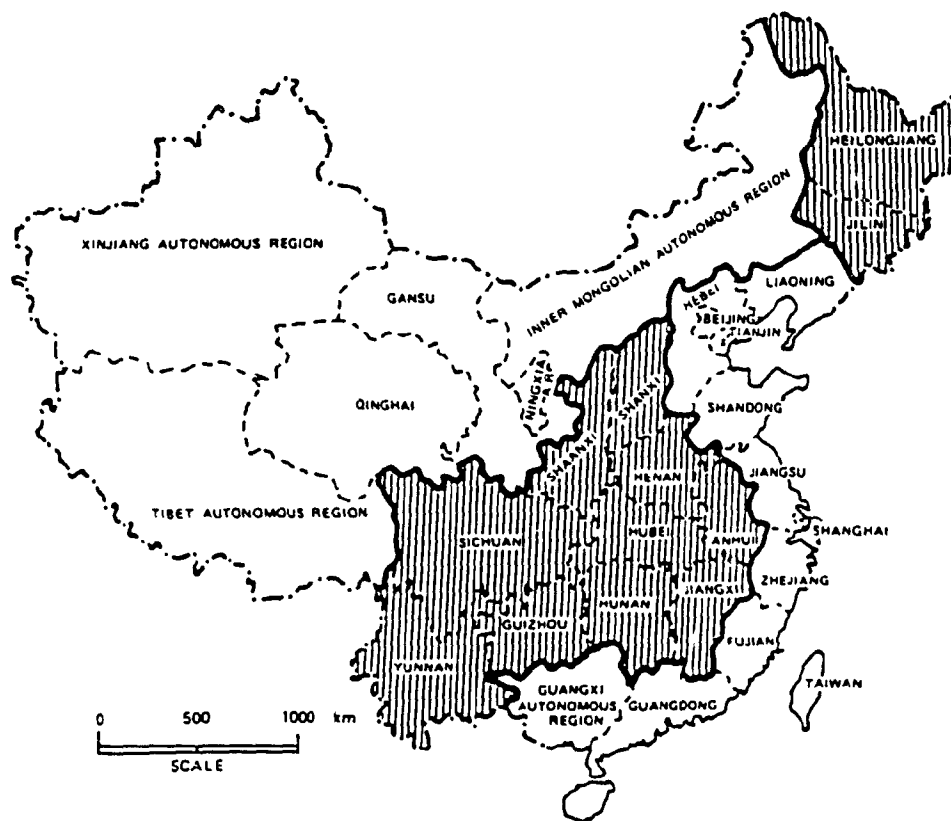
Although it has sometimes been argued that industrialization

* To see a detailed explanation for the indicators Total Product of Society and National Income in the Chinese sense, refer to SSBa, 1985: Foreword.

zation and its expected consequence, economic growth, are not always precisely reflected by these indicators, there are no better choices. It is likely that, since the performance of the tertiary sectors is excluded from the first two indicators taken from the yearbooks, the results we get will be somehow distorted. This is especially true if we are concerned that many dynamic functions such as knowledge production and communication (i.e., education, scientific-technological research and diffusion) as well as services are not necessarily directly reflected by the so-called "material-productive" aspects of the economy.

In order to examine the movement of regional distribution, it is necessary to refer to a map of China. For geographical-economic studies, there are several ways to classify China. An acceptable and suitable way here is to divide China into three regions: the coastal, the interior (inland), and the peripheral (border). As Map 1 demonstrates, the coastal region consists of eleven provincial-level units, covering only 13.4% of China's area; the interior region is composed of twelve provincial-level units, accounting for 31.5% of China's area; while the peripheral region has only six provincial-level units but covers 55.1% of China's area.

Map 1: The Coastal, Inland and Border Regionalisation



Note: Provincial-level units in each of the three macro-regions:

1. Coastal (11 provincial-level units, 13.4 per cent of China's area): Beijing, Tianjin, Hebei, Liaoning, Shandong, Jiangsu, Zhejiang, Fujian, Shanghai, Guangdong, Guangxi AR.

2. Inland (12 provincial-level units, 31.5 per cent of China's area): Shanxi, Jilin, Heilongjiang, Anhui, Jiangxi, Henan, Hubei, Hunan, Sichuan, Guizhou, Yunnan, Shanxi.

3. Border (6 provincial-level units, 55.1 per cent of China's area): Nei Monggol AR, Xizang (Tibet) AR, Gansu, Qinghai, Ningxia AR, Xinjiang AR.

Source: Zhou, 1983:19.

Based on this grouping, by making use of the same indicators, when available, which have been described above for the variables Urbanization and Industrialization at the national level, two sets of sub-variables for these two variables at the regional level will be created. The sub-variables Coastal Area Urbanization and Industrialization will be examined against the corresponding sub-variables for the interior region as well as sub-variables for the border region.

Models and Specification

Now, on the basis of the theoretical hypothesis and operational definitions of variables, we can draw our working models* as shown below:

* As we have pointed out in the Introduction section, our research is at exploratory level. Therefore, our working models should not be considered as standard diagrams but diagrams of reasoning guidance which help make our idea more clear.

Figure 6a: Path Diagram and Expected Signs among Our Variables at the National Level

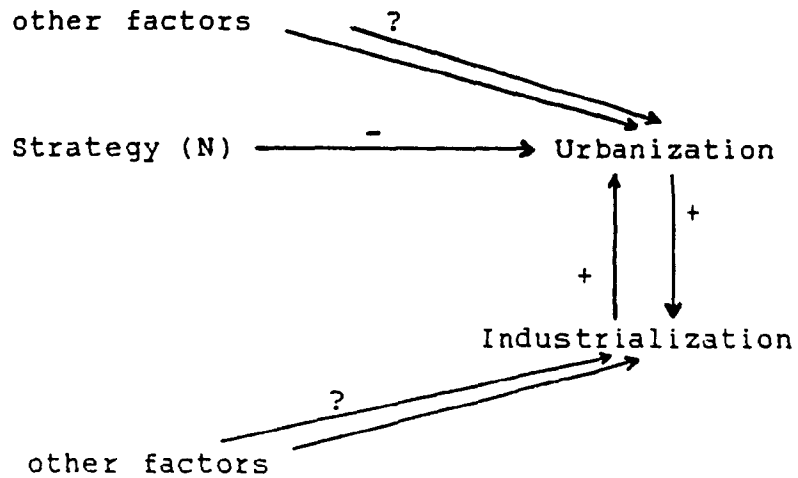
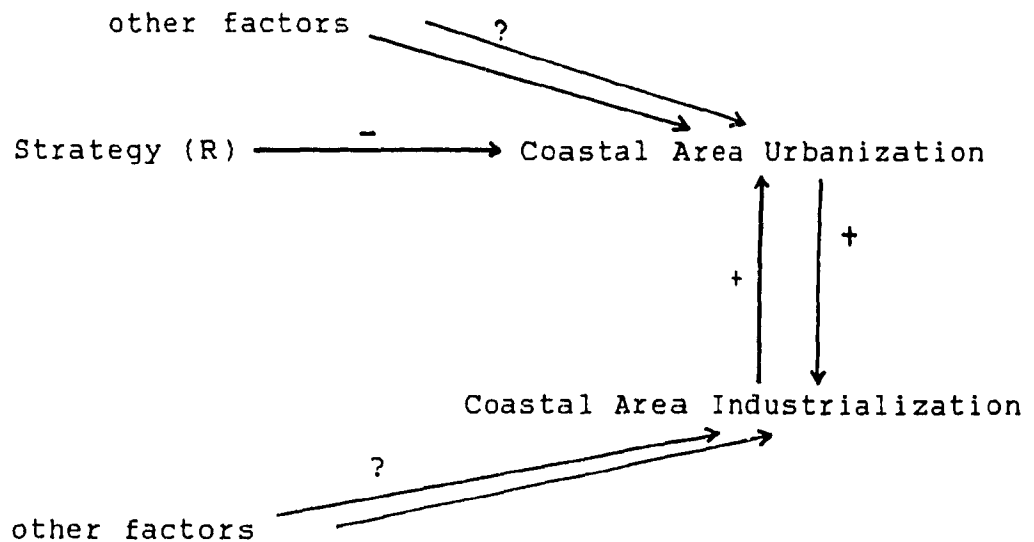


Figure 6b: Path Diagram and Expected Signs among Our Variables at the Regional Level



In Figure 6a, the variable Strategy(N) serves as the first aspect of the PRC's strategy, that is, urban policy at the national level, and it is expected to restrain growth of national urbanization, therefore a minus sign between it and the variable Urbanization. Since theoretically it is tenable that there is a mutual positive relationship between urbanization and industrialization, positive impacts are marked both ways. Accordingly, through the variable Urbanization, the variable Strategy(N) would produce an indirect negative impact on the variable Industrialization. When the policy is strictly carried out, both Urbanization and Industrialization receive a strong negative impact, otherwise the influence is weaker. Thus, if there is a positive correlation between urbanization and industrialization, evidence should show that the PRC's urban strategy, which is in conflict to her desire for rapid industrialization, has hampered growth of industrialization. Certainly, besides the impact of the implementation of the strategy, there are many other factors affecting the processes of urbanization and industrialization.

In Figure 6b, the variable Strategy(R) indicates the second aspect of the strategy, which leads to urban development at the regional level, and is also to be measured by the strength of the implementation. Since limiting coastal growth is the nature of this aspect of the strategy while

the non-coastal areas' growth is to be promoted, we expect a direct negative impact on the coastal area's urban growth as well as an indirect negative impact on this area's economic growth. Then, on the corresponding sub-variables of the two non-coastal regions all the direct and indirect impact from the variable Strategy(R) are expected to be positive. In other words, it is expected that both urban and economic growth in non-coastal areas were faster than that in the coastal area, especially when the strategy is put into practice in a restricted manner. Simultaneously, there are many other factors influencing the regional development of urbanization and industrialization.

Here, it is important to point out that several methodological imperfections may cause problems. First of all, there are definitely many other factors which cannot be controlled yet which affect industrialization and urbanization. Thus, we can only compare the results from the three different developmental periods of the PRC in terms of the different strengths of the strategy implementation, while the net repressing impact of the strategy on urbanization and industrialization cannot be statistically presented because of the lack of a suitable "control group". In other words, to be precise, we will examine the periodical impacts of the strategy by comparing the results from the different periods but not the impact itself. However, this does not

seem to be a very serious problem. Certainly, to compare with another developing country may be a remedial measure, but the country has to be carefully chosen in order to arrive at a meaningful comparison. Besides, due to great differences in socio-economic conditions, which always more or less exist between two countries, comparative studies do not promise nor necessarily produce more fruitful results than concentrated case studies, especially while countries such as China are involved. In any case, a comparative study is another research line and beyond the scope of this paper. However, some rough comparisons with developing countries as a whole will be introduced.

The second major potential problem is that since realization of industrialization was seen as the overall important mission of the CCP leaders and it was to a certain extent promoted all the time, the variable industrialization itself is a very strong variable, one which has positive impact on urbanization, on which the net impact of urbanization is very difficult to measure. This is especially likely since we are not able to control other factors, some of which, for example, the management of national economy, are very influential. These uncontrolled variables may distort our results.

Consequently, the third potential problem is that the

indirect impact of the urban strategy on industrialization may be even more difficult to assess. However, the regional level results will be less vague because we can compare the simultaneous results from three different regions. Since all the other factors on both urbanization and industrialization for these three regions are the same, the net impact of the strategy can be measured. If the results at the regional level are identical with those at the national level, confirmation of our hypothesis is assumed to be reinforced.

Specification of the Measurements of Urbanization

Before we begin to analyze the results, it is necessary to specify the measurements of the variable Urbanization. It is not only because such a specification is a prerequisite for conducting our examination, but also because it would help us to understand more properly the indications and limitations of the results.

