

da in Tôkyô region and as Ibaragi, Takatsuki, Hirakata, etc. in Osaka region. They seem to be satellite towns, but not at all in the true sence of the words, because their developments had had not immadiate connection with the growth of Tôkyô-shi and Osaka-shi respectively, but they are almost developed as traffic towns at the junctions or trunk roads or along roads from the feudal days, having no functions as residential or employing suburbs as nowadays in this period. Their developments as suburb cities are rather after the Second World War.

(3) Front line of the growth of urban Areas. In Fig. 1 and Fig. 2, there are drawn broken lines around the city areas of Tôkyô and Osaka. They have been drawn connecting the highest percentages of population increase by shi, chô, son in this period and they may be called the front lines of the growth of urban areas. They may correspond to the highest part of doughnut cake and the percentages of population increases are low both inside and outside of the broken lines in the figures. It is believed that they proceed outwards in accompanying with the growth of urban areas in the cities. There are some items about the broken lines, but it may be pointed out that the percentages of population increase outside the line slope gently in the case of Tôkyô, but very steep in the case of the east side of Osaka and it must resulted from the topographical conditions there as mentioned above.

The author dedicates heartifully to Dr. S. Kiuchi as the memory of his retirement from Tôkyô University.

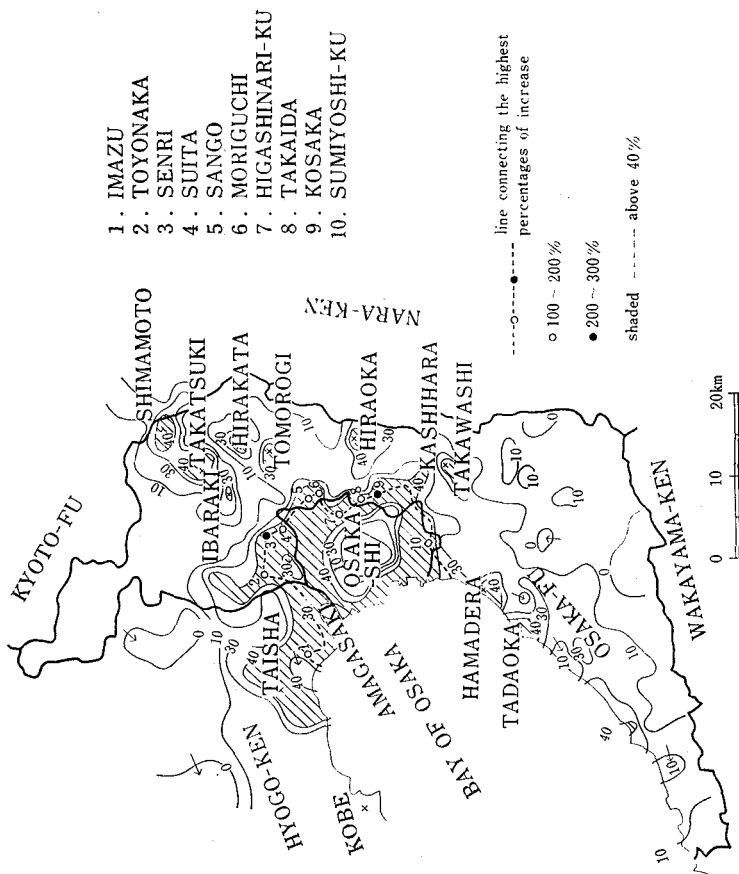


Fig. 2 Population Changes in the Surrounding Areas of Osaka (1920—1930)

Upland and the continuous urbanization is possible and easier, but in Osaka there are low, marshy paddy fields in the east and in the northeast of the built-up areas of Osaka and there exist no such high and dry uplands as in Tôkyô, excluding on the foots of Ikoma and Oinosaka Mts. The urbanization in Osaka was obliged to be limited and skipping.

(2) Apart from the continuous increased areas of population, there distributed several segregated areas where the rate of population increase are high comparatively, as Urawa-Omiya, Tachikawa, Machi-

