

# **Application of Geographical Terminology to Japanese Urban Growth**

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## **Summary**

Japan is one of the rare countries in the world where the education of university level is given by non-european language. It is very difficult, therefore, for geographers in the world to read and to use the articles of Japanese geographical magazines. But on the other hand it is very common in Japan to read and to refer to the articles and theories appeared in the occidental world. We can say that Japanese geographers have more chance to approach to the world-wide geographical studies. Japan exports very little works in the field of geographical science, while it imports excessively abundant. Japanese geographers are almost accustomed not to express their original contributions to the international society of geographers, but to be taught by Occidentals, to introduce the Occidental theories and terminologies of sciences, and to apply them to the Japanese actualities. This situation is very similar to that of developing countries in the third world.

The author would summarize the facts observed in Japanese urban growth and urban structure in recent days and examine the geographical words if they will be applicable to Japanese urban phenomena.

## **I. Introduction**

When International Geographical Congress was held at Tokyo in 1980, many geographers especially those from the industrialized countries visited Japan. They travelled in the Japanese countryside, took its pictures, observed its actualities. They also looked for the basic documents, maps and statistics about Japan, with their translation. But they threw out soon most of them without translation

into a garbage box with other articles and books written in Japanese. This manner of some Occidental geographers seemed to neglect the achievements of Japanese colleagues and made them really astonished. But we don't have to accuse them because of the manners, as the papers written in Japanese are really a strange cryptogram for them.

It is well known that one of the principal difficulties for non-japanese geographers' research in Japan is that the fundamental and important materials for them are not written in any European language. Though many Japanese geographers can read European articles and books, non-japaneses can hardly refer to Japanese articles. That means, Japanese geographers have more chance to know world-wide geographical affairs. Japan is now accused to export too much and import too little, but it is not the same at all in the academic field of geography as science.

Japan is one of the rare countries in the world where neither European language nor alphabet is used for the education of university level. It is very difficult, therefore, for non-japanese geographers to give their lectures in Japanese university. Even some professors from U.S.A. or from Europe have taught regularly in a Japanese university, they have not generally used Japanese but their own mother language.

We can say that Japan has introduced the theories, terminologies and criteria invented in the Occidental world but has had no intention to export its works<sup>1)</sup>. Japaneses are accustomed to be taught and Europeans are not. When an European geographer refers to a Japanese article in his papers, it must be of course written in European language, and in most cases what is contained in the article should be treated as one of the facts concerning to the regional geography of Japan. It is really an exceptional case that he refers to Japanese theoretical works in general geography. The occidental geographers have written many text books in general geography, using facts supplied or translated by the geographers in the third world. In this sense, Japan is belonging to the third world. Or we can say that Japanese geographers have never felt to be belonging to the first world in the scientists' society.

When the author participated to the regional congress of geography in Rio de Janeiro in 1982, he found that many European geographers were not so eager as in Japan in 1980 to seek for documents and statistics. It must be easily imagined that they have been able to find fundamental statistics and maps or

principal geographical periodicals of Brasil in their own country much more easily than those of Japan. Because most of geographers in developing countries are very often former student of European or American professors, or that they are working by one of the European languages, the scientific exchange between these developing countries and Occidental world are much more frequent than that of Japan and other countries. Japan is not belonging to the third world in this sense, neither.

He participated to the symposium on the education of geography at that regional congress of I.G.U., where two european geographers proposed their programme of the university level education in geography. They seemed to advise Latin American colleagues how their programm was efficient. But some Brasilians accused them, saying that the geographers from the first world have written many articles on the third world, generlized the facts of this world with the criteria established in the first world, and evaluated that the third world is developing or under-developed. Furthermore, the geographers from the first world have published books and sold them to the third world with the programm of education and even taken posts of professors in the university as not a visiting professor but as a full-time one, dominating all the world in the field of this science.

