Characteristics and Problems of Asian Port Cities¹⁾

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Contents

- I. Introduction
- II. Urban Network
- III. Social Areas and Urban Structure
 - A. Old part
 - B. New part
- IV. Inhabitants in Urban Social Areas
- V. Urban Planning

I. Introduction

One of the critical problems in Asia is that of urbanization. Not only because of the demographic explosion in this region, but also because of increasing rural-urban migration, urban growth is so excessively fast that many urban inhabitants suffer from unstable and unhealthy lives, without jobs, adequate housing or medical services. The central governments as well as the local authorities in this region have been struggling to resolve these urban problems.

From 9 to 16 June 1982, the Regional Congress of Local Authorities for Development of Human Settlements in Asia and the Pacific (Y'LAP) was held in Yokohama, Japan. The Congress was organized by the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP), the United Nations Centre for Human Settlements (HABITAT), and the City of Yokohama. Representatives from 16 cities from different countries of the ESCAP region participated officially, namely, Auckland, Bangkok, Bombay, Busan, Chittagon, Colombo, Hong-Kong, Jakarta, Karachi, Manila, Penang, Port Moresby, Shanghai, Singapore, Sydney, and Yokohama. Voluntary participants included delegates from Calcutta, Lahore, Madras, New Delhi, Suva, etc.

The author was invited to this Congress as a panelist and also as an academician in order

to provide a background report for discussion, based on the compilation of a small atlas which summarized the physical profile of the participating cities. In preparation for the Congress, a group of scholars was sent in 1981 to several cities to be engaged in the investigation of urbanization, urban structure, and urban planning, as well as the collection of maps, statistics, and other information, so as to analyse the critical problems found in each city. As a result of this research trip, the author had the opportunity to observe generally the characteristics of urban structure in Asian port cities, which has led to the following analysis of the application of urban geographical approaches to city planning.

Because the 16 cities vary greatly in their geographical, historical, and social contexts, the author would like to limit his discussion mainly to a comparison of port cities in de-

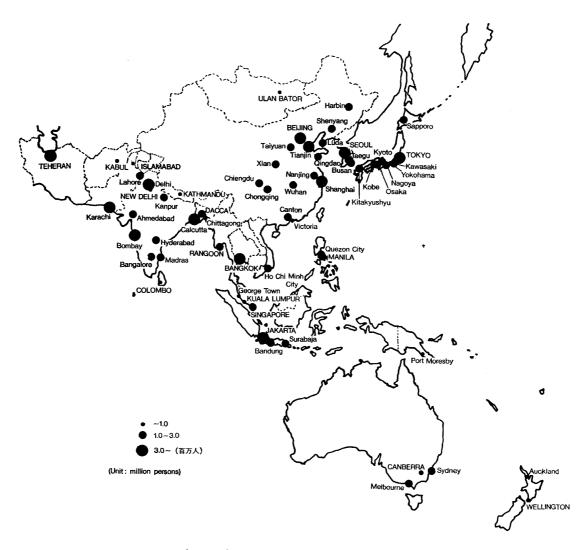


Figure 1 Population of Major Cities.

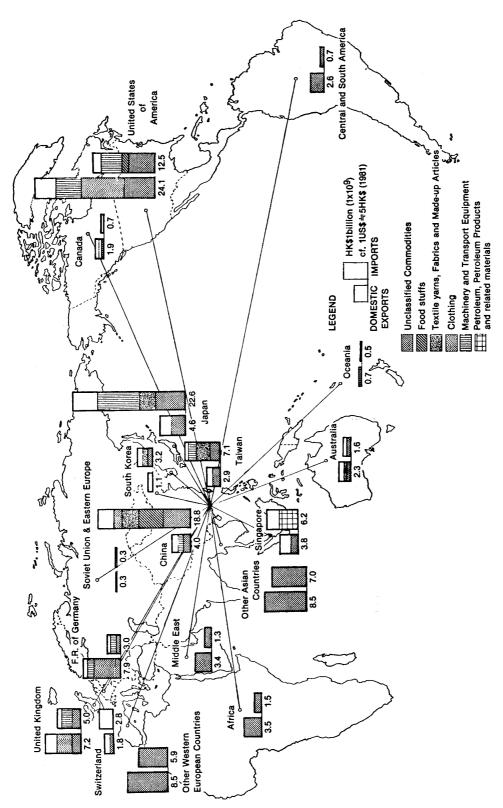


Figure 2 Hong Kong's External Trade.