There is no measurement for "urban" which has a definition that can be applied to all places at all times. Even in the mid-twentieth century no uniformity exists in the way various Western nations have applied them. In the United States the census definition of a town was a settlement with twenty-five hundred people; in Greece, ten

thousand; in Sweden and Denmark a settlement of only two hundred qualifies as a town (Roebuck, 1974:1). Prior to 1950, the Canadian census definition of urban was basically restricted to the legal municipal status of incorporation and the minimum requirement for a town was a thousand people. In the 1971 census, an urban resident was defined as one who lives in either: 1. incorporated cities, towns or villages with a population of 1,000 or over; 2. unincorporated places of 1,000 or more having a population density of at least 1,000 per square mile; 3. the built-up fringes of 1. and 2. having a minimum population of at least 1,000 and a population density of at least per square mile (McGahan, 1982:3-4).

From an international view, the range of definitions of urbanness is even larger and more complicated. As Table 4 demonstrates, the variations between the maximum and minimum sizes of urban places within each of the seven standard regions are extremely broad. The largest differential between the maximum of Asia (50,000 persons, Japan) and minimum of Africa (500 persons, South Africa) reaches one hundred times.

The PRC's case in this aspect is not much less complicated. It is generally understood that the standard definition for the term "urban" was provided by the Ministry

Table 4 : Urban Criteria — Some International Variations

| | INCLUSION AS URBAN | |
|------------|-----------------------|------------------------|
| | Minimum (persons) | Maximum |
| Africa | 500 (South Africa) | 10,000 (Senegal) |
| N. America | 1,000 (Canada) | 2,500 (Mexico) |
| S. America | 500 (Peru) | 2,500 (Venezuela) |
| Asia | 2,000 (Israel) | 50,000 (Japan) |
| Europe | 200 (Norway) | 10,000 (Spain) |
| Oceania | 500 (Papua N.G.) | 1,000 (New Zealand) |
| USSR | n.a | n.a |

Note: The table presents merely the crude numerical thresholds. In almost all cases these are subject to conditions. For example, the Republic of South Africa allows a smaller minimum figure providing there are one hundred or more white residents. Many national standards of minimum settlement size to be included as an urban place stipulate that a certain proportion of residents should be non-agricultural. In the USSR standards vary between Republics.

source: UN, 1981:203-275.

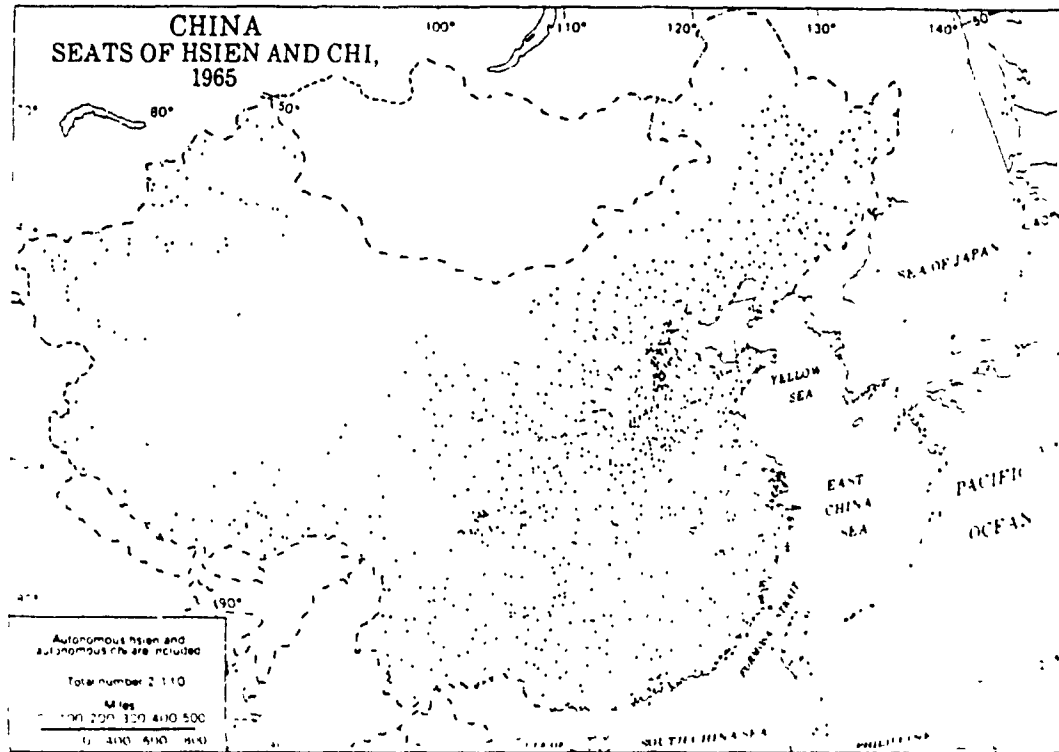
of Internal Affairs in 1955. An urban resident is supposed to live in an urban place. An urban place has to meet one or more of the following conditions: A) have a total population of over 2,000, of which at least half are engaged in non-agricultural pursuits; B) have a resident population between 1,000 and 2,000, of whom seventy-five per cent are non-agricultural; and C) serve as the seat of any people's committee at the Xian (County) level or above. Regions which cannot meet any of these three criteria are all considered rural. However, all urban suburbs, regardless of the proportion of agricultural population, were placed under the category of urban area (Chen, 1973:55; Kirkby, 1985: Chapter 3; Kojima, 1987:3-4). In addition, it has been reported that the authorities have sharply lowered the criteria for qualification for "official urban place" in 1984 (SSBa, 1985:1) while the changes have not yet been explained in detail.

In terms of administration, the PRC's urban system is divided into four levels. Three special municipalities (Zhixia Shi) are directly run by the central government and they constitute the highest level of municipality. They are the capital city of Beijing and leading commercial and industrial port cities (formerly, two of the major treaty ports) of Shanghai and Tianjin. These three cities are the first order administrative units paralleling the twenty-two

provinces and five autonomous regions. The second level of the PRC's urban hierarchy is the regional centers which are either the capital cities of the provinces and autonomous regions, or large prefecture-level regional cities. The Xian(county)-level cities are defined as the third order urban places, whose population usually falls between 50,000 and 300,000. The fourth order urban places are the capitals of 2010 rural counties (Xian or Chi [Qi]) distributed widely throughout China (see Map 2) and some individual small urban places. The first three orders are defined as designated municipalities (Shi), while the last one is defined as township (Zhen or Xian) (Chang, 1976:401; Ma, 1979:841).

The Chinese urban hierarchy can also be classified by city size. This classification which has been most often adopted by both Chinese and foreign researchers will be used here. According to the CCP's official paper the People's Daily (7 February 1986), Chinese cities are divided into four categories: (1) extra-large city, where residents number over a million; (2) large city, where the number of residents falls between half a million and a million; (3) medium-sized city, which has residents between two (sometimes three) hundred thousand and half a million; and (4) small city whose residents number below two (or, sometimes, three) hundred thousand. This classification does not take the townships (Zhen or Xian) but only cities into account.

Map 2 : Distribution of County-level Urban Places



Source: Chen, 1973:64.

Thus, when comparing the weights of different categories during the analysis, the proportion of the category small city should be assumed larger than it is presented.

There are four sets of concepts of urban population which have appeared in Chinese documents:

(A) Shizhen renkou (total population of cities and townships);

(B) Chengshi renkou (total population of cities);

(C) Zhen renkou (total population of townships);

(D) Chengzhen renkou (total nonagricultural population of cities and townships).

The Shizhen renkou (A) is the total population of inner cities' (and townships') districts and suburbs where there is a massive agricultural population. The Chengshi renkou (B) is the total population living in officially designated cities and the Zhen renkou (C) is the total population living in the officially designated townships. The Chengzhen renkou (D), consisting of the categories of both (B) and the (C), refers to the Shizhen zongrenkou (A) minus the agricultural population who live in the inner cities' (and townships') districts and their suburbs. This category closely corresponds to the concept of urban population used in the western world and should best reflect the degree of urbanization. However, statistics for this category are not available year by year. They are only given by the

Ministry of Public Security for the 295 cities and 6,211 townships for 1984. Of the Chengshi renkou (B) of 191.115 million, the nonagricultural population came to 110.13 million, and of the Zhen renkou (C) of 134.47 million, the nonagricultural population came to 52.28 million (MPS, 1985: 1-11). That is, 42.4 percent of municipal population and 61.1 percent of population living in townships were an agricultural population. Taking a weighted average of the two, only 49.9 percent, or roughly half of the total "urban" population were nonagricultural. Note must be taken on this since the PRC has, unfortunately, set up her urban account in terms of the category Shizhen zongrenkou (total population of cities and townships) in its statistical yearbooks and other announcements.

The Shizhen zongrenkou (A) has to be adopted with carefulness while we use it to examine the general urban population and urbanization. The urban concentration in large urban places will be investigated by measuring the distribution of the Chengshi renkou (B), or the nonagricultural population of Chengshi renkou when available, in the hierarchy of city sizes.

CHAPTER FIVE: RESULTS

National Urban Growth and Urbanization in the Three Developmental Periods

As we know, the examination of a country's urban growth and urbanization has to be conducted within the background of the growth of the total population. Through tracing both the growth of the total population and the growth of the urban population, and comparing these two, we will be able to get some idea about what has happened to the Chinese demographic evolution under the PRC's urban strategy.

As Table 5 indicates, the urban population has increased from 57.65 million in 1949, when the PRC was founded, to 437.53 million in 1986 (being more than seven times) while the total population has only increased from 541.67 million to 1.057 billion (less than doubled) respectively. It seems clear that in general the urban population has grown much faster than the total population. However, the detailed circumstances are more complicated than this general result reveals. Several aspects shown by this table are noteworthy.

Table 5: Composition of National Income

(Total National Income=100)

| Year | Agri- culture | Indus- try | Const- ruction | Trans- port | Com- merce |
|------|------------------|---------------|-------------------|----------------|---------------|
| 1952 | 57.73 | 19.52 | 3.57 | 4.24 | 14.94 |
| 1953 | 52.75 | 22.00 | 3.95 | 4.09 | 17.21 |
| 1954 | 51.87 | 23.26 | 3.48 | 4.28 | 17.11 |
| 1955 | 52.91 | 22.72 | 3.81 | 4.19 | 16.37 |
| 1956 | 49.76 | 24.04 | 6.24 | 4.20 | 15.76 |
| 1957 | 46.81 | 28.30 | 4.96 | 4.30 | 15.63 |
| 1958 | 39.36 | 35.86 | 6.08 | 5.28 | 13.42 |
| 1959 | 30.77 | 43.13 | 6.22 | 6.38 | 13.50 |
| 1960 | 27.21 | 46.31 | 6.48 | 6.89 | 13.11 |
| 1961 | 43.37 | 34.64 | 2.51 | 4.82 | 14.65 |
| 1962 | 48.06 | 32.79 | 3.46 | 4.11 | 11.58 |
| 1963 | 48.80 | 33.70 | 4.00 | 3.90 | 9.60 |
| 1964 | 47.09 | 36.19 | 4.29 | 3.77 | 8.66 |
| 1965 | 46.22 | 36.41 | 3.82 | 4.18 | 9.37 |
| 1966 | 43.63 | 38.21 | 3.66 | 4.16 | 10.34 |
| 1967 | 47.27 | 33.96 | 3.70 | 3.50 | 11.57 |
| 1968 | 50.46 | 31.73 | 3.11 | 3.46 | 11.24 |
| 1969 | 44.66 | 36.30 | 3.71 | 3.83 | 11.50 |
| 1970 | 40.39 | 40.98 | 4.15 | 3.84 | 10.64 |
| 1971 | 38.90 | 42.90 | 4.38 | 3.85 | 9.97 |
| 1972 | 37.83 | 44.10 | 4.12 | 3.93 | 10.02 |
| 1973 | 38.22 | 44.00 | 3.97 | 3.84 | 9.97 |
| 1974 | 39.26 | 43.23 | 4.22 | 3.62 | 9.67 |
| 1975 | 37.79 | 46.03 | 4.51 | 3.84 | 7.83 |
| 1976 | 39.74 | 45.57 | 4.94 | 3.79 | 6.96 |
| 1977 | 34.53 | 47.77 | 4.69 | 4.01 | 9.00 |
| 1978 | 32.76 | 49.40 | 4.15 | 3.92 | 9.77 |
| 1979 | 36.60 | 48.60 | 3.88 | 3.61 | 7.31 |
| 1980 | 35.95 | 48.90 | 5.02 | 3.42 | 6.70 |
| 1981 | 38.30 | 46.70 | 4.90 | 3.30 | 6.80 |
| 1982 | 40.44 | 45.72 | 4.90 | 3.52 | 5.42 |
| 1983 | 40.61 | 45.16 | 5.48 | 3.38 | 5.37 |
| 1984 | 39.85 | 44.53 | 5.36 | 3.59 | 6.67 |
| 1985 | 35.44 | 44.98 | 5.82 | 3.56 | 10.20 |
| 1986 | 34.49 | 45.30 | 6.52 | 3.90 | 9.79 |

Source: SSBA, 1987:54.

