I. Introduction: Stages of Urban Development in Tokyo

Stages of Urban Development in European Case
Van den Berg et al. (1982) proposed four stages of urban development based on European experience (see Table 1). The functional urban region is considered to be composed of the Core (central city) and the Ring (suburbs). In the stage of urbanization, the Core is growing in population while the Ring is declining. In the stage of suburbanization, the Ring is growing rapidly while the Core is declining in population. Then, the stage of desurbanization comes when the Ring as well as the Core is declining. Reurbanization is expected when the Core is revitalized.

Table 1 Stages of development in a Functional Urban Region (FUR)

<table>
<thead>
<tr>
<th>Stage of development</th>
<th>Classification type</th>
<th>Population change characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>I Urbanization</td>
<td>1. Absolute centralization</td>
<td>++</td>
</tr>
<tr>
<td></td>
<td>2. Relative centralization</td>
<td>++</td>
</tr>
<tr>
<td>II Suburbanization</td>
<td>3. Relative decentralization</td>
<td>+</td>
</tr>
<tr>
<td></td>
<td>4. Absolute decentralization</td>
<td>-</td>
</tr>
<tr>
<td>III Desurbanization</td>
<td>5. Absolute decentralization</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>6. Relative decentralization</td>
<td>--</td>
</tr>
<tr>
<td>IV Reurbanization</td>
<td>7. Relative concentration</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>8. Absolute concentration</td>
<td>+</td>
</tr>
</tbody>
</table>

Adapted from Van den Berg et al. 1982, p.36

Stages of Urban Development in Tokyo
In the case of Tokyo, serious desurbanization did not occur. Instead, Tokyo underwent the second wave of suburbanization in the late 1980s and has entered the stage of reurbanization since the late 1990s (see Table 2). According to this scheme, I will show the urban process in Tokyo from 1955 to the present.
II. Tokyo Metropolitan Area: Geographical Definition

Tokyo is known as the Capital of Japan. However, there is no law that stipulates the place of the capital. Even the City of Tokyo does not exist.

The City of Tokyo was established in 1889 and persisted until 1943, when it was abolished and incorporated into Tokyo Metropolitan Government.

23 Special Wards as the Central City

The area of the former city is almost the same as that of 23 special wards today. Therefore, it can be regarded geographically as the central city of Tokyo, or Central Tokyo (the eastern part of Map 1). It covers about 620 square kilometers. The central city has about 8.7 million populations.

Table 2 Stages of Urban Development in Tokyo and other Japanese Metropolises

<table>
<thead>
<tr>
<th>Stages of Urban Development</th>
<th>Central City</th>
<th>Suburb</th>
<th>Metropolitan Area</th>
<th>Urban Economy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urbanization</td>
<td>++</td>
<td>--</td>
<td>+</td>
<td>Industrialization</td>
</tr>
<tr>
<td></td>
<td>+</td>
<td>++</td>
<td>++</td>
<td></td>
</tr>
<tr>
<td>First Suburbanization</td>
<td>--</td>
<td>++</td>
<td>+</td>
<td>Service Economy</td>
</tr>
<tr>
<td></td>
<td>--</td>
<td>+++</td>
<td>+</td>
<td>Oil crises</td>
</tr>
<tr>
<td>Second Suburbanization</td>
<td>--</td>
<td>+++</td>
<td>+</td>
<td>Bubble Economy</td>
</tr>
<tr>
<td></td>
<td>--</td>
<td>++</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Reurbanization</td>
<td>+</td>
<td>+</td>
<td>++</td>
<td>Information Economy</td>
</tr>
</tbody>
</table>

Map 1 Tokyo Metropolis
The **Tama Area as a Suburban Part**

The *Tama* area is a suburban part of Tokyo. The area is about 1,160 square kilometers. It is composed of 26 cities, 3 towns and one village (the western part of Map 1). The population of the *Tama* area is about 4.4 million.

**The Greater Tokyo Metropolitan Area**

Functional metropolitan region extends to three neighboring prefectures: Saitama, Chiba, and Kanagawa (see Map 2). Altogether, the greater Tokyo metropolitan area has about 35 million inhabitants, or a quarter of the national population.

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**Map 2. Greater Tokyo Metropolitan Area**

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**III. The Growth of the Metropolis**

Figure 1 shows the population of Tokyo Metropolis (bold line) and of the central city (narrow line) from 1920 to 2005

Earlier urbanization in Tokyo started at the beginning of the twentieth century. By 1920, the population had increased to 2 million. In 1932, the City of Tokyo incorporated
with neighboring 83 towns and villages. Its population reached to 6 million in 1935. From 1940 to 45, the population decreased due to air raids by U.S. forces.