A german geographer answered that the education system in Checoslovakia, for example, in socialist countries, was not so different from that of his country, and he asked how they evaluate the socialist programm of education. There were no reply from the third world nor from the East. Then, chairman asked to the Asian and African geographers for intervention. The author took a micro-phone, therefore, and explained the particular situation of Japanese geography in the world. It is very often that Japan is considered to be a member in the first world, and almost all geographers in the world who presented their papers to that Regional Congress on inequal development of the world, treated Japan as a capitalist industrialized country who exploit the third world. But in the field of geographical education, it is certain that Japan is one of the isolated countries which do not belong to any of these three devisions of the world. A question was posed to the auditors who could read the books written in Japanese, and which country had ever invited any Japanese geographers as professors and allowed him to give lectures in Japanese. Generally speaking, professors from developed countries give their lecture in their mother language, and students in developing countries have to learn their professors' language before studying his major discip-

line. And of course, Japan should be classified as a developing one in this sense. We can say, therefore, that Japan may be belonging to the first world in economy but at the same time to the third world in science.

Japanese geographers have, therefore, two ways of the attitude toward their research; 1) examining the facts occurred in Japan so as to varify the general theory or criteria established by the Occidental facts, or as to show how Japanese facts are deviated from the Occidental norm<sup>2)</sup>, 2) analysing Japanese facts so as to propose a new original idea of general theory or criteria, or as to show how Japanese facts would make the Occidental norm more relative. The author discussed already the details on these problems<sup>3)</sup>.

The author would like, therefore, to show how Japanese geographers have used Occidental norm or terminology to analyse and explain the recent trends of Japanese urban growth and how it is difficult to apply the so-called general theory in Occidental world to Japanese geographical facts. He would suggest in this paper the problems of application of geography in developed countries to the facts in developing countries.

## II. Metropolitanization

### a) Terms of Urbanization, Megalopolis and Metropolis

At first we would treat the metropolitanization, the term of which was used in an author's article<sup>4)</sup>. One of the interesting phenomena in recent Japanese urban growth is that some large cities are eating small neighbouring cities. They are expanding over so vast area that a city can not be shown on a map as a point of central place any more but as a circumscribed space, in which we can find a system of several central places.

In 1950s, Japanese geographers had concentrated their works on the urbanisation<sup>5)</sup>. This term of urbanisation is very clear at that time in the Occidental countries. It means at first the phenomenon of transition from rural to urban areas, and secondly the intensification of urban function in urban core. But because there are so many part-time farmers in Japan that the process of transition from rural to urban is not so clear as in Europe. We have to analyse a family structure, heritage system, a life cycle of farmers, and rural-urban relation in exchange of products and labor forces. We think that the urbanization in European countries can be understood a little bit differently from that of Asian countries

including Japan. Japanese urbanization can be named simply as dis-ruralization of rural area.

In the suburbs of Tokyo, for example, we can find so many "sunday farmers", who are mostly working and commuting as a non-agricultural worker in urban area, but are still feeling themselves to be a farmer and their way of life seems really to be that of farmer's.

Then the term of "Megalopolis" arrived at Japan. We introduced this word very easily like Tokaido Megalopolis from Tokyo to Osaka. But as well-known this word was given at first to the wide areas including many large cities with New York, Washington D.C., and Boston in U.S.A. Though New York is really the largest city in this megalopolis, and that it is predominant over other cities in financial function for example, it is not dominating other large cities in political and administrative function so strong as Tokyo is doing over Osaka or Nagoya. Or it may be said that large cities in American megalopolis are much more independent from each other than those in Japanese one.

The system of local administration is, of course, one of the principal reasons to make megalopolis of two countries different. The central government in Japan is controlling local governments more strongly than the American federal government is. Jean Gottmann himself said us at the meeting in Japan that another megalopolis after Eastern Coast of United States can not be found in Japan but in North-Western Europe from North France through Benelux to Ruhrgebiete in Germany where most large cities are relatively independent, being protected by the national boundaries between small countries from the view-point of political administration.