Firstly, while the total population consistently increased, there was an exception: during the 1959-1961 period, the total population decreased from 672.07 million to 658.59 million. This has usually been interpreted as a result of the failure of the Great Leap Forward campaign (GLF) and the nationwide natural calamity, both of which caused reduction in grain output and the death of many people (Chen, 1973; Cell, 1979). Secondly, the urban population and its percentage of the total population have often shown a decrease when the macro-trend is to increase. In consonance with a reduction of urban population from 130.73 million in 1960 to 116.46 in 1963, the degree of urbanization dropped from 19.8 % to 16.8 % respectively. And the degree of urbanization decreased again from 18.0 % in 1965 to 17.1 % in 1972 although during this period the urban population was gradually growing.

Thirdly, maybe most important to our examination, the patterns of urban process among the three different developmental periods are quite easy to identify. From 1949 to the end of the first Five-Year Plan in 1958, urbanization largely increased from 10.6 % to 16.2 % while the urban population increased from 57.65 million to 99.49 million. During this first decade the urban population grew at an average 7.2 percent: more than three times the rate of total

population growth. In the next twenty years or so, however, the degree of urbanization only increased a bit more than one per cent. For the second developmental period from 1958 to 1976, the urban population increased from 107.21 million to 163.41 million, while the urbanization level changed from 16.2 % to 17.4 %. By contrast with more than 85 % growth of urban population during the first ten years, the urban population only grew about 52 % during these twenty years or so of the second developmental period. The factors affecting the urban growth pattern are definitely complicated and mixed: not only the withdrawal of Soviet technical-economic experts and aid, and the natural calamities in the late 1950s and early 1960s but also the political-economic chaos stemming from the GLF (1958-1960) and the early period of the Cultural Revolution (1966-1969) would have produced negative influences on national population growth in general and urban growth in particular. Besides these, however, the government's emphasis on the urban control policy and the full implementation of the urban strategy must have played an important role. For this period, the Chinese growth rate of urban population was notably lower than that for other less developed countries. The annual average rate for the PRC is 2.42 per cent, which is a big difference compared with the less developed countries' annual average (refer to Table 2: 8.0 % for 1950-60, 3.9 % for 1960-70, or 4.0 % for 1970-80). Compared with the United Nations' data, the PRC

had a relatively slower urbanization, even with the rapid urban growth in the first decade and later period included in the account. During the period 1950-1980, all the less developed countries experienced a greater average growth of total population than the PRC (193.4 % against 178.8 %) while the difference in the rates of urban growth is even greater (310 % against 263 %). The index of urban population growth derived from these rates of increase is 1.88: 1 for the less-developed countries as a whole and 1.73: 1 for the PRC. It can be imagined that the difference would be even greater if the PRC were excluded from the calculation of the less developed countries as a whole.

Finally, after 1978, for the third developmental period, urban growth and increase in urbanization level were quite rapid. Especially, after 1983 both urban growth and increase in urbanization level were dramatically great. From the end of 1982 to end of 1986, the level of urbanization soared from 20.8 % to 41.4 % while the urban population increased from 211.54 million to 437.53 million. It is almost unbelievable that both urban population and degree of urbanization could be doubled in a short period of four years! For the most dramatic increase in urban population between 1983 and 1984, the explanation of the Statistical Yearbook (SSBa, 1985:1) is that in 1984 the definition for urban places was adjusted and many new locations were

consequently defined as urban places. Several foreign researchers (Kirkby, 1985: Chapter 3; Kojima, 1987:Chapter 1 and 2), on the other hand, have indicated that, besides this reclassification, the national reform introduced in 1982 on the administrative division between urban and rural areas, by which many cities received annexation of counties surrounding them, have had a large agricultural population added to the urban population. Even if we consider all these factors, however, it is still more likely that urbanization was at a rather rapid rate. As we can see within a period of six years from 1976 to 1982, which is before reclassification of the "urban place", the degree of urbanization increased more than three per cent from 17.4 % to 20.8 %. Urban growth was at an annual average rate of 4.4 %. This increase rate was already a little higher than the annual average rate of the less developed countries during the same period (4 %, see Table 2).

Increases in urban population are affected through three sources: natural increase, net migration, and reclassification. Although reclassification has played a rather important role, rural-urban migration has been a causal reason for the growth of urban population in the PRC. Like other developing countries, the natural increase of the urban population has constituted another very important factor for urban growth due to the improvement of social

welfare and medical conditions.

Growth of Urban Places and Large City Control

Controlling the growth of large cities is an important aspect of the Chinese strategy. Urban places are divided into two major types: cities (Shi) and townships (Zhen or Xian). Although the latter is much larger in terms of absolute number of places, the former is more important to our study: not only because in the PRC cities hold most of the urban population, but also because we are examining the impact of the strategy on the urban concentration in cities, especially large cities.

It has never officially been reported how many urban places existed before 1949 according to the PRC's definition. The 1953 national census reported a total of 5,568 urban places, 164 of which were cities (Shi) and all others were non-city urban places, Zhen or Xian (Onoye, 1970:99). Since then, however, there has not been any reliable information about the number of Chinese urban places until recently. Even the Statistical Yearbook of China or the Statistical Yearbook of Chinese Cities has only indicated the number of urban places for after 1981. According to Chengxiang Jianshe (1984, No.12), a PRC official magazine published by the Ministry for Urban-Rural Construction and

Environmental Protection, there were 174 cities in 1956. That is, between 1953 and 1956 ten new cities emerged.

Based on various sources, the growth of the number of cities is presented in Table 6. Compared with 174 cities of 1956, 42 new cities came into existence up to 1979. For a twenty-three-year period, this is not a very impressive increase. The average growth for this period is 1.83 cities per year and it is much slower than that for the period between 1953 and 1956 (3.33 cities per year). However, it is not unexpected if we consider that, during these twenty-three years, China twice experienced noteworthy declines in urban growth (1960-1963 and 1966-1977) and the relative percentage of urban population only increased 4.4 %, from 14.6 % to 19.0 % (refer to Table 5).

However, the increases since 1979 have been at much higher rates than the second developmental period. Most likely, it is much higher than the first developmental period. Within a short period of seven years, 136 new cities have come into existence. And the average growth is 19.5 cities per year. This matches the recent outstanding growth of urban population and the increase of degree of urbanization. As we mentioned a little earlier, the recent adjustments on the criteria for urban places must have constituted a part of this rapid growth. Meanwhile, this rapid increase

Table 6: Growth of the Designated Cities
(year-end)

| Year | Number of Cities (Shi) | Net Increase Per Year |
|------|------------------------|-----------------------|
| 1953 | 164 | - |
| 1956 | 174 | 3* |
| 1979 | 216 | 2** |
| 1980 | 223 | 7 |
| 1981 | 233 | 10 |
| 1982 | 245 | 12 |
| 1983 | 271 | 26 |
| 1984 | 295 | 16 |
| 1985 | 324 | 29 |
| 1986 | 353 | 9 |

Note: * On average for the three years (1953-56).
 ** On average for the twenty-three years (1956-79).
 Compared to 1956, there were 42 new cities.

Sources:

1953: Figure from the national census, cited from Onoye, 1970:99.
 1956: Chengxiang Jiangshe, 1984:8.
 1979-1981: Kirkby, 1985:85.
 1982-86: SSBa, 1983:107; 1984:85; 1985:198; 1986:94; 1987:1-3.

can also be considered as a part of the result of an accelerated urbanization, caused by the policy changes. While the net increase of twenty-nine cities between 1984 and 1985 should be assumed to result from the reclassification of urban places taken in 1984, other impressive numbers of net increases between 1979 and 1984 and between 1985 and 1986 are not necessarily related to this reclassification and therefore should be considered as clear clues of acceleration of recent urban growth.

The pattern is just a little different with respect to the large city control. As Table 7 shows, between 1953 and 1982, there was no marked evidence of an increase in concentration. While the PRC's municipal non-agricultural population practically doubled from 43.25 million to 99.20 million, the share of large cities (over 500,000 residents) on the total municipal non-agricultural population only increased one percent from 62.1 % to 63.1 %). This supports our hypothesis. In contrast to the recent trend of quickened urbanization, however, the weight of large cities decreased from 63.1 % to 53.2 % during the four years from 1982 to 1986. Most likely, this should at least be partly due to the reclassification of urban places in 1984, which put a great number of small- and medium-sized cities (77 for the small and 25 for the medium) into existence. Besides, this deviation from our hypothesized pattern is considerably

Table 7 : Municipal Population Distribution by Size-class
1953, 1982, and 1986
(Non-agricultural Population)

| Size-class | No. of <i>shi</i> | Share of <i>shi</i> (%) | Population (millions) | Share of all <i>shi</i> population (%) |
|------------------|----------------------|-------------------------------|--------------------------|-------------------------------------------------|
| <i>i. 1953</i> | | | | |
| Over 1,000,000 | 9 | 5.5 | 17.47 | 40.4 |
| 500,000-999,999 | 16 | 9.8 | 9.38 | 21.7 |
| 200,000-499,999 | 28 | 17.1 | 7.06 | 16.3 |
| 100,000-199,999 | 49 | 29.9 | 5.99 | 13.8 |
| Under 100,000 | 62 | 37.8 | 3.63 | 8.4 |
| Totals | 164 | 100.0 | 43.25 | 100.0 |
| <i>ii. 1982</i> | | | | |
| Over 1,000,000 | 20 | 8.2 | 42.05 | 42.8 |
| 500,000-999,999 | 28 | 11.4 | 19.93 | 20.3 |
| 200,000-499,999 | 70 | 28.6 | 21.88 | 22.3 |
| 100,000-199,999 | 70 | 28.6 | 10.55 | 10.7 |
| Under 100,000 | 57 | 23.3 | 3.78 | 3.8 |
| Totals | 245 | 100.0 | 98.20 | 100.0 |
| <i>iii. 1986</i> | | | | |
| Over 1,000,000 | 23 | 5.7 | 49.30 | 40.2 |
| 500,000-999,999 | 31 | 8.7 | 22.37 | 18.3 |
| 200,000-499,999 | 95 | 26.9 | 28.86 | 23.5 |
| 100,000-199,999 | 108 | 30.6 | 15.74 | 12.7 |
| Under 100,000 | 96 | 27.2 | 6.31 | 5.1 |
| Totals | 353 | 100.0 | 122.58 | 100.0 |

Source: 1953: Ullman, 1972:91-93.
1982: SSBa, 1983:103-108.
1986: SSBb, 1987:19-26.

small. More important, since the clear data for 1954-1957 and for 1976-1981 are not available, we had to adopt data for 1953 and 1982 and were unable to properly compare the results from the three developmental periods; otherwise, the pattern might have been even more similar to those representing the general trend in the three periods.