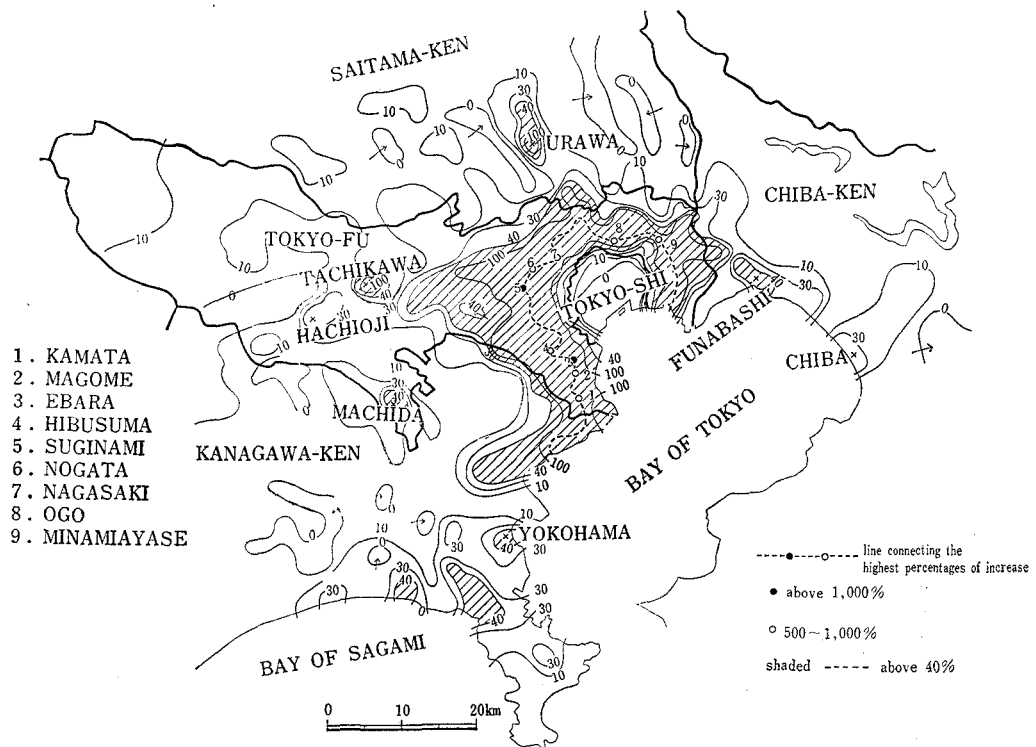


Fig. 1 Population Changes in the Surrounding Areas of Tokyo (1920—1930)

of Tôkyô-shi against that of Tôkyô-fu was 91% in 1920, 92% in 1930. In the same period, the population of Osaka-fu (prefecture) increased by 36.8% and that of the old quarter (4 wards) of Osaka-shi decreased by 49.8%, and that of Osaka-shi (13 wards) increased by 39.8%. In Osaka-shi, too, the decentralized population overflowed the city boundary out to the adjacent areas as in Tôkyô.

As to the concentrated population in Tôkyô and Osaka in the period from 1920 to 1930, there are not appropriate data, but owing to the estimated values by the author with the vital statistics method are as follows: 135,000 in Tôkyô (23 wards) and 64,000 in Osaka (13 wards) in every year on the average.

**Table 1. Population in Tôkyô and Osaka in 1920 and 1930**

	Tôkyô-fu (pref.)	<sup>1)</sup> Tôkyô-shi (city)	<sup>2)</sup> Tôkyô-kubu 23 ku (ward)	Osaka-fu (pref.)	<sup>3)</sup> Osaka-shi (city)	<sup>4)</sup> Osaka-shi (city)
1920	3,699,839	2,173,201	3,358,186	2,587,847	1,252,972	1,768,295
1930	5,408,262	2,070,529	4,986,913	3,539,989	629,176	2,453,569
number of increase	1,708,423	-102,672	1,628,727	952,142	-623,796	685,274
rate of increase	46.2%	-4.7%	48.5%	36.8%	-49.8%	39.8%
		1) 15 ku (ward) in 1930		2) 23 ku (ward) in 1970		
		3) 4 ku (ward) in 1920		4) 13 ku (ward) in 1930		

### 3. Population increase in the surrounding areas of Tokyo-shi and Osaka-shi

(1) Fig. 1 and Fig. 2 indicate the population changes in the period from 1920 to 1930 in the surrounding areas of Tôkyô-shi and Osaka-shi by the administrative units of shi (city), chô (town) and son (village). Owing to the two maps, there expand the increased areas of population in the adjacent areas of the city. In the case of Tôkyô the increased areas are not only broader than those of Osaka, but they expand in all directions, especially finger-like along the trunk roads and the railroads, and in the case of Osaka they expand northwards and westwards only and not eastwards. The directions of the growth of the increased areas reflect the topographical conditions of each areas. In the surroundings of Tôkyô, there extend broad diluvial uplands as Musashino Upland, Omiya Upland and Shimôsa

## Population Changes in and around Tokyo and Osaka: 1920—1930

Minoru KISHIMOTO

### 1. Object of the study

As the results of the migration into the large cities, there arise areal changes in the urban areas. One is the population decrease in the centers of the cities, the so-called doughnut phenomenon resulting from the decentralization of population and the other is the outbreak and growth of suburbs—residential (dormitory) suburbs, employing suburbs and balanced suburbs—in the surroundings of the cities. It is interesting to study such areal changes and their influences to the areas in and around the large cities.

As a part of the study of such phenomena, Tōkyō and Osaka which are the largest cities in Japan have been selected and the common and special features have been studied. The period from 1920 to 1930 corresponds to the beginnings of the growing time of Japanese heavy and chemical industries and of the large cities in Japan. In the case of Tōkyō, this period is the increasing time of population before and after the Kantō Great Earthquake in 1923.

### 2. Population increase in Tokyo and Osaka

Table 1 indicates the population increases in Tōkyō and Osaka. In the period from 1920 to 1930, the population in Tōkyō-fu (prefecture) increased by 46.2%, but that of Tōkyō-shi (city) decreased by 4.7%, and the population of Tōkyō-shi accounted for 59% of that of Tōkyō-fu in 1920, but 38% in 1930. The decreases of the percentage of Tōkyō-shi and of the weight of it in Tōkyō-fu resulted from the decentralization of population from the center to the adjacent areas of the city. It is clear from the fact that the increase rate of Tōkyō-kubu (the present administrative area of 23 wards containing Tōkyō-shi in 1930) reached 48.5% in this period and the ratio