Though the feudal system survived till last century in Japan, later than in Europe, the centralization of political, economic and cultural power to Tokyo has been so strong after the restoration of Meiji, that almost nobody protested against a dialect of Tokyo as a standard Japanese language. Paris is dominating over the France but its force of industrial activity especially in the field of heavy and modern industry is not always strong as that of Tokyo-Yokohama region is over Japan. This theme must be studied from the historical view-point of modernization and industrialization of Japan.

#### **b) Density of Population and Industrial Activity**

Another difference between Japanese urban area and Occidental one is the

density of population, industrial activity and cities. By the private impression, an European city seems to have about four times larger scale of built-up area than a Japanese one, when they have the almost same scale of population<sup>6</sup>). Or we can say that Japanese city is much more compact than Occidental city. But curiously the population density of residential district is lower in Japan than in Europe. This means that European city has large space not for residences but for urban activities. For example, the percentage of road and parks are much larger in European city than in Japanese city.

Though Japan has the words expressing the inhabitants of certain city like *Edokko* (child of Tokyo) or *Naniwakko* (child of Osaka) for example, they have had not tradition to protect their own city and to create their own independent city. Most of Japanese have thought that their home exists always far from the city in country side and they are not so proud of their residential city. This defect of citizen-ship in Japanese city may be caused by the fact that the class of bourgeoisie was not brought up there. The towns-men (*Chonin*) were accustomed to be controlled by the *Samurai* in most case. Even now the serious problem of local government is that most inhabitants are thinking themselves not responsible to build up and to change their city. They say very often that city life is not to be created by themselves but to be given by the local authority. This private impression is to course only a hypothesis which should be more investigated.

The difference of the density of industrial activity between Japan and Europe is symbolized by a sheep on the grassland in the central part of Ruhr Gebiete or near the Zone Industrielle Portuaire of Le Havre, which we can never find in Keihin industrial region. You can reach a vast cultivated land by only 5 minutes of driving from Wolfsburg, but we cannot find rural landscape after 5 minutes from Toyota City. The ZIP in France are really different from Japanese reclaimed land for industry. The ZIP in France is rather isolated from existing mother city like Fos, Dunkerque and Le Havre. But most of Japanese reclaimed industrial zones on the sea are so near from major cities as to become a sort of simple littoral urban zone<sup>7</sup>).

This is also the difference of industrialization. The European industrial cities are mostly middle class towns in population scale and the large cities like London, Paris or Brusselles seems to be another type of city from the view-point of industrial structure. But in Japan, the principal zones of heavy modern industry exists in

Tokyo-Yokohama region, Osaka-Kobe region and Nagoya region. Europe have natural resources in inland cities but Japan have to import almost everything raw materials. The system of modern industry was born in Europe and introduced to Japan. It's a foreign way of life to Japanese to work in a modern factory as well as to live in a large city and his homeland is expected to be always in a small and modest village far from the large city.

### c) Density of Cities

As for the density of cities, Japan has had so many small compact cities in narrow coastal region but local towns in Europe are very sparsely distributed. As you know, there were 53 post towns between Tokyo and Kyoto on the distance of about 300 kilometres, due to the transportation system of Japanese feudal days. And there are so many small towns between them. The process of urbanization in Europe is really the transition from rural to urban area. But this classic type of urbanization in the suburbs of Japanese large cities had finished soon, even before the world war II and was followed by the process of metropolitanization, that is, a large city eats and consumes its small adjacent cities. For example, as Figure 1 shows, Tokyo has eaten Shinjuku, Fuchu and is eating Hachioji, which were also formerly post towns<sup>8)</sup>. This process is quite different from so called conurbation, urbanization and megalopolitanization. The term of metropolitani- zation which the author used as to explain Japanese facts, suggests that there is now formed a system of central places, former small cities within a large urban area.

The former adjacent small cities which makes the complex system, are dependent to the central city from the view-point of daily migration of workers and of flow of goods. They are, however, relatively independent from the central city in daily family life, because each municipality in the peripherie has its own administrative and commercial centrality to meet to the basic demands of a family. Only a worker, mostly a white collar should go out of his family's sphere for his working place. And when this peripheric city is well digested by the central city, its inhabitants feel to be belonging to the central city and not to their residential city<sup>9)</sup>.