veloping countries in Asia and Japanese cities. From an Occidental viewpoint, typical Asian cities may seem to be traditional in character and devoid of modern industries. In India, Thailand and Japan for example, Varanasi, Chengmai and Kyoto appear to be more typical Asian cities than Bombay, Bangkok, or Yokohama. But if we look through the history of Asia and the many problems imposed by colonialism, it could also be said that the typical Asian cities are the port cities, where Asian civilzation has been modified forcibly by and adapted to Occidental influences. It is, therefore, appropriate for us to analyse the port city, the gateway for Occidental influences, as cities partly modernized or industrialized but maintaining traditional ways of life, as important examples of urban problems in Asia which have yet to be solved.²⁾

II. Urban Network

Because most of the Asian port cities have been used by the Occidental world as their economic and administrative bases for mercantile and colonial operations, the urban network has an intimate relation with the world-wide colonial empire. As can be seen in Figure 1,3 most of the major cities in the ESCAP region are ports located on the coast except for

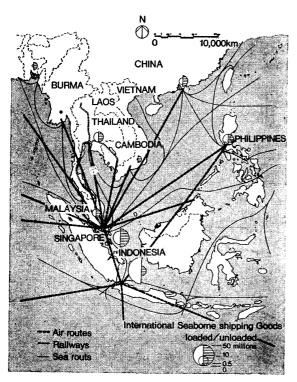


Figure 3 Singapore and other Countries.

some inland cities in China and India. It is natural, therefore, that the urban network in most of Asia does not usually form a hexagonal pattern which Christaller proposed through his study of Southern Germany. And there are only a few studies on this urban distribution pattern in the region.⁴⁾

We can say that there are two kinds of cities in Asia, those situated mainly inland which function as local commercial and service centers for a dependent area,⁵⁾ to which Christaller's general theory can be applied, and, secondly, cities situated on the sea coast, that function as a part of an international network of economic and military activity. The latter seem unrelated to the former. The

city-country symbiotic relationship, often referred to as "Umland", is a concept which is important for textbook discussion, but not so useful in an analysis of the historical development of large ports, for example, Hong Kong or Singapore. Because they were founded for the sake of a colonial strategy developed by the British and others, they are relatively independent from the urban network that has evolved spontaneously for many centuries in China or in the South East Asia.⁶⁾

The locations of these ports were decided in relation to the level of technology for construction and defense at that time. Most of the colonial port cities were established, there-

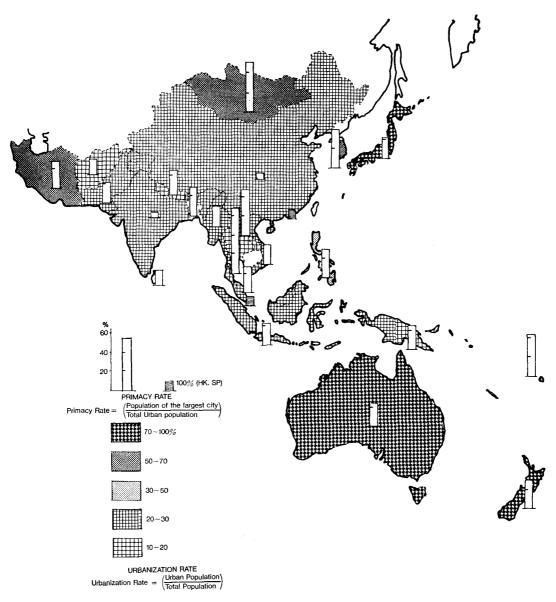


Figure 4 Urbanization.