Urbanization and Industrialization

The PRC's economic growth is first of all measured by the index of National Income (see Table 8). We found the results fit our hypothesized pattern. In the first developmental period, the average annual increase rate was at 12.8 %. Since the economy of the country was only at a stage of reconstruction during the first couple of years, the end of 1952, just before the first Five-year Plan (1953-57), is often taken as a starting point for statistical purposes by Chinese authorities. Between 1953 and 1957, the average annual increase rate is found at 8.9 %, a little lower than that for this developmental period as a whole. For the second period (1958-1977), the average annual increase rate was found at 4.89 %, being notably lower than those for the other two developmental periods. The average annual increase rate for the third developmental period is 9.3%. If we only count the recent five years (1981-1985) the rate

Table 8 : Indexes of National Income †

| Year | Index | | Year | Index | |
|--------------------------------------|----------|------------------------|-----------|----------|------------------------|
| | 1952=100 | The preceding year=100 | | 1952=100 | The preceding year=100 |
| 1949 | 58.9 | | 1966 | 231.0 | 117.0 |
| | | | 1967 | 214.3 | 92.8 |
| 1950 | 70.1 | 119.0 | 1968 | 200.4 | 93.5 |
| 1951 | 81.8 | 116.7 | 1969 | 239.1 | 119.3 |
| 1952 | 100.0 | 122.2 | 1970 | 294.7 | 123.3 |
| 1953 | 114.0 | 114.0 | 1971 | 315.3 | 107.0 |
| 1954 | 120.6 | 105.8 | 1972 | 324.5 | 102.9 |
| 1955 | 128.3 | 106.4 | 1973 | 351.4 | 103.3 |
| 1956 | 146.4 | 114.1 | 1974 | 355.2 | 101.1 |
| 1957 | 153.0 | 104.5 | 1975 | 384.7 | 108.3 |
| 1958 | 186.7 | 122.0 | 1976 | 374.4 | 97.3 |
| 1959 | 202.1 | 109.2 | 1977 | 403.6 | 107.8 |
| 1960 | 190.2 | 98.6 | 1978 | 453.2 | 112.3 |
| 1961 | 140.0 | 70.3 | 1979 | 484.9 | 107.0 |
| 1962 | 130.9 | 93.5 | 1980 | 515.9 | 106.4 |
| 1963 | 144.9 | 110.7 | 1981 | 541.2 | 104.9 |
| 1964 | 168.8 | 116.5 | 1982 | 586.1 | 108.3 |
| 1965 | 197.5 | 117.0 | 1983 | 643.5 | 109.8 |
| | | | 1984 | 732.9 | 113.9 |
| | | | 1985 | 820.2 | 112.3 |
| <u>Average annual increase (%)**</u> | | | 1949-1957 | 12.80 % | |
| | | | 1958-1977 | 4.89 % | |
| | | | 1978-1985 | 9.30 % | |

† Figures in this table are at comparable prices.

** The Average annual increases were calculated by Z. Liang.

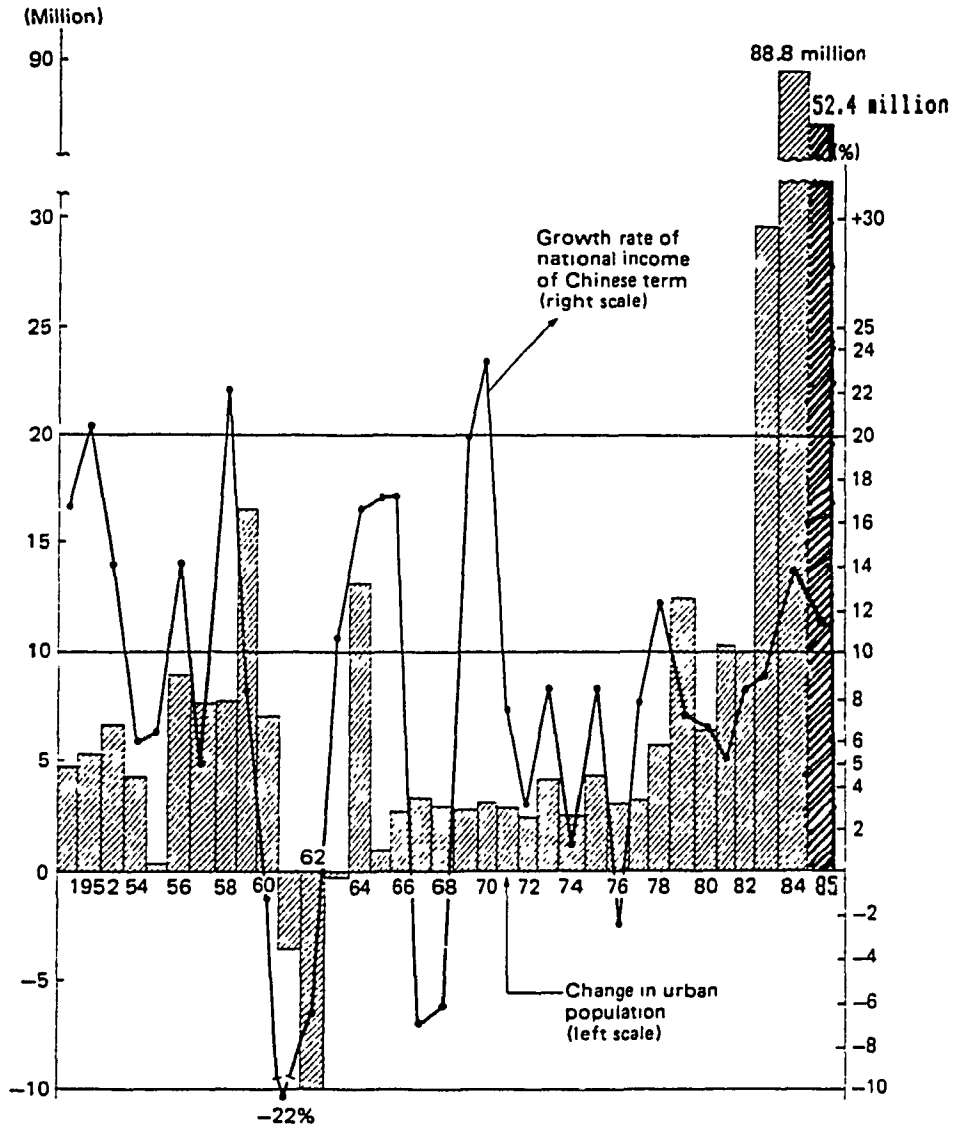
Sources: For 1985:SSBa, 1986: 18;
for 1949-1984: SSBa, 1985: 34.

will be even higher (9.7%). During the three developmental periods, the pattern of the increases of National Income was identical with the pattern of urban growth, showing a similar style: strong for the first, weaker for the second, and strong again for the third.

Such a pattern not only coincides with the three developmental periods as a whole, but can almost be matched year by year. As Figure 7 demonstrates, with several exceptions, national economic growth in the PRC has been almost symmetric with the growth of the urban population. Our earlier worries about the validity of the indicator National Income seem not to have come true. While the urban population grew faster, the national income increased faster.

Since the indexes of National Income might have somewhat distorted the circumstance of national economic growth, it is necessary to check our hypothesis with other indicators of the national economy. Besides National Income, six major indicators of the national economy were selected and calculated according to the three periods. From Table 9, we can see that results on every indicator, with the exclusion of Total Population, are identical with those from the National Income. The average increase rates in the first and the third periods for both Total Product of Society and

Figure 7: Growth Rate of National Income and Changes in Urban Population



Sources: For increase in urban population: AABb, 1987:89; for growth rate of National Income: SSBa, 1985:34 and 1986:18.

Table 9: Main Indicators of the National Economy
(Average Annual Increase Rate)

| ITEM | 1953-57 | 1958-78 | 1979-85 | 1981-1985 |
|------------------------------------------------|---------|---------|---------|-----------|
| Total Product of Society | 12.3 | 7.9 | 10.3 | 11.0 |
| Gross Output Value of Industry and Agriculture | 10.9 | 7.5 | 10.3 | 11.0 |
| Gross Industrial Output Value | 18.0 | 9.7 | 10.1 | 10.8 |
| Gross Agricultural Output Value | 4.5 | 2.9 | 10.1 | 11.7 |
| National Income | 8.9 | 5.2 | 8.8 | 9.7 |
| Labour Force | 2.8 | 2.5 | 3.3 | 3.5 |
| Total Population | 2.08 | 1.99 | 1.24 | 0.67 |

Note: All calculations were done by the present author.

Sources: For Total Product of Society, Gross Industrial Output Value, Gross Agricultural Output Value and Labour Force: SSBa, 1982:54, 1986:18; for Total Population: SSBa, 1982:54, 1986:71.

Gross Output Value of Industry and Agriculture are considerably larger than those for the second period. The differences in Gross Industrial Output Value are relatively minor but they still follow the pattern. The differences in Gross Agricultural Output Value are notably greater, especially between the second period and the recent period of 1981-1985 (2.9% : 11.7%). Index for the Labour Force (national employment) follows the same pattern.

Since general economic theories usually connect economic increase to the growth of total population, it is very important to notice that the index of Total Population DOES NOT follow the pattern. The growth of total population in the three different periods shows a decreasing pattern: the average annual rate for the first period is 2.08 % (or 20.8‰), 1.99% for the second period and 1.24% for the third period, while only a 0.67% for the recent five years (1981-1985). Therefore, we can assume that national economic growth in the PRC has been symmetric with urban growth rather than with growth of total population.

Regional Urbanization during the Three Periods

Because the regional data are less complete than that at the national level, we will not always be able to conduct

comparisons between the three periods. As we will see, however, it does not interfere with getting a basic idea of what happened.

Based on the divisions for the three regions stated in the last chapter, regional changes in the urban population have been summarized in Table 10. Since the proper data for 1957 and 1977 are missing, we had to make use of the figures for 1981 and only compare the last two periods. As we can see, during the second period, urban population in the coastal region had lost 22% though its absolute number increased 41%. While the weight of urban population in the coastal region decreased from 58.2% to 45.6%, the proportion for the non-coastal regions increased from 41.8% to 54.4%. Between 1981 and 1986, however, the coastal region won back part of the weight that it lost in the period between 1953 and 1981, while the weights for both the Inland and Border regions relatively decreased.

As we look at the regional changes in the distribution of designated municipalities, there is a similar problem with obtaining proper data. Figures for the regional designated cities in 1957 are not available. As Table 11 indicates, between 1953 and 1977 the increases of designated municipalities in the coastal region was relatively slower than the other two regions. While the non-coastal regions

Table 10: Regional Changes in the Distribution of Urban Aggregate Population, 1953-81-86 (Non-agricultural Population)

| | Proportion of urban population (% and millions) | | | Relative (and absolute) changes (%) | |
|---------|----------------------------------------------------|-----------------|-----------------|----------------------------------------|------------|
| | 1953 | 1981 | 1986 | 1953-81 | 1981-86 |
| Coastal | 58.2 (45.08) | 45.6 (63.26) | 50.0 (82.22) | -22 (41) | 10 (30) |
| Inland | 38.3 (29.59) | 46.5 (64.46) | 43.0 (70.64) | 21 (118) | -8 (10) |
| Border | 3.5 (2.70) | 7.9 (10.98) | 7.0 (11.4) | 126 (307) | -11 (5) |

Sources: For 1953: Orleans, 1972: 71;
for 1981: SSBa, 1982: 90;
and for 1986: SSBb, 1987: 1-3.

Table 11: Regional Changes in the Distribution of China's Designated Municipalities 1953-77 - 86

| | Proportion of <i>shi</i> (%) (and numbers) | | | Relative (and absolute) changes (%) | |
|---------|-----------------------------------------------|--------------|---------------|----------------------------------------|--------------|
| | 1953 | 1977 | 1986 | 1953-77 | 1977-86 |
| Coastal | 43.4 (72) | 34.2 (64) | 33.3 (107) | -21.2 (-8) | -2.6 (43) |
| Inland | 45.2 (75) | 52.9 (99) | 50.5 (162) | 17.2 (24) | -4.5 (63) |
| Border | 11.4 (19) | 12.8 (24) | 16.2 (52) | 12.3 (5) | 26.6 (28) |

Note: The figures in parentheses in columns 1 to 3 are numbers of municipalities; the last two columns are percentage increases in the number of *shi* within the region.