Tokyo in its wide meaning is yet expanding over the Kanto plain, and Nagoya, Osaka, Fukuoka, Sendai, Hiroshima and many other large cities are evolving into new type of metropolis. One of the problems for Japanese geographers is if

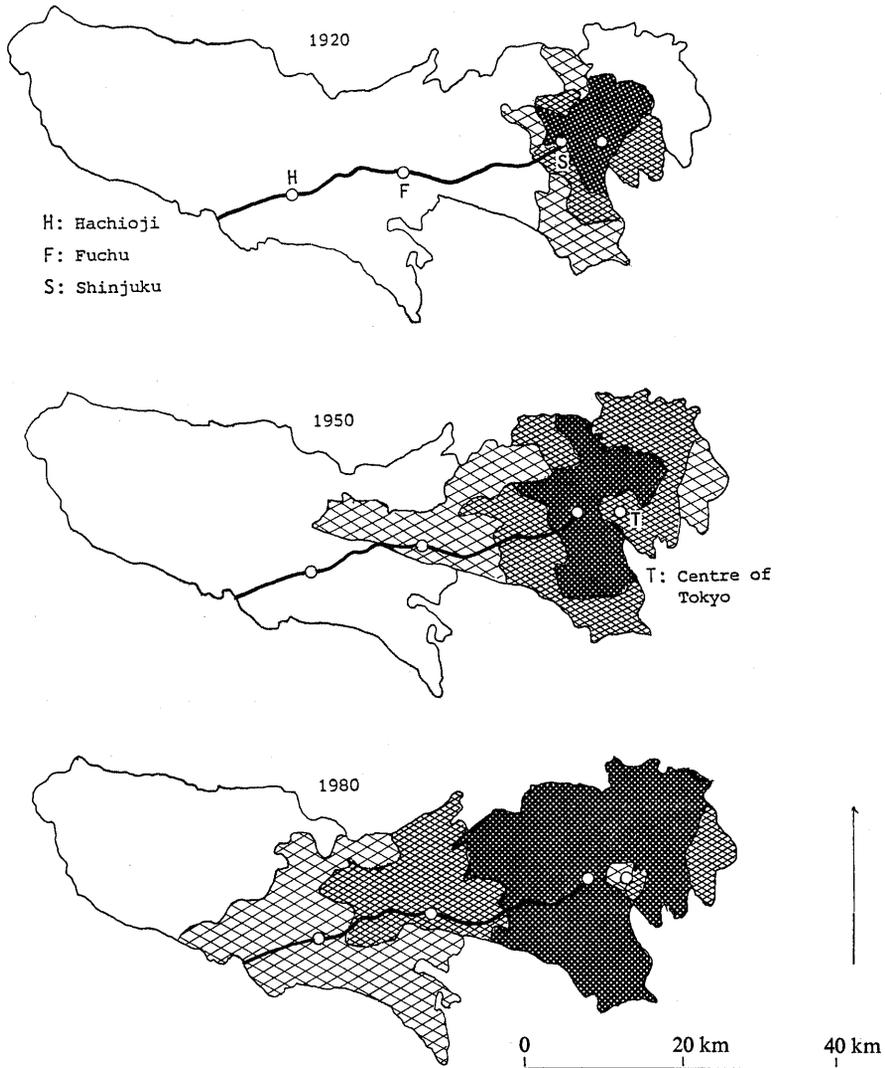


Fig. 1.  
Population Density/km<sup>2</sup>

- more than 10,000
- ▨ 10,000—5,000
- ▧ 5,000—1,500

they are forming a megalopolis and how we could evaluate the terms “urbanization” and “megalopolis” so as to analyse Japanese cities and to apply these terms to its urban planning.