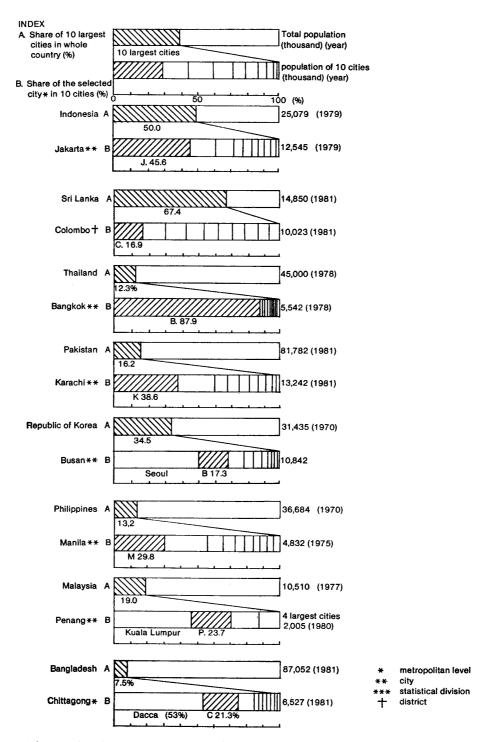


Figure 5 Share of the Largest 10 Cities in Relation to the Total Population of the Country.

fore, on islands or at the top of peninsulas using a narrow channel as a defense line, as is evident in the cases of Bombay, Colombo, Hong-Kong, Penang, and Singapore. These sites helped to promote a certain amount of independence from adjacent areas. They have stood so independent of the hierarchical hexagonal urban network that the so-called rank-size curve of cities is excessively concave, that is, the primate city is dominant in comparison with the middle-sized city. For example, most countries in this region, except the continental countries, have a primary rate of more than 20 per cent.⁷⁾ In other words the traditional urban networks containing middle-sized cities have not been well developed.⁸⁾ Or, we can say that urbanization is taking place especially in the port cities or national capitals and that most countries are still rural.⁹⁾

III. Social Areas and Urban Structure

It is well known to geographers that a large city is composed of distinct areas with particular functions or social characteristics. Such urban features have been studied extensively in the United States. Even though there are some studies of the inner structure of Asian cities, ¹⁰⁾ we cannot say that the study of this region has been carried to any great degree in comparison with that of Occidental cities. It is estimated, however, that among the 25 largest cities of the world with an anticipated population in excess of 10 million in the year 2000, 14 will be found in the ESCAP region. Unfortunately, general models of urban structure have been abstracted inductively, based largely on Occidental cities as the criterion.

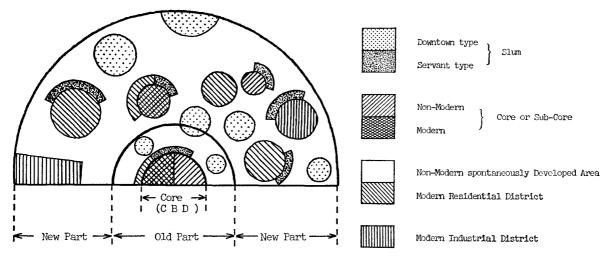
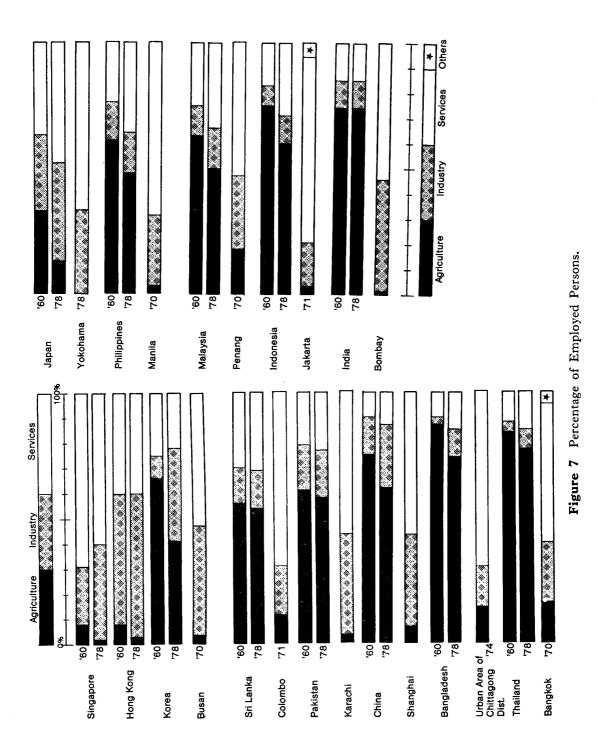