Sources: 1953: Ullman, 1972:86;
1977: Map, 1979:1-3.
1986: SSBa,1987:1-3.

gained 123 new cities in these twenty-five years, the coastal region only obtained 64 new cities. Simultaneously, the weight of the number of cities in the coastal region declined from 43.4% to 33.3%, whereas the respective proportion of the non-coastal regions increased from 56.6% to 65.7%. During the period of 1977-1986, this trend changed. While only the border region gained 26.6%, both Coastal and Inland regions relatively decreased a bit. Although the coastal region is still losing, there are four points which may explain these figures: (1) The Inland region, the larger part of the non-coastal regions, decreased more than the coastal region (-4.5% against -2.6%); (2) the absolute increases of both coastal and inland regions are much greater than that of the border region (respectively, 43% : 63% : 28%); (3) the relative change in national distribution of the municipal non-agricultural population for the border region in this period did not increase but decrease (-11%, see Table 10). (4) The decision to establish designated municipalities depends more on administrative mechanisms. Thus, the relative increase in the number of designated municipalities does not necessarily indicate a faster urban growth of the border region.

Table 12 shows provincial and regional changes in the distribution of the number of large cities (over 500,000). The share of the large and extra-large cities for the

Table 12 : Number of Cities Over 500,000 by Province and Region, 1953 and 1982

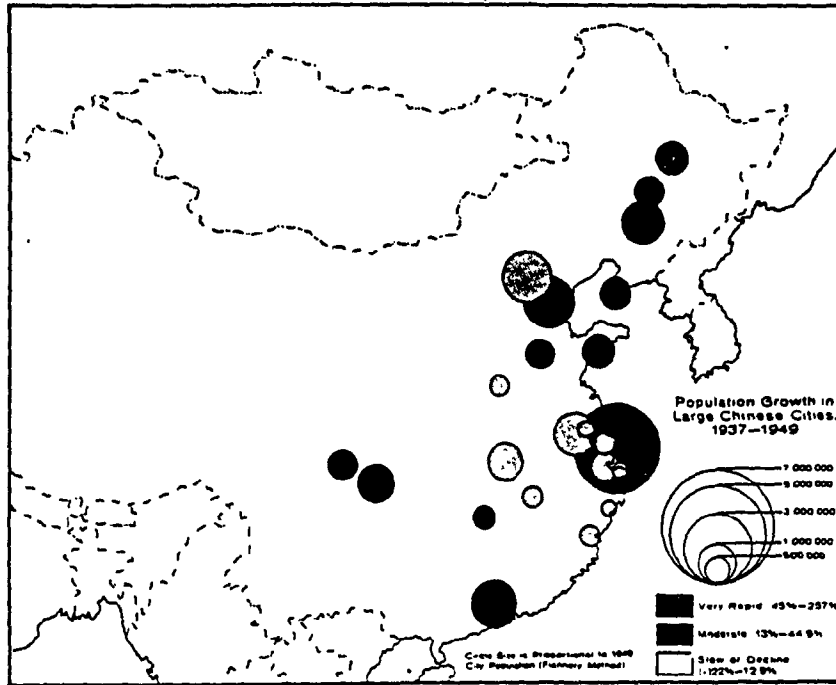
| | 500,000-999,999 | | | Over 1 million | | | Over 500,000 | | |
|--------------------|-----------------|-----------|-----------|----------------|-----------|-----------|--------------------|--------------------|--------------------|
| | 1953 | 1982 | 1986 | 1953 | 1982 | 1986 | 1953 | 1982 | 1986 |
| I. COASTAL | | | | | | | | | |
| Beijing | -- | -- | -- | 1 | 1 | 1 | 1 | 1 | 1 |
| Tianjin | -- | -- | -- | 1 | 1 | 1 | 1 | 1 | 1 |
| Hebei | 1 | 3 | 3 | -- | -- | -- | 1 | 3 | 3 |
| Liaoning | 3 | 3 | 3 | 1 | 4 | 4 | 4 | 7 | 7 |
| Shanghai | -- | -- | -- | 1 | 1 | 1 | 1 | 1 | 1 |
| Jiangsu | 1 | 3 | 3 | 1 | 1 | 1 | 2 | 4 | 4 |
| Zhejiang | 1 | 1 | 1 | -- | -- | 1 | 1 | 1 | 2 |
| Fujian | 1 | 1 | 2 | -- | -- | -- | 1 | 1 | 2 |
| Shandong | 2 | 1 | 1 | -- | 2 | 1 | 2 | 3 | 3 |
| Guangdong | -- | -- | -- | 1 | 1 | 1 | 1 | 1 | 1 |
| Guangxi | -- | 1 | 2 | -- | -- | -- | -- | 1 | 2 |
| Total | 9 | 13 | 15 | 6 | 11 | 12 | 15 (60%) | 24 (50%) | 27 (50%) |
| II. INLAND | | | | | | | | | |
| Shanxi | 1 | 1 | 1 | -- | 1 | 1 | 1 | 2 | 2 |
| Jilin | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 2 | 2 |
| Heilongjiang | -- | 3 | 5 | 1 | 1 | 1 | 1 | 4 | 6 |
| Anhui | -- | 2 | 2 | -- | -- | -- | -- | 2 | 2 |
| Jiangxi | -- | 1 | 1 | -- | -- | -- | -- | 1 | 1 |
| Henan | 1 | 2 | 1 | -- | -- | 1 | 1 | 2 | 2 |
| Hubei | -- | -- | -- | 1 | 1 | 1 | 1 | 1 | 1 |
| Hunan | 1 | 1 | 1 | -- | -- | 1 | 1 | 1 | 2 |
| Sichuan | 1 | -- | -- | 1 | 2 | 2 | 2 | 2 | 2 |
| Guizhou | -- | 1 | 1 | -- | -- | -- | -- | 1 | 1 |
| Yunnan | 1 | -- | -- | -- | 1 | 1 | 1 | 1 | 1 |
| Shaanxi | 1 | -- | -- | -- | 1 | 1 | 1 | 1 | 1 |
| Total | 7 | 12 | 12 | 3 | 8 | 10 | 10 (40%) | 20 (42%) | 22 (41%) |
| III. BORDER | | | | | | | | | |
| Nei Mongol | -- | 2 | 2 | -- | -- | -- | -- | 2 | 2 |
| Xizang | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Gansu | -- | -- | -- | -- | 1 | 1 | -- | 1 | 1 |
| Qinghai | -- | -- | 1 | -- | -- | -- | -- | -- | 1 |
| Ningxia | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Xinjiang | -- | 1 | 1 | -- | -- | -- | -- | 1 | 1 |
| Total | -- | 3 | 4 | -- | 1 | 1 | -- (0%) | 4 (8%) | 5 (9%) |
| Grand Total | 16 | 28 | 31 | 9 | 20 | 23 | 25 | 48 | 54 |

Note: Percentage figures under regional totals are of grand totals in respective columns.

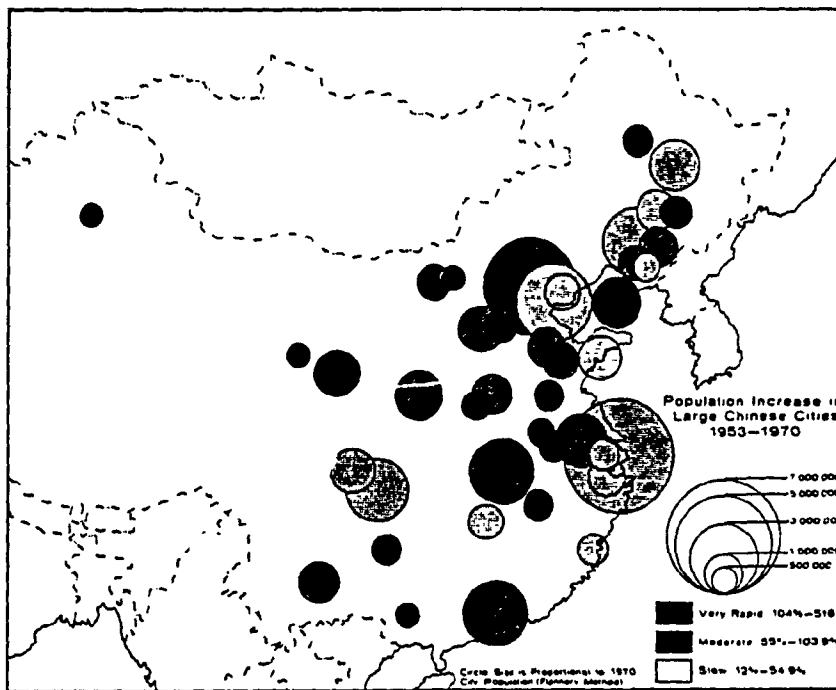
Source: 1953: Orleans, 1972:61; 1982:SSBa, 1983:165; 1986:SSBb,1987:1-3.

coastal region was at 60% in 1953%, while the Inland region weighted 40% and the Border region did not hold any city of this size. After thirty years, which covers the three periods with the second period occupying most of it, ten new large cities (over 500,000) emerged in the interior region and four, for the first time, in the peripheral region, while the weight of these two regions increased from 40 % to 50 %.

Based on non-official or estimated data, many scholars have observed a trend of regional decentralization for this period. Map 3 illustrates one of those observations. In contrast to the pre-1949 period (Map 3a), rapid increases of large cities were no longer concentrated along the coast, and many new large cities quickly emerged in the non-coastal areas (Map 3b). Perhaps most significantly, for the first time in the whole history of China, several large cities had come into existence in the peripheral region at very rapid rates. Table 13 indicates some most dramatic cases. In a period of twenty years (1953-1982), these large cities in the Border region experienced rapid growth, ranging from at least more than doubling (Lanzhou, Gansou) to at most a six-fold increase in size (Urumqi, Xinjiang). Noteworthily, even during the first developmental period such growth was already very rapid. In Inner Mongolia alone, while Huhhot doubled, Baotou tripled. Since all these cities are well-



Map 3a : Population Growth in Large Chinese Cities, 1937-1949



Map 3b : Population Growth in Large Chinese Cities, 1953-1970

Source: Pannell, 1981:110.

Table 13: Border Region — Growth of Selected Cities Currently of
over 500,000 Persons
(Non-agricultural Population)

| | 1953 | 1957 | 1982 | 1986 |
|----------------------|---------|---------|-----------|-----------|
| Lanzhou (Gansou) | 397,000 | 699,000 | 1,080,000 | 1,097,000 |
| Hohhot (Nei Monggol) | 148,000 | 314,000 | 515,000 | 586,000 |
| Baotou (Nei Monggol) | 150,000 | 500,000 | 853,000 | 913,000 |
| Urumqi (Xinjiang) | 141,000 | 275,000 | 899,000 | 958,000 |

Sources: 1953 and 1957: Chen, 1973:67;
1982: SSBa, 1983:165;
1986: SSBb, 1987:1-3.

known as newly emerged industrial cities, this growth reflects the practice of the strategy to redistribute national resources and promote development of heavy industry in the non-coastal regions. This trend seems to have stopped, however, or at least, be moderated. As shown by the last column of Table 12, the coastal region obtained as many new large cities as the non-coastal regions between 1982 and 1986, while it kept the weight it had four years ago. Such a reverse trend is reinforced by the facts that the coastal region contains most (five of eight) of the cities with over 2,000,000 residents (SSBb, 1987:1) and that during roughly the same period (1981-1986) the urban population in the coastal region did not decrease relatively but increased, while those in both non-coastal regions decreased relatively (see Table 10).