### III. Inner Structure of Urban Area

The second interesting phenomenon in recent Japanese urban growth is related with this feature of metropolis. The inner structure of city is discussed very often in Japan using terms introduced from United States. But as already shown<sup>10)</sup>, a Japanese large metropolitan municipality has been generally formed by the amalgamation of so many small cities around its core city that most of them have been changed into small local central places in its new administrative circumscription. Some metropolitan areas have grown up so large now that their urbanized area has overflowed even the administrative boundary of the amalgamated municipalities surrounding these large core metropolitan cities have been submerged under the huge wave of metropolitanization<sup>11)</sup>. These small municipalities in a large metropolitan area have become small local centers, too.

Before 1879, a local municipality was formed generally by rather homogenous inhabitants. It was very common to find a *Samurai's* municipality and *Chonin's* one side by side independently<sup>12)</sup>. And the urban area (*Machi*) was strictly excluded from the rural area (*Mura*), even if a certain *Mura* was densely inhabited. *Samurai's* town with the seigniorial castle has been transformed into modern district with high buildings for administrative or public services. On the other hand, *Chonin's* town has been mainly evolved into commercial and artisanal district where we could find narrow street and low houses under the much more familiar or warm atmosphere.

After two huge waves of amalgamation of cities, towns and villages into a larger municipality in 1979 and from 1954 to 1956, this homogeneity of their inhabitants has been lost because of the enlarged area of their administrative unit and of the industrialization or urbanization in Japan, which have created many new type of urban districts as if so-called new town, residential estate (*Danchi*) or industrial zone. In most cases, the core of a large metropolitan area consists of two types of districts; the *Samurai's* town has grown up as modern city core or white-collars' residential district (*Yamanote*), and the *Chonin's* town as traditional core or workermen's district (*Shitamachi*).

The *Yamanote* district has been tremendously transformed into a modern core but most part of *Shitamachi* area has yet conserved its status as a traditional core. Most of large cities in Japan have, therefore, two core districts in their central part, to which it is very difficult to apply the term of C.B.D. The same facts

are found in Asian port cities, for example, Colombo has two centers; Fort district as modern city core and Pettah district as traditional city core<sup>13)</sup>. This dualism of inner structure of Japanese cities is not yet clearly examined or studied. It is already stressed that this dualism especially the traditional or non-modern core district is very important for urban planning on the occasion of Local Authorities' Congress in Yokohama held in 1983 organized by United Nations.

The traditional non-modern core seems to be a sort of slum from the Occidental standard of infrastructure, very similar to the so-called slum of other Asian cities but quite different from the downtown or that of large cities in the United States. We can be rather tranquil in Asian slum without any fear to be thieved. Honestly speaking, we can feel cold in modern *Yamanote* but warm in non-modern *Shitamachi*. This feeling is very similar which the author found in Bazar of Karachi, in the slum of Bombay or in the small satellite towns of shanty houses outside of well planned beautiful but cold Brasilia.

We can say that the modern core district consists of huge well-designed buildings, wide roads and parks, on one hand, but the non-modern core district consists of small stands for eat and drink, street stalls for menial goods and humble factories for repairing, on the other hand. Supposedly this dualism is needed seriously by Japanese people, because Japanese moral life is composed always of two dimensions, that is, *Tatema* (official principle) and *Honne* (real intention). The *Yamanote* seems to be a well-painted face needed by *Tatema* and *Shitamachi* seems to be a stomach or a heart looked for by *Honne*. It may be possible, of course, that the large cities have generally the dual cores in Japan as well as in other developing countries which has been modernized very quickly in this century.

Recent city planning in Japan has been to clear up the non-modern characteristics of traditional urban districts. But we could find that small humble cafe-bars, restaurants and stores were born just by the side of well planned modern residential estate with the high-storied apartments houses. It is, therefore, very difficult to say that the recent urban planning could change this sort of Japanese people's sentiment who are looking for something to liberate them from too modernized or westernized ways of life. It will take many years to change this dualism of cities even if it might be possible, because Japanese way of life based on the *Tatema* and *Honne* cannot be easily changed.