Figure 6 Model of the Urban Structure in Asian Port Cities.

Because of the colonial process, social areas of the Asian port cities are generally divided into two parts by their developmental stages: before World War II, or the Colonial era, and after the War when most Asian countries obtained independence from the suzerain country. These two stages are sometimes referred to, when describing "new" and "old"



parts of each cities. These parts may in turn be subdivided into two areas from the view-point of cultural characteristics; "modern area" and "non-modern area". The modern planned urban areas are usually covered by service areas for water supply, sewage, garbage collection, electricity, and other aspects of the urban infrastructure. On the other hand, in the non-modern area, spontaneously developed areas are sometimes deprived of these sorts of urban services. We can also distinguish some sub-areas with particular functions; such as the commercial, industrial, residential areas for the high or middle class, or for slum or squatter.¹¹⁾

A. Old part

(1) Modern area

Each colonial city has a historical core largely shaped by Occidental influences for trade or military activity, including port facilities. The landscape of this area often imitates the European city with high buildings, paved roads, parks, and other urban facilities. People living there often wear European style clothing and speak European languages. Because the colonial influence affected modern industries' development, the main functions of this area are oriented to administrative, financial, and external trade activities. 12)

In Manila, the Intramuros section constructed by the Spanish in the 16th century and the Ermita and Marate section to the south constructed by the United States in the 19th century, can be called the old but modern core of the Central Business District (CBD).¹³⁾ The ancient fort of Colombo, built by the British, has also become the CBD where most of the government offices are concentrated, as shown in Figure 8. We can see a similar landscape near the Custom House in Bombay or near Port Authority in Karachi. The actual CBD of Jakarta, the Merdeka square, was constructed originally by the Dutch.

Because the need for clerical work in this area makes the daytime population much larger than night-time population, the so-called rush-hour phenomena is one of the critical problems in these cities. But the population density of this area is not so high and the living conditions are planned to suit Occidental tasks. A high class residential district is sometimes founded adjacent to this area.¹⁴⁾

(2) Non-modern area

a) If we define business activity differently, we find in these cities another historical Central Business District, composed of Bazaar type areas, with many small retail shops, as well as wholesale businesses attached to artisan workshops. It cannot be said that this

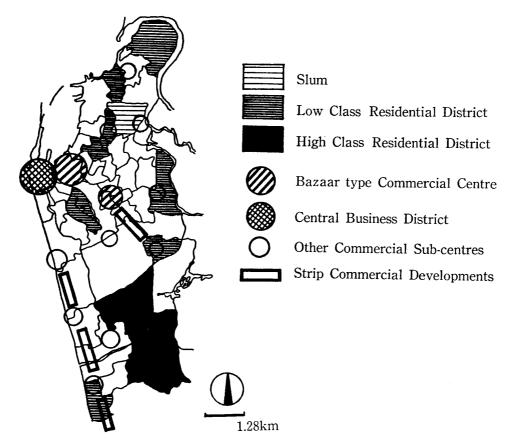


Figure 8 Colombo.

area is a mixture of commercial, industrial, and residential land uses, because the inhabitants themselves are engaged in a variety of activities, a typical feature of pre-modern society, where wholesale and retail shops cannot be precisely distinguished and a craftsman may also be a merchant. It is possible in the suburbs that people who are in the daytime farmers might be craftsmen at night, and peddlers when the weather is not favorable for agricultural work. This means, therefore, that industrial classification based on modern society is not effective if we are to understand the way of life in these areas.