Since 1945, Tokyo has reconstructed from the damage of the war. The population increased rapidly until 1965. The trend changed in the mid-1960s. While numerous youths still moved into the central city, young families began to move out to suburban areas. Since 1995, however, the population of the central city as well as Tokyo Metropolis has been increasing again.

Tokyo was in the stage of urbanization from 1955 to 1965, then suburbanization until 1995, and is now in the stage of reurbanization.

![Figure 1 Populations of Tokyo: 1920-2005](image)

**Figure 1** Populations of Tokyo: 1920-2005

*Source:* Population Census

### IV. Migration and Natural Increase

Population change depends on migration and natural increase. Figure 2 shows the numbers of in- and out-migrations between Tokyo and other prefectures.

Those who moved in Tokyo had been outnumbered those who left from 1955 to 1966. Tokyo was in the stage of urbanization. After 1967, the trend was reversed. Net migrations had been negative from 1967 to 1984. Tokyo entered the stage of the first suburbanization. In the early 1970s, the population growth in Tokyo depended on natural increase due to a great number of births, as Figure 3 indicates.

From 1985 to 1996, net migrations became negative again as a result of rising land
prices during the period of the bubble economy. After the burst of the bubble, however, net migrations have turned positive again, while natural increase has declined due to the aging of population and decreasing rate of birth.

![In- and out-Migrations between Tokyo and Other Prefectures: 1955-2007](image1)

**Figure 2** In- and Out-Migrations between Tokyo and Other Prefectures: 1955-2007


![Number of Births and Deaths in Tokyo: 1950-2007](image2)

**Figure 3** Numbers of Births and Deaths in Tokyo: 1950-2007

V. Urban Process and Economy

Industrialization and Urbanization: 1955-1965
The development of manufacturing industries in Tokyo had attracted young labor force from rural areas until 1965. By 1965, the number of workers engaging in manufacturing industries reached to 1.6 million in the central city (Figure 4).

Figure 5 indicates the number of employees by occupation from 1950 to 1965. Over 1.8 million workers or about 40 percent of workforce living in central Tokyo had blue-collar jobs in 1965.

Urban service sectors followed the growth of the metropolis. Those who worked for the wholesale and retail and the service industries were increasing during this period. Thus, service and white-collar workers were growing, too.
Suburbanization and Service Economy: 1965-1985
Since 1965, mass production factories were likely to move out to suburban and rural areas, while headquarters of nation-wide companies concentrated in the central city. Urban economy has shifted to service economy
There were increasing white-collar workers who preferred to live in suburban residences and work downtown. Thus, service economy accelerated suburbanization.
In the 1970s, as the oil crises brought about stagnation of the urban economy, the manufacturing jobs were decreasing in the metropolis. By 1985, 1.3 million workers were employed in the wholesale and retail industries and 1.1 million were employed in the service industries, while manufacturing workers decreased to 0.9 million in Central Tokyo (see Figure 6).

![Figure 6 Numbers of Employees by Selected Industry: 1965-85](image)

Source: Population Census

For the occupational structure, blue-collar workers decreased to 1.2 million, or 30 percent of the workforce by 1985 (see Figure 7).

![Figure 7 Numbers of Employees by Occupation in Central Tokyo: 1965-85](image)

Source: Population Census
Bubble Economy and the Second Suburbanization: 1985—1995

In order to redress the growing imbalance in trade between Japan and U.S., the national government aimed to expand domestic demand and adopted credit relaxation policy, which triggered skyrocketing land prices of commercial areas in Tokyo. Soon, residential areas followed the wave (see Figure 8).

![Change Rates over Preceding Year in Land Prices in Tokyo Metropolitan Area by Use](chart)

Figure 8 Change Rates over Preceding Year in Land Prices in Tokyo Metropolitan Area by Use  
*Source: Official Announcement of Land Price by National Land Agency,*

Old residents in the central city could not continue to live there due to increasing property tax, called “kicking out” tax. Also, young adults could not find reasonable housing in the central city. They were forced to move out to suburban areas.

Thus, the coming of the bubble economy in the late 1980s facilitated suburbanization again (see also Figure 2).

“Doughnutization”

Suburbanization gave rise to a distinct ecological trend called “doughnutization” of population distribution in Japanese. It refers to the trend of the decreasing population in the central city and the increasing population in the suburbs.

Map 3 and 4 show the growth rates from 1965 to 1970 and 1985 to 1990 by municipality respectively. It is evident that the central wards were declining in population, while the east and west sides were increasing moderately, and the municipalities in the Tama area exhibited the highest growth rates in population (except the mountain area in the west corners of the maps.)