This dualism is also found in Japanese urban network. Cities in former territory of feudal lords and those under the direct administration of the Shogunate,

each group of cities played the different role till 19th century. The first ones were in fact a sort of local administration center, of which the population scale was dependent on the socio-economic scale of the territory. Kanazawa, the capital of the largest feudal lord's territory had, for example, much more population than Nagoya. But the second ones were a sort of junction between these divided feudal lords' territories. Tokyo, Osaka, Kyoto and many other actual large cities of Japan were mostly of this second type<sup>14)</sup>. And now we can say that it have taken almost one hundred years after the Meiji restoration to unify these two networks of Japanese feudal cities.

#### IV. Population Structure

The third point to be discussed about Japanese city is that the population structure especially in its professional and sex structure of large cities which are very different from those of Western cities but similar to that of Asian cities.

It is well-known that the modern heavy industries in Japan are located in large metropolitan areas on the sea-coast, partly because most of their raw materials have to be imported. And besides, the Meiji central government founded many modern governmental factories on the ports or large cities, because these large and principal cities had been belonging to the second type of dual Japanese urban networks, administrated directly by the Shogunate, and dedicated to the Meiji government after the restoration. Tokyo, Yokohama, Osaka, Kobe, Nagasaki or or Niigata were of this type of cities liberated already from the feudal seignorial administration even before the restoration.

Because the huge factories of heavy industry are existing in Japanese large cities, we can find there a high percentage of workers engaged in the secondary industry, which is relatively low in European large cities as well as in Asian ones. It can be said generally that the principal function of large cities is the tertiary industries rather than secondary ones, but it is not always true for Japanese large cities.

Because of these modern heavy industries, Japanese large cities have attracted many young and male workers, though most of European large cities attracted female workers for service or commercial industries. Because we can find this excessive male population in large cities in other Asian developing countries, this phenomenon appears not only because of Japanese proper process of industrializa-

tion but also because of Asian family structure. It is rather common in Asian countries that a male worker would leave his family in country-side to get temporary or seasonal job in large cities, sending his wages to the family, no matter whether he is married or not. We name this fact *Dekasegui* in Japanese, which can be translated directly as “earning through transitional emigration”. It is possible that he should stay in the city so longer than he might have imagined that he becomes a towns-man. But the *Dekasegui* has given many urban inhabitants a certain sentiment to be foreigner in the large city, because they have felt that their homeland is left in the country-side where their ancestors had lived.

But the recent trend of urban growth in Japan seems to change these features of urban population. At first the feminization of urban population becomes apparent which makes it very similar to the European urban population and different from the Asian one. This trends has been accompanied by the decrease of percentage of workers engaged in the secondary industry, because they began to remove to the smaller local cities. Journalists called this fact “U” turn or “J” turn, because they have very often returned to work near their homeland which they

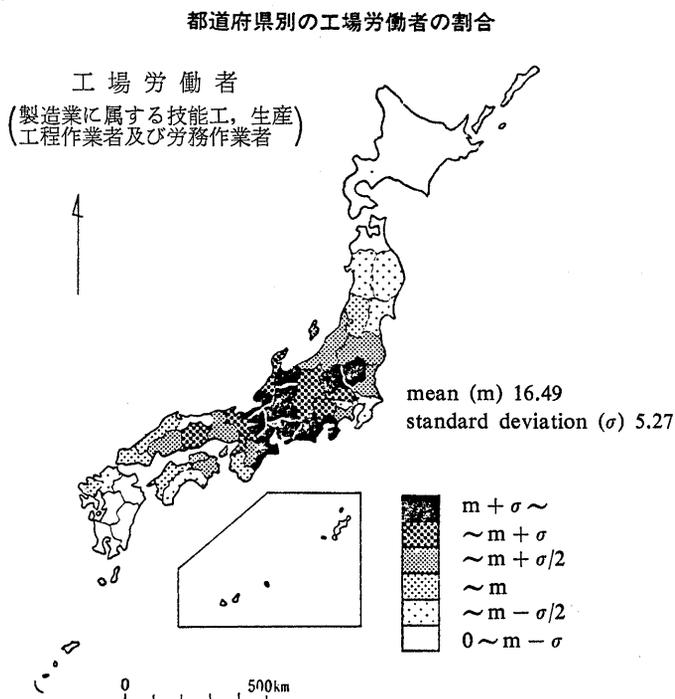


Fig. 2. Percentage of Industrial Workers (1980).

had once left.