Figure 8 shows that a large bazaar type commercial centre exists near the modern CBD of Colombo. A large bazaar is found on the north of the modern CBD of Karachi¹⁵⁾ as well as Jakarta. This duality, co-existence of a modern and non-modern CBD, is very common in other colonial cities of Asia, not only in port cities, but also in such inland cities as New Delhi and Old Delhi. Such bazaars are very similar to the traditional downtown of Japanese cities of a few decades ago or old town of Shanghai shown in Figure 9. We can find in Karachi, for example, a street where they sell only paper, another street selling

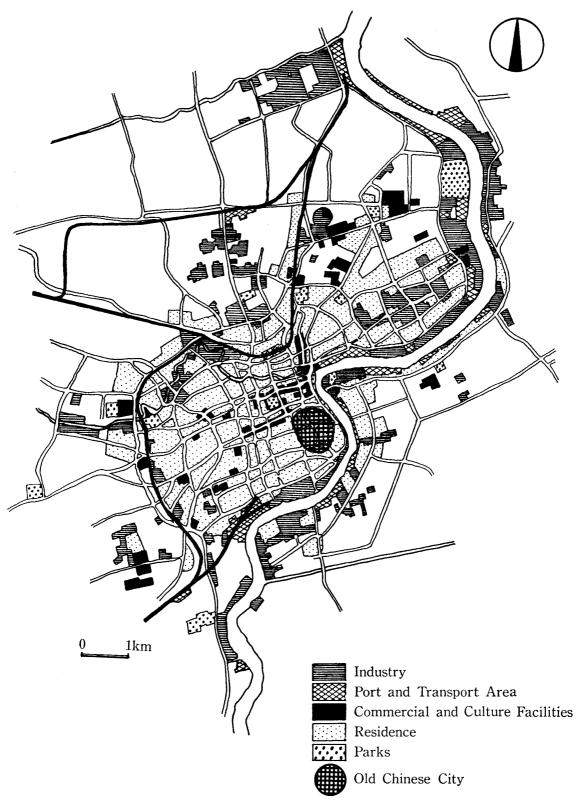


Figure 9 Shanghai.

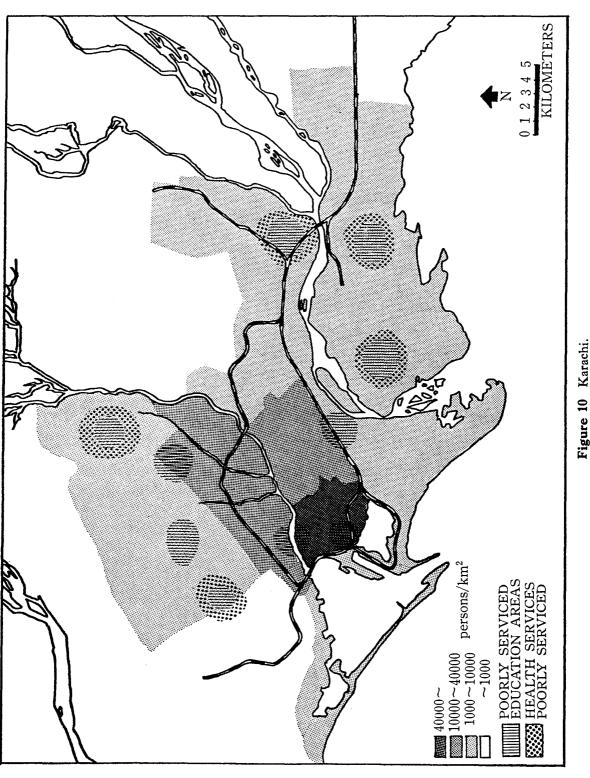


Figure 10 Karachi.

only clothes. They are not selling the goods by fixed prices, but rather through bartering, and the size, quality, color, and form of the merchnadise are generally not well standardized, that is, we can find an enormous variety of goods in small quantities.