As the time went on, high-growth areas moved further and further from the central
area, and the “hole of the doughnut” became greater.

Map 3 Population Growth Rates by Municipality: 1965-70

Map 4 Population Growth Rates by Municipality: 1985-90


After the burst

After the burst of the bubble economy, Tokyo plunged into deep recession, lasting more than ten years. Finance, insurance, and real estate companies, the major players in the asset bubble, held huge debts and merged each other again and again. Finally, major banks had to use taxpayers’ money to offset the tremendous amount of bad debt.

In order to adjust to the globalizing economy since the 1990s, manufacturing firms began to restructure their operations, reducing the number of employees, recommending earlier retires, lowering wages, and prolonging working hours.
Reurbanization

Ironically, the falling land prices made the central city available for residential use. Young Internet millionaires and stock investors as well as high educated professionals and technicians could find their homes in high-rise condominiums near the downtown. Deregulation of zoning made it possible to construct high rise buildings. More common white-collar workers also could afford to find proper housing in the residential districts of the central city. In the late 1990s, the population began to increase in Central Tokyo (see also Figure 1 and 2).

The trend of population growth in the central districts still continues. Tokyo has entered the stage of reurbanization since 1997. Map 5 and 6 show that there are increasing in population in many areas of Tokyo metropolis, especially in the central wards.

The Rise of the Information Service Economy

After the burst of the bubble economy, the finance and insurance industries in
Japan were far from providing producer services, as noted above. International financial market did not contribute to the urban economy from the late 1990s to the early 2000s in Tokyo.

Urban economy in Tokyo has recovered due to the growth of information service industry. Since the late 1990s, various service industries have been growing up in Tokyo. By 2000, about 1.4 million workers living in the central city were working in the service industries (see Figure 9). The service industries have higher proportion than any other industries in the nominal gross regional product since 2000 (see Figure 10).

Figure 9 Numbers of Employees by Selected Industry in Central Tokyo: 1985-2005
Source: Population Census

Figure 10 Nominal Gross Regional Product by Major Industry in Tokyo: 1996-2005
Source: Cabinet Office, Prefectural Economic Accounting 2006
Increasing Professional and Technical Workers

Occupational composition has also changed, as Figure 11 shows. In the phase of reurbanization, Tokyo attracts specialists and technicians increasingly. In 2005, 0.7 million employees living in central Tokyo were professional and technical workers, while 0.9 million people had blue-collar jobs.

![Figure 11: Numbers of Employees by Occupation in Central Tokyo: 1985-2005](Image)

**Figure 11 Numbers of Employees by Occupation in Central Tokyo: 1985-2005**

*Source: Population Census*

Segregation by Social Status

Segregation by social status in Tokyo has a little strengthened recently. Blue collar workers were traditionally concentrated in the east and south part of the central city as modern industries developed along the Tokyo Bay. In the process of suburbanization, middle class residents increased in the western part of the central city (“Yamanote” area) and the eastern Tama area. Map 7 indicates the proportions of blue collar workers and Map 8 those of upper white collar workers by municipality in 1970. It is evident that blue collar workers were concentrated in the east and south sides of Central Tokyo as well as the western Tama, while upper white collar workers disproportionately lived in the west side of the central city and the eastern Tama area.
During the bubble economy, soaring land prices and various redevelopment projects in the central district forced its dwellers to leave for outer suburbs within the Tokyo metropolitan area. Since the late 1990s, however, newly-built high-rise condominiums in the central city attracted high income managers and professionals.

Thus, as Map 9 indicates, managers are concentrated in the central wards in 2005. Map 10 also shows that proportions of professional and technical workers are high in the west side of the central city and the east side of the Tama area.
Finally, Map 11 indicates the rates of professionals and technicians by municipality in the Greater Tokyo Metropolitan Area in 2005. “Intellectual” workers are concentrated in the west and the south side of the region. The intellectual sector extends along several railroad lines: the JR Chuo line, the Odakyu and the Keio lines in the Tama New Town area, and the Tokyu Den’entoshi and Toyoko lines in suburban areas of Kawasaki and Yokohama City.

VI Conclusion

Tokyo has developed through four stages: urbanization, the first suburbanization, the second suburbanization, and reurbanization.

Manufacturing industry led urbanization, attracting massive young blue-collar workers. The first wave of suburbanization was accompanied by deindustrialization and the growth of service economy in the metropolis. The second wave of suburbanization was distinctive due to the bubble economy. And recent reurbanization has been supported by the rise of the information service rather than the financial industry.

Tokyo seems to find out a new mode of development on the basis of the information service economy.