As you can see in Figure 2, high percentage of industrial workers are not marked in Tokyo-Yokohama metropolitan area but in central part of Honshu Island, where we can find the high mountain ranges and narrow valleys though there exists a large city of Nagoya. We can say that the principal industrial regions do not always employ the industrial workers for factories, because of automatisations of modern factories. The large cities has begun to attract office workers and service workers, where female and unmarried workers are much needed<sup>15</sup>. It is not yet clear if this recent trend of feminization and dis-industrialization of the population in Japanese large cities makes them similar to the Occidental cities or not.

In conclusion, the problem is to which extent many so-called general theories including the definition of terms in urban geography developed in Occidental

Table I. Percentage of male population and workers in secondary industry of selected large cities.

	Population (million)	% of male	% of Secondary Ind.
Tokyo (1980)	8,646	50.49	34.1
Yokohama (1980)	2,621	51.45	40.1
Nagoya (1980)	2,079	50.34	37.3
Auckland (1976)	743	49.4	35
Bangkok (1980) (including Thonburi)	5,126	49.0	27.02
Bombay (Greater Bombay)	6,075	55.1	
Busan (1975)	2,450	50.1	42.6 (1977)
Colombo (1971) (City level)	1,476	53.9	17.3
Jakarta (1979) (Dki Jakarta)	5,228	52.0	17.2 (1971)
Karachi (1981)	5,595	55.3	43.1 (1980)
Chittagong (1974)	905	59.9	
Hongkong (1981)	4,937	52.2	57 (1978)
Singapore (1980)	2,414	51.0	38 (1978)
Sydney (1976)	227	49.3	29

Table II. Percentage of male population and workers in secondary industry of Tokyo (*ku* Area) by each census

	1960	1965	1970	1975	1980
Male population per 100 females	107.5	105.1	103.1	102.0	100.7
Workers in Secondary industries (%)	44.0	42.1	38.8	34.1	31.4

society and introduced to Japan can be applied to Japanese actualities. If we would deny all of them, we have to fall into the hell of relativisme. But if we depend on them at all to explain Japanese geographical facts, we should be polluted by the colonial spirits, that we are accustomed to believing that the Occidental norms are always right and general. This attitude has been very common in developing countries of sciences like Japan. We have, therefore, to look at the facts in our country not by the Occidental glasses but our own naked eyes as to make the theories of geographical sciences more general and utile to explain the actualities all over the world.

The characteristics of Japanese cities are intimately related with each other. Some of them are quite different from those of Occidental ones, but can be generally found in Asian developing countries. This fact seems to tell us that they are not originating in the time lag of industrialization but in the difference of way of life, or shortly in the civilizations.

This paper is dedicated to the retirement of Professor O. Nishikawa with author's many thanks for his works at the University of Tokyo.

#### Notes

- 1) The Association of Japanese Geographers began to publish "Geographical Review of Japan, Series B" in 1984, but as its Information for Contributors says that "Papers not previously published in occidental languages will also be accepted", we can find many articles there rewritten for foreign geographers after several yeas of original publication in Japanese, which are yet very precious for the international cooperation of geographers.
- 3) Ueno, N. (1972): CHISIGAKU NO GENTEN (Starting point of regional geography) p. 7.
- 3) Tanabe, H. (1980): LA GEOGRAPHIE JAPONAISE ET SA CONTRIBUTION POSSIBLE, L'espace géographique, T. IX, No. 2, pp. 85-93.  
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- 13) Tanabe, H. (1983): CHARACTERISTICS AND PROBLEMS OF ASIAN PORT CITIES, Jinbun-Kagakka Kiyo 78, Univ. of Tokyo.
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- 15) Tanabe, H. (1982): SHOKUGYO KOZOH NO HENDOH (CHANGE OF PROFESSIONAL STRUCTURE), Kokusei Chosa News, 19, Paimo Minister 's Office of Japan.

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