The bazaar phenomena suggests that the modern commercial system, as well as the modern industry of mass-production is not yet developed, although small scale merchants, traditional artisans, and their groups may be described as a sort of Central Shopping Center which has evolved from the traditional pre-modern city.

b) Within such dual-core cities, those with both modern and non-modern CBD's in the old part, there can be found spontaneously developed settlements, where most inhabitants are engaged in menial jobs.¹⁷⁾ The poorer district in this area may be called a sort of slum from the viewpoint of Occidental living standards.¹⁸⁾ As shown in Figure 10, slums in Karachi are recognized as areas where education or health facilities are poorly served. It is important to note, however, that we could find the same landscape in Yokohama soon after the World War II, and this area was not described as a slum.

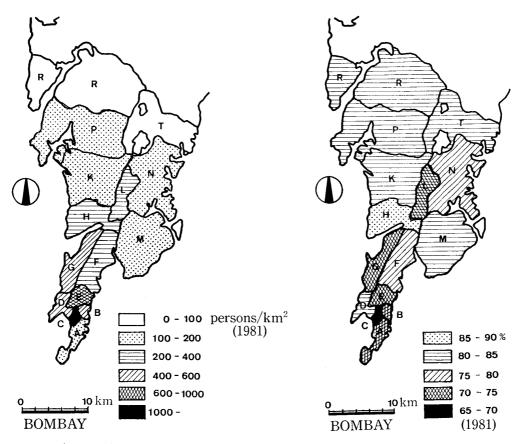


Figure 11 Density.

Figure 12 Sex-ratio.

Because a discussion of this sort depends upon the definition of slum, we would like to suggest that the residential district of the poor is not always a slum.¹⁹⁾ The district where the urban infrastructure is well developed from the Asian viewpoint, is sometimes called a slum in the Occidental countries in those cases where inhabitants cannot gain enough income, with a high unemployment rate, and a poorly developed social or cultural infrastructure. We might illustrate this point by noting that the slum area of the old part of Bombay, shown in the Figures 11-13 as district G, has a high population density of 54,959 persons per square kilometre, and low sex ratio of 72.5 female per a hundred male, but its illiteracy rate of 32.6% is not so high in comparison with that of high class residential district D.

Most of surveyed cities have been influenced by urban



(1) Modern area

planning concepts used in the west and have now established master plans. They have planned and partly completed; therefore, modern areas as functionally ordered land use, developed new residential estates, new industrial estates, as well as new commercial centers or new business centers. These modern areas are generally well planned but isolated from spontaneously developed non-modern areas.

One of the recently planned areas is the new business district, which is mostly composed of the governmental buildings including domestic and international activities. In Manila, Makati city has been constructed as a new CBD to the south and a new national capital in Quezon city has also been developed to the north-east.¹³⁾ Both cities are adjacent but outside of the Manila city boundary. New Bombay, located outside of Bombay island beyond the Thana Creek is now under construction as a new administrative center for the State with residential and industrial estates.²⁰⁾

In some cities where the new CBD might not be planned, we can often find the old modern core extending and invading the old non-modern part under the auspices of urban renewal.

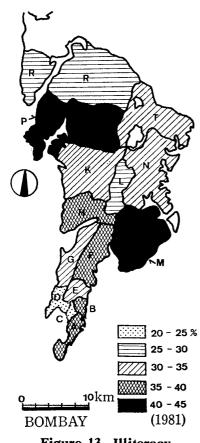


Figure 13 Illiteracy.

If there exists a so-called "cantonment" area, a former military base in the colonial era, it is used as a new site for constructing public and administrative building.