Regional Comparisons on Urbanization and Industrialization

With respect to regional development, the trend of deconcentration of urban growth in the second period was associated with a similar tendency in industrial development. As Table 14 demonstrates, between 1952 and 1982 the

Table 14 : Gross Value of Industrial Output by Province and Region, 1952 and 1982 and 1986

| | Percentage of GVIO | | | Change (%) | |
|--------------------|--------------------|-------------|-------------|------------|--------------|
| | 1952 | 1982 | 1986 | 1952-82 | 1982-86 |
| I. COASTAL | | | | | |
| Beijing | 2.4 | 4.1 | 3.8 | 69 | -7.3 |
| Tianjin | 5.4 | 3.8 | 3.6 | 42 | -5.3 |
| Hebei | 3.9 | 4.1 | 3.5 | 4 | -14.6 |
| Liaoning | 13.3 | 8.5 | 8.6 | -38 | 1.2 |
| Shanghai | 19.1 | 11.4 | 9.9 | -40 | -13.2 |
| Jiangsu | 7.6 | 9.0 | 13.1 | 19 | 45.6 |
| Zhejiang | 3.2 | 4.1 | 7.0 | 27 | 70.7 |
| Fujian | 1.2 | 1.8 | 2.1 | 31 | 31.3 |
| Shandong | 6.4 | 6.6 | 6.9 | 7 | 4.5 |
| Guangdong | 5.1 | 4.9 | 6.0 | -4 | 22.4 |
| Guangxi | 1.0 | 1.6 | 1.0 | 58 | -37.5 |
| Total | 68.5 | 59.7 | 65.5 | -13 | 9.7 |
| II. INLAND | | | | | |
| Shanxi | 1.9 | 2.4 | 1.9 | 27 | -20.8 |
| Jilin | 3.2 | 2.6 | 2.4 | -20 | -7.7 |
| Heilongjiang | 5.8 | 4.8 | 3.9 | -14 | -18.8 |
| Anhui | 1.9 | 2.6 | 2.3 | 40 | -11.5 |
| Jiangxi | 1.7 | 1.8 | 1.5 | 7 | -16.7 |
| Henan | 2.6 | 3.9 | 3.9 | 51 | 0 |
| Hubei | 2.8 | 4.9 | 4.2 | 74 | -14.3 |
| Hunan | 2.3 | 3.5 | 2.9 | 55 | -17.1 |
| Sichuan | 4.9 | 5.4 | 5.1 | 11 | -5.6 |
| Guizhou | 0.8 | 0.9 | 0.6 | 14 | -33.3 |
| Yunnan | 1.0 | 1.4 | 1.0 | 43 | -28.6 |
| Shaanxi | 1.1 | 2.0 | 1.9 | 79 | -5.0 |
| Total | 29.6 | 36.2 | 31.6 | 22 | -12.7 |
| III. BORDER | | | | | |
| Nei Mongol | 0.6 | 1.2 | 0.9 | 114 | -25.0 |
| Xizang | - | - | - | - | - |
| Gansu | 0.7 | 1.5 | 1.2 | 121 | -20.0 |
| Qinghai | 0.1 | 0.3 | 0.2 | 150 | -33.3 |
| Ningxia | 0.03 | 0.3 | 0.2 | 900 | -33.3 |
| Xinjiang | 0.5 | 0.8 | 0.7 | 57 | -12.5 |
| Total | 1.9 | 4.1 | 3.2 | 116 | -20.0 |

Source: 1952: Lardy, 1978:197-8;

1982: SSBa, 1983:234;

1986: SSBb, 1987: 43-50.

coastal region lost about nine percent in the weight of national Gross Value of Industrial Output (from 68.5% down to 59.7%), while its relative change was calculated as minus thirteen percent. The weights of Inland region and Border region in the same period respectively increased from 29% to 36.2% and from 1.9% to 4.1%, while witnessing 22% and 116% relative changes. It is not very surprising to see such results, since promoting industrial production in non-coastal areas is a major aspect of the PRC's strategy. As the trend might have begun to reverse at the beginning of the third period, we could probably obtain results with even larger changes if data for the end of the 1970s were available.

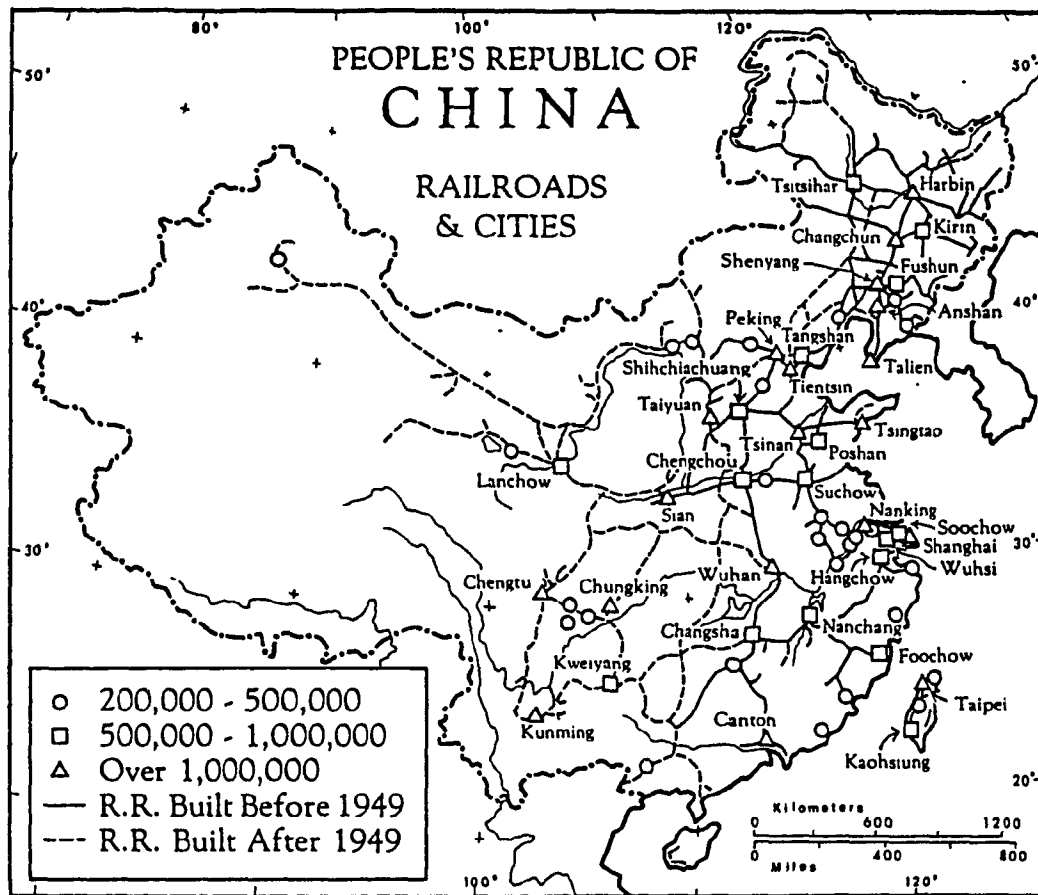
According to the CCP's official paper, the People's Daily (15 December 1981), during the First Five-Year Plan period the coastal region missed out in the allocation of construction projects. Of the 700 major backbone projects, 68% were earmarked for non-coastal provinces. These included most of the particularly important industrial projects being built with direct Soviet assistance. Besides, fifty-eight per cent of the total industrial investment was despatched to the non-coastal regions. Despite a short pause between 1956 and 1957, this proportion was almost equalled or exceeded in a two-decade period through the second Five-Year Plan (1958-1962) and the third Five-Year Plan (1966-1970) as

well as the fourth Five-Year Plan (1972-1976). Map 4 demonstrates the PRC's achievement of promoting modern transportation in the non-coastal areas. Before 1949, the railroads were concentrated along the coast. Up to the end of the 1970s, many new railways, most of which are located in the non-coastal areas, were built to connect China's vast hinterland with the outside world.

However, as has been seen in almost every set of results, the trend of regional deconcentration was turned back. Consistent with the trend of re-concentration of urban population in the coastal area, the coastal region has seemed to win back its weight in the national economy. Between 1982 and 1986, in a short period of four years, the proportion of the Gross Value of Industrial Output for the coastal region increased from 59.7% to 65.5% with a 9.7% of relative change. The proportions for the inland region and the border region correspondingly declined from 36.2% to 31.6% and from 4.1% to 3.2%, with relative changes of -12.7% and -20.0%.

This reversed trend can also be identified from two other main indicators of regional economy (the others are not available). As Table 15 indicates, during the same four-year period (1982-1986) the coastal region gained more than two per cent with respect to the weight of the Gross

Map 4 : Growth of Railroads and Cities in the PRC



Source: Murphey, 1980: 50

Table 15 : Main Indicators of Regional Economy*
(Relative Changes)

%

| ITEM | 1982 | | | 1986 | | | Relative Change** | | |
|-----------------------------------|------------------------------------------------|------|------|------|------|------|-------------------|-------|-------|
| | C | I | B | C | I | B | C | I | B |
| | Gross Output Value of Industry and Agriculture | 55.2 | 40.3 | 4.5 | 57.3 | 37.1 | 3.9 | 3.8 | -7.9 |
| Gross Output Value of Industry | 59.7 | 36.2 | 4.1 | 65.5 | 31.6 | 3.2 | 9.7 | -12.7 | -22.0 |
| Gross Output Value of Agriculture | 45.4 | 49.3 | 5.3 | 46.3 | 39.9 | 5.9 | 2.0 | -19.1 | -11.3 |

* Within the table, C=coastal region, I=inland region, and B=border region.

** All the calculations in this table were done by the present author.

Sources: For 1982:SSBa, 1983:21; for 1986:SSBa, 1987:50.

Output Value of Industry and Agriculture (from 55.2% up to 57.3%). When both non-coastal regions experienced relatively negative changes, the relative change for the coastal region was positive. Even with respect to the share of the Gross Output Value of Agriculture, the coastal region increased from 45.4% to 46.3% while the non-coastal regions respectively lost out. The relative changes for all three indicators benefit the coastal region at the expense of the non-coastal regions. Although changes of shares of the National Income from each region are not available at year-by-year level, the figures indicated by the Statistical Yearbook seem to be identical with three major indicators just examined: at the end of 1986 the coastal region contributed 61.43 per cent of the national income while the shares for the interior and peripheral regions were respectively 33.13 per cent and 5.44 per cent (SSB_a, 1987:55).

Summary of Results

Generally, the results we have found support our hypothesis. The division into three developmental periods is tenable and, based on them, the examination of the PRC's implementation of its urban strategy has been fruitful. We have found that, since the implementation of the strategy has a pattern of "weak-strong-weak" in the three periods,

the growth of urban population and urban concentration as well as national economy have shown a close correlation. When the strategy was strongly put into practice, growth of urban population and urban concentration as well as the degree of urbanization was depressed. Meanwhile, the national economy experienced a relatively slow rate in average annual increase. When the strategy was not restricted during the first period or was not given much emphasis during the third period, urban growth and urban concentration occurred very rapidly. Coincidentally with these periods, the national economy twice experienced a rapid growth.

In addition, regional development performed in a similar way. While the strategy was fully practiced, it clearly gave evidence of the trend of spatial deconcentration of urbanization and industrialization, from the coastal region to the non-coastal areas. However, once implementation of the strategy became less restricted, the trend was reversed. Concentration of both urbanization and industrialization became a major characteristic of new growth. The coastal region started winning back the weight given away in the second period when the practice of the strategy was strong.

Thus, corresponding to the pattern of national ur-

ba :ion, regional growth simultaneously witnessed a concentrated-deconcentrated-concentrated pattern while the emphasis on implementation of the strategy went through a weak-strong-weak cycle in the three respective periods. The trends for different developmental periods, for the last two in particular, might be even more clear if we were able to obtain the proper data to precisely distinguish the different periods.

Empirically, there is a very apparent correlation between urbanization and industrialization in light of the PRC's experience. When urbanization and spatial concentration increase, industrialization and the national economy grow faster. When urbanization and spatial concentration are restricted, industrialization and growth of the economy become more stagnant. Promoting the peripheral (non-coastal) areas helped to reduce regional differentials, but the core (coastal) region was likely to be depressed and therefore the national economy suffered a slow growth.