- b) Modern residential estates have been planned and constructed not only by public bodies but also by private enterprises. A striking aspect of such development is that they are very often enclosed by walls or fences in South Asian countries, something which was once observed in Yokohama during the American occupation soon after the World War II near military bases, shopping centers or residential zones but not in ordinary residential estates. The main inhabitants of this area are officers or clerical workers for modern factories, commercial companies, and government or administrative enterprises. It seems that the leading class of the city has imitated the former colonial settlements segregating themselves from the native, in the present case the lower class, population. Though there exist other types of residential estates for the middle or lower class, the number of houses is too limited to provide for the enormous number of people without adequate shelter. Perhaps we can say that the developing countries are generally lacking in a true middle class.
- c) The third sub-area is the industrial estate, which is planned in order to industrialize the city and sometimes designed as a tax-free zone so as to stimulate foreign capital investment. This area is generally located rather far from the old part of the city. The Korangi industrial area of Karachi, for example, is situated about 20 km from the CBD, ¹⁶, the industrial estate of New Bombay is about 25 km from the city of Bombay, and West Laguna Industrial Estate is more than 30 km from the Intramuros section of Manila. The distance seems to be small in comparison with large cities in developed countries, but because the traffic system is underdeveloped, distances of more than 10 km isolates these estates from the city core.

One of the problems of this sort of industrial estates is that factories so located are expected to be productive, to export their products or to stimulate the industrial base of the region but that they are often too modern to give the enormous unskilled population access to jobs. The industrial estates are, therefore, segregated from the city core not only because of the distance but also by the kind of employment offerred.

(2) Non-modern areas

In this case, newly and spontaneously urbanized areas are composed generally of various types of dwellings and small shopping centers, but the urban infrastructure is not so well planned here and slums can also be found. Because of under-developed mass-transportation

systems, the lower class of this area cannot easily commute to the city center. It can be said that though this area is a part of the city, the daily life of its inhabitants is rather independent from the central old part of the city.

As most of inhabitants in this area are newcomers from the surrounding rural area, the illiteracy rate is high as noted, for example, by districts M and P of Bombay in Figure 16. These people are not trained for the urban work requiring skilled labor, and their income level is very low. The problem for the urban planner is that this area is expanding so rapidly that it is difficult to establish and carry out plans to improve the urban infrastructure. Urban planning in developing countries must, therefore, be accompanied by the rural development plan on a national basis.

We might summarize this section by noting that the Asian port cities are generally composed of two stages of urban development; an "old part" and a "new part". The former has two cores of CBD's divided from the socio-economic and urban planning viewpoint: the "modern core", and "non-modern" or "traditional core". In the old part, there is also non-modern settlement which have developed spontaneously, often accompanied by slums, with functions auxiliary to the two cores. We can refer to such non-modern areas as "old spontaneous settlements". The new part also has two types of areas: a "modern area" and a "non-modern area". The modern area is sub-divided by function into a "new sub-core", a "new residential estate", and a "new industrial district". The non-modern area may be called "new spontaneous settlement".

IV. Inhabitants in Urban Social Areas

(1) Servant-type slum

Though we have distinguished several social areas in the Asian port cities, the meaning of the term "social areas" is quite different from that of the developed countries such as the United States, and even from that of the developing countries in Latin America. If we want to describe briefly the social areas of a certain city in a developed country, we must mention at first their function; commercial, industrial or residential, and then the social characteristics of the inhabitants; social status, and dominant race or religion. Nonetheless it is very difficult to apply such discriptive terms to the social areas in the most Asian port cities. This is true, first of all, because areal function is not clearly discernible except in

modern areas of the city, as we have seen. Secondly, it is rather difficult to identify the social status, race, religion, caste or profession of typical Asian city dwellers. Some small blocks may be occupied by a certain race but another may have a certain profession or a certain religion. It is simply too difficult to generalise at a block scale about the characteristics of urban social areas.

During the course of research, there was an opportunity to visit a high class residential district in Bombay and Karachi, a place where small, plain houses or shanty houses stood side by side with splendid high class apartment houses. Along the walls or fences of well-planned residential estates, some sort of squatter could almost always be found. This scene means that different social classes are living together without forming a homogeneous district composed of only one