CHAPTER SIX: DISCUSSION

Issue of Economic Efficiency

There is evidence to support our hypothesis. Evidence of the PRC's experience shows a correlation between urbanization and economic growth. The development of the national economy has been positively related to increases in urban population and the degree of urbanization. More likely, as suggested by the urbanization theories of the main stream, there exists a correlation between economic efficiency and the increases of both urbanization and urban spatial concentration*.

In modern China, like in most countries in the world, cities have definitely played a leading role and, as a set of dynamic socio-economic processes, urbanization has been positively related with the development of the national economy of the country. Evidence suggests that the Chinese

* In supporting this assumption, a typical example we can point out in the PRC's experience is its sewing machine industry. According to the People's Daily (2 August 1982), the differentials in productivity between the PRC's 51 plants are several times between those in the East and in the large cities and those in the smaller centers and the West. There have been comparable contrasts in the industries of bicycles, watches and many other goods.

urban strategy has harmed the growth of the Chinese economy. Since the strategy has been rooted in a strong rural bias, it counters economic rationality. By promoting small and medium-sized centers and rural townships building self-contained satellites and so on, while limiting the growth of larger urban places, the Chinese urban strategy and its rigid implementation have restrained national economic growth in general and coastal economic growth in particular.

Although economic development in the non-coastal areas gained benefits from the implementation of the strategy, the expected constructive impact of the strategy through the redistribution of resources among regions in the national economy is very difficult to assess. This is, first of all, because the attempts at redistribution were at the expense of the present growth of the national economy as a whole. It is also because the decision of the redistribution was more probably based on the subjective will of the strategy designers and social-ideological considerations rather than the needs of economic growth. Thus, the redistribution is not necessarily identical with the actual needs of the economic development. Because of stark realities of topography and climate, as some Chinese urbanists later on realised, "China's population distribution in its main outline ... cannot be transferred" (Zhou, 1983:21).

Therefore, even being seen in the long term, it is still an open question whether the attempts at redistribution would have benefitted the national economy at all. What we know at this moment is that the strategy must have harmed Chinese economic growth in the last phase of development.

A fundamental material condition for the PRC is that its capital resources are extremely limited. By constraining the growth of larger cities, which contain high productivity and more advanced capacities of production of material goods and knowledge, the implementation of the strategy must have set up two integrated obstacles for the rapid growth of the PRC's industrialization. On the one hand, the precious capital resources were not able to be fully utilized in expanding the established bases of production in the larger urban places along the coast to reach a more optimal economic achievement and, on the other hand, the capital costs of both developing industry in the thousands of small settlements, and providing them with an essential urban infrastructure have been recognized as wasteful and completely insupportable*.

As we know, in economic terms, a non-urban location has certain advantages such as the land savings in urban

* We will come back to and discuss this matter later in the section C) New Voices in the PRC.

infrastructure and housing. However, one must weigh these economic savings against the costs of providing the industrial infrastructure for an isolated plant or a small plant complex and the loss of efficiency resulting in a location remote from the urban center. The claim that a given city is too large is often based on a numeration of the disadvantages associated with the growing size of a metropolitan area without due consideration of the counter-vailing advantages. Insofar as the advantages and disadvantages are a joint product, the positive and negative aspects should be considered together. The continued growth of a metropolis in most developing countries should be considered as evidence that the positive aspects continue to outweigh the negative.

Issue of Social Considerations

Certainly, as we have discussed earlier, economic growth or economic efficiency is not the sole consideration involved with the design of an urbanization strategy. More or less, it is a question of choices. A government has to select an alternative from either more economic benefits accompanied by more social problems, or fewer economic benefits with fewer social problems.

Our results have suggested that the Chinese strategy

definitely has had to follow this rule, and not as some foreign scholars have naively expected, the Chinese strategy could not achieve both economic efficiency and social control at the same time. Whether or not the CCP leaders had realized it, the Chinese urban strategy had no economic advantage.

The waste and suffering of humanity in the squalid metropolises of most developing countries are undeniable. Through controlling the growth of its urban population and especially its population in large urban places, the PRC has managed to minimize its urban problems and to keep maximum governmental control. It is obvious that the PRC has paid a heavy price for this. The question is how much social benefit has the PRC's strategy brought in. Has it been worth it? There are different assessments from different people who see it from different angles.

The answer from certain foreign tourists and scholars may probably be positive, since those oft-seen urban problems were not found in the PRC. For those who seek social equity and social stability, the answer may be also positive. Compared to the disturbance and social upheaval often seen in developing countries, some foreigners feel the overall social order in the PRC has been more under control. It has been all too often overlooked by outside researchers,

however, that what is good for the Chinese authorities is not necessarily good for the people.

Certainly, giving a comprehensive evaluation on the social advantages and disadvantages of the PRC's urban strategy is not our target and is beyond our capacity in this thesis. However, there are still a few important aspects of the matter worth discussing here.

It is common knowledge that the needs of economic growth are not always identical with the needs of governmental control, nor those of human rights and individual development. In the face of conflicts, choices made by autocratic governments have more often than not sacrificed human rights and individual needs to maintain their control. As some have noticed, (Stretton, 1978; Potter, 1985) almost all communist governments have generally been suspicious and uncertain of urban life, and therefore have often tended to make more concerted efforts to reduce the growth of large cities in order to secure their control over the country. The PRC has not been an exception.

The human costs of the implementation of the Chinese urbanization strategy have never been fully assessed. Although the adoption of various measures to control personal mobility has obviated the alternative mass miseries

in urban settings, illustrated by the shanty-town experience -- unemployment, hunger and disease, the PRC's urban growth restraint model has been at the expense of individual freedom -- tens of millions of them. Most clearly, in modern China, as most evidence shows and as what I understand from my some thirty years' experience as a Chinese citizen, most Chinese people would choose the urban alternative if they had a choice. Probably, the romantic and poetical rural life may only survive in the minds of some CCP leaders who live in the large cities. Urban life to Chinese people not only represents a better living with material goods and cultural benefits, but also symbolizes modernization and the hope of the future. Nobody is capable of measuring the human costs exacted by the prohibition on travelling, employment opportunities, and migration. Further, the effects of limiting the physical mobility on individuals must have limited their psychological mobility. Rigid and continued physical limits in reality stunted people's imagination and creativity. This is more than a great loss both in terms of social welfare and human rights as well as in terms of economic efficiency.

There is another matter which has been too often overlooked by foreigners. The problem of massive misery and poverty in the PRC has been as serious as it in the worst of the developing countries. Perhaps one of the reasons why the

problem of massive misery and poverty in many developing countries has been more conspicuous than the same problem in the PRC is that the former is often concentrated in large urban places exposed to the public and therefore more visible and more impressive, while in the PRC it is dispersed in the vast countryside and is concealed from strangers, especially foreigners who have been denied access to such areas.

Considerations of economic efficiency are different than the consideration of social justice, but there are certain relationships between the two. Although without rapid economic growth certain social equity can still be achieved, as the PRC has done, social justice is still an open question if most of the people prefer faster economic growth to a social system with more equity but without the freedom of personal mobility. Similar to the situation in many developing countries, a fundamental reality for the PRC is its nationwide poverty. Based on such a fragile base, it is really questionable to seek more social equity at the expense of loss of economic growth. Despite the sacrifice of economic efficiency, the attempts for more equity among people and regions must depress individual initiative and regional enthusiasm, which in turn must harm collective welfare and benefits. Thus, for a country like the PRC, perhaps social equity should not be put in the position of

priority. A social system with more social equity and less individual freedom may not be a solution for the problems that the PRC has faced on the road to industrialization and modernization. Interestingly enough, it is not outside experts but the PRC's scholars who have started the attack on the Chinese urban strategy.

New Voices in the PRC

As we have indicated, important changes in the PRC's policies of national development were set in motion in the late 1970s after the death of Mao. Changes in agricultural, industrial and local government organizations brought Chinese scholars to a rethinking of the spatial and regional elements of the PRC's urban strategy. "Whereas in 1980," observed Kirkby (1985:201), "the wisdom of a small-town-based strategy was unquestioned amongst urban specialists, by 1983 the consensus was no longer."

Although the notion of a "Chinese road to urbanization" (distinguished from other national experiences basically by its small-town basis) has still represented the main tone of Chinese writings on urbanization, an increasing number of Chinese scholars have begun to take it as a subject for criticism. Generally, the critique has been conducted from

three perspectives.

Perspective of Theories of Developmental "Stages"
Declarations of the "universality" and "inexorability" of the urbanization process have become most popular phenomena seen in the critiques of the Chinese urban strategy. This new perspective highlights not the evils of urbanization, but rather its inevitability and even its desirability. Focussing on correcting the Chinese traditional rural bias, it was argued (SJDB, 1982):

"Urbanization is an objective law in the development of the commodity economy, and is a trend which cannot be obstructed."

Others later on put it in even more extreme terms. For instance (Li, 1983:27):

"Urbanization is a necessary consequence of the economic development of society, whatever the country, whatever its social system, admitting absolutely no exception."

To specify this "objective" and inevitable process, a well-known geographer-author, Feng Yufeng adopted a crude "stages" theory of economic and urban development which may most typically reflect the increasing new voices. Cities in the pre-industrial era are described as being essentially centers for agricultural marketing and administration. As Europe and North America have experienced, the growth of

manufacturing industry brings a spatial concentration of the new means of production. Thus, a close association between the growth of per capita manufacturing output and urbanization characterizes the second stage. Only in the third phase, when the tertiary sector becomes more prominent in a nation's economy than primary and secondary activities, is it possible for a move away from centralized urban concentrations ("de-urbanization") to emerge.

In short, the proposed universal path of urban development is staged as 1) spatial dispersal of population, followed by 2) concentration which in turn leads to 3) an urbanism with a new form of spatial deconcentration. Thus, while the advanced capitalist countries are seeking an active policy of new town development, China cannot slavishly copy this experience because its present level of development still belongs to the first stage. There is no short-cut. Attempts to "jump over" a necessary stage of development would be foolhardy and wasteful and would be punished by the "objective law".

Perspective of Economic Efficiency Behind the theories of the developmental "stages", a key of the argument is the consideration of economic efficiency. As Li

(1983:28) explained:

"Our country's urbanization process is at its early stages, and the economic base is relatively fragile. Therefore we will encounter many problems if we try to energetically develop the small towns and cities. If we wish to develop our economy as rapidly as possible to a higher stage, then we must give full play to the economic centers represented by the large and medium-sized cities."

There is almost no question that the large urban centers have larger capacity and higher productivity, while small urban places have poor developmental conditions and suffer the inefficiency of production. According to a 9-province survey of the economic and demographic features of commune seats conducted in 1981 (Jin, 1981), the small towns were in rather bad shape. Many small towns were found with "old and broken-down housing, dirty streets, lacking drainage or running water" (Jin, 1981:33). Capital investments for the small towns were short and often misused. Not only is the urban infrastructure in need of funds, so are the productive enterprises. There are no mechanisms for a coordinated approach to the problems of water and electricity supply, sewage, and land use. There is usually no town plan, and no town planners. On the other hand, by "eating out" and restricting the supply of raw materials of the large plants in the large urban centers, the expansion of the rural small enterprise sector has not only forced many large plants to slow down or even suspend production, but also to turn out low-quality end-products at high cost and

in the process to ruin established marketing networks.

Perspective of Arable Land Associated with problems of inefficiency in the small towns, another major attack is from the point of view of the availability of arable land.

In terms of geographic area, China is the third largest country in the world. However, China's arable land and natural resources are insufficient to support its large population. According to a PRC official magazine China Reconstructs, the Chinese cultivatable land in the 1980s is less than 0.1 hectare per capita, only 40 per cent of the world average*.

In an important yearbook, China: Development and Reform, 1986, published by the Chinese Research Institute of Economic System Reform, which is directly under the PRC's State Council, there is an essay titled "City, Industry and Land: A Re-evaluation of the Road to China's Urbanization and Industrialization in Terms of Land", in which the author (He, 1987:416-419) summarized the PRC's deteriorated situation of the arable land. The decline of availability of arable land has been rather serious. While there is just a little uncultured arable land left, the average per capita

* China Reconstructs, December, 1987:24.

share of cultivated land has decreased from 3 MU (the Chinese unit of area, 1 MU = 0.0667 hectare) in 1957 to about 1.4 MU in 1986. That is, in thirty years, the average per capita share of cultivated land has declined more than fifty per cent (He, 1987:417).

Although the situation is largely caused by the rapid increase in total population, claimed He, the undergoing urbanization and the industrialization directed by the Chinese small-town-based strategy must hold a major responsibility as well. Rapidly increased townships and small cities have occupied a vast area of precious arable land. In order to run the basic urban operation, thousands of inefficient facilities have repeatedly been built up. Because of the shortage of the available capital investment and their miniature scale, these socio-economic facilities in the small towns have never been able to be formed in a complete set. The consequence is extreme inefficiency, expanded environmental pollution and reduction of vast precious land. In the next twenty years or so, according to both foreign and Chinese estimations, more than half a billion Chinese peasants will not be engaged in agricultural activity. If these peasants have to be absorbed by existing and new small towns, the situation of the land and food supply will definitely go beyond the extent that Chinese resources can bear. It is urged that "the Chinese

urban strategy must be re-evaluated by putting it on the scale of the land" (He, 1987:41-7).

It is not a necessity, argued He, that the realization of urbanization and industrialization in densely populated countries has to be at the price of sacrificing a vast area of arable land. Japan and Egypt were pointed out as opposite examples. While the Japanese agricultural population decreased from 44% of the total population in 1946 to 18% of the total population in 1980, the average share of cultivated land increased 4%. Between 1937 and 1947, Egypt's cultivated land increased 25% while the urban population increased from 25% to 60%. The characteristic of these two countries's urbanization is that large cities were fully developed. Japan in 1975 had sixteen large cities with more than half a million inhabitants, whose total population equals more than a quarter of the country's total population. More extremely, two large Egyptian cities (Cairo and Alexander) have absorbed nearly fifty percent of the total population (He, 1987:417).

Compared to Japanese socio-economic achievement, He sharply questioned the Chinese small-town-based strategy and the assumption that with the aid of the "Third Wave" China may "jump over certain stages" and directly enter the "counter-metropolitan" (counter-urbanization) period.

"Since being limited by its scales, backward communication and incompleteness", He worriedly indicated (1987:418), "the economy in those small towns would become a kind of 'Penjing' [potted miniature tree] and never be able to grow up. It would decline before it entered modern production."

Assessment and Implications

The Chinese self-criticisms only give us some ideas about what one group of Chinese scholars have begun to think about their country's strategy, the so-called "Chinese road to urbanization" which surely needs to be evaluated objectively and comprehensively. Although our study does not offer the basis for a comprehensive evaluation, it is still beneficial and necessary, based on what has been explained here, to give a general review of the Chinese strategy and its results.

It is clear that the development of the cities has historically been based on changes in socio-economic organizations, and increasing occupational specialization and social differentiation are direct correlates of the process of urbanization. Economic efficiency is more likely to be positively correlated with the degree of urbanization and the spatial concentration of the urban population, while

a country's economic development is positively related with its degree of urbanization. Economically speaking, evidence shows that the PRC's urban strategy has hindered Chinese economic development. When the PRC puts its strategy into full practice, the rate of economic growth decreases; and when the implementation of the strategy is not emphasized, economic growth occurs at a higher rate. Without holding back its urban growth, especially the growth of the large cities along the coast, the PRC would possibly have achieved a higher rate of economic growth. Although the strategy has helped the non-coastal areas to reach a higher speed of growth, the costs at present are quite heavy and the results in the future are not viewed optimistically.

The point is clear that the Chinese economy cannot modernize and make the "great leap" into the twenty-first century on the basis of the petty production in the small towns. Perhaps some kind of large threshold size must be reached for an urban center to free itself from uncertainties of a narrow and backward base. The limits of arable land and food supply seem to have ruled out the possibility of urbanizing more than half a billion peasants under the direction of the small-town-based strategy in a short period of twenty years.

The social outcomes brought about by the implementation

of the strategy are not very bright. It may have been very beneficial for the government to maintain its efficient control on the country's social order and stability. The social and regional inequities have been kept under control, therefore the famous urban problems often seen in the metropolis of most developing countries have been milder or not very visible. However, the Chinese have paid a very heavy price. Citizens, especially peasants were banned from travelling, from being employed, or from living in an urban site of their own choice. The limitations of migration and occupation are likely to have depressed people's pioneering spirit and creativeness so that in turn economic efficiency may have been harmed. Since the Chinese economy is very backward and both the Chinese leaders and the Chinese people are eager to catch up with the advanced West, neither at present nor in the long run, will the priority of trying to avoid possible increases of social and regional differentials be useful for the solution of China's socio-economic problems.

As we have recognized, the Chinese urban strategy was born in the context of China's traditional ideology and the CCP's painful experience with urban settings in its early days, and only under a very special historical background did the strategy begin to be seriously practiced. The strategy may come out of a mixture of rural-bias ideology

and naive expectation of its economic outcomes. Only with a strong governmental power and its extreme control over the individual's freedom, was the strategy able to be fully conducted. The economic results of the practice of the strategy are definitely negative, while the accompanied social implications are quite questionable.

Then, can other developing countries learn anything from the Chinese experience? The answer will depend on different approaches of different bodies who look for different ends. Governments may learn certain techniques of control, while researchers of policy effect may find the government can become a strong device in interfering with economic process. But hardly anything can be seen positive, especially in terms of economic development.

Probably, it is hard to accept the fact that economic development follows its own laws and most superficial interference does not contribute a positive impact but produces a negative influence to it. If a country chooses to develop its economy as rapidly as possible, the growth of urbanization should not be restrained. Certainly, people do not have to just do nothing but watch the "growing pains" and expect economic growth to heal it in the unknown future.

Whatever they are going to do, however, they have to keep in mind that: 1) there are certain conditions which have to

be respected, and 2) social programs in most cases may be at the expense of economic efficiency.

To end up this chapter, perhaps it is proper but somewhat satirical to quote two statements from John Friedmann, written when he still had a clear head:

"A society that has set its course on industrialization cannot avoid accelerating the several related processes of urbanization. Any other hopes would be misplaced" (1973: 180).

Urbanization is not "an unfortunate by product of planned industrialization whose consequences governments should learn how to constrain" but "a set of powerful developmental forces in its own right" (1973: 154).

CHAPTER SEVEN: CONCLUSION

Distinguished from most developing countries, the PRC has designed and practiced an urban strategy which limits growth of urbanization and spatial concentration. While the growth of large cities is particularly suppressed, that of small cities and townships is favored. By limiting the growth of the coastal region and promoting the growth of non-coastal regions, this strategy aims at leading to a more "balanced" distribution of national resources. Since the strategy has aroused a great deal of attention and there has been quite surprising ambiguousness about its theoretical and practical significance, our task in this study has been to examine the strategy and its impact on the PRC's industrialization as well as its implications for other developing countries.

By putting the Chinese urban strategy in a broad historical context, it is clear that the main elements of the strategy stemmed from the age-long Chinese tradition. The CCP's painful experience with large urban settings in its early period of fighting for national power has also been one of the major factors which brought the strategy into existence. The designers of the strategy, the CCP's leadership, Mao himself particularly, were not experienced

with modern production and management of large urban centers, while the economic implications of the strategy have never been made clear. However, the strategy was not fully practiced until the emergence of very special historical conditions in which the PRC found itself in an extremely isolated position after the withdrawal of Soviet assistance and the increased threat of wars. After Mao's death and a change in the CCP's leadership, the degree of restriction of the practice of the strategy was on the decrease. With respect to the implementation of the strategy, it can be divided into three periods, in which the degree of restriction of the practice showed a weak-strong-weak pattern.

According to comprehensive theories of urbanization, there is a positive correlation between urbanization and industrialization as well as between spatial concentration of urbanization and economic efficiency. A fundamental alternative has to be chosen while a developing country decides its strategy of development. Following the designs with priority of economic growth, accelerated industrialization and urbanization will be accompanied by an increase of social inequity and other problems; on the other hand, the implementation of a strategy may to some extent ease the "growing pain" but it will be most likely at the expense of growing speed. In acceptance of these principles, we find that either the Chinese urban strategy was designed more

with considerations of governmental control, or the CCP leadership did not fully realize the socio-economic significance of the strategy, or it was a combination of the two. Whatever the case, the Chinese strategy conflicted with economic rationality and so it should have harmed the growth of the Chinese economy.

Based on the PRC's official data, the three developmental periods have been examined to test this hypothesis. Although sometimes the concrete figures for each of the three periods are not absolutely complete, the results clearly show that the degree of restriction of the strategy implementation has had a positive correlation with control of urban growth and urban concentration, while the growth rate of the national economy has been negatively related with the degree of restriction of the strategy implementation. The more successful the practice of the strategy at depressing the growth of urbanization and urban concentration, the lower the growth of the national economy. Therefore, opposite to the weak-strong-weak pattern of the strategy implementation, the growth of the national economy in the three developmental periods has shown a strong-weak-strong fashion. Identical with the results at the national level, the degree of the PRC's success at achieving a more "balanced" distribution of national resources is negatively related with the speed of growth of the national economy.

That is, the rapid economic growth in the non-coastal areas was at the expense of coastal growth and national economy. Even looking at it in the long run, the promoted growth in the non-coastal areas would not necessarily do anything good for the national economy, since the idea of a more "balanced" distribution of resources is not rooted in economic needs but in ideological assumptions. Due to topographic and climate conditions, furthermore, an even geographical distribution of national resources is not only unnecessary but also impossible.

Hence, we can conclude that, as suggested by the comprehensive theories of urbanization on which our hypothesis is based, there is a positive correlation between urbanization and industrialization as well as between economic efficiency and spatial concentration. Economically, the Chinese urban strategy has been likely to be inefficient and has been likely to have produced negative impacts on the PRC's industrialization. If so, the growth of the national economy has been confined by holding back increases of urbanization and spatial concentration.

On another side of the scale, the social problems associated with urbanization in the PRC seem to have been relatively less serious than the ones oft-seen in other developing countries. Social inequities and regional

differentials seem to have been smaller, while urban housing, unemployment, mass diseases, and other urban problems common to the developing countries have been less obvious. However, we have to keep in mind: what is good for the government is not necessarily good for the people. The governmental implementation of control in the PRC has been at the expense of extreme limits to citizens' freedom. The success of avoiding massive misery in the urban places was paid by hundreds of millions of people in the countryside. The physical and occupational restrictions must have circumscribed people's creative spirits and initiative. The urban problems which were more concentrated and therefore more visible and more impressive were most likely eased by maintaining poverty in the vast countryside where the problems had less chance to be exposed, especially by foreigners.

All in all, what our study has shown is that according to the Chinese experience there is a positive correlation between urbanization and industrialization as well as between economic efficiency and spatial concentration. By depressing the growth of urbanization and spatial concentration, the Chinese urban strategy has been likely to restrain the national economy. From an economic point of view, therefore, other developing countries can learn very little from the Chinese urbanization strategy. If a country

intends to develop its economy as rapidly as possible, the growth of urbanization and spatial concentration should not be held back. Even concerning social aspects of the strategy, one has to be very careful in judging what is good for people.

Lastly, it is necessary to repeat that our exploratory study is a primary work. Although we have questioned the economic efficiency and the social implications of the Chinese urban strategy, further research is needed to achieve a comprehensive evaluation. It is suggested to take other important factors such as, for instance, the impacts of the Chinese strategy of industrialization and the threats of war into account. Besides, a proper cross-nation comparative study would also be beneficial in deepening our understanding of this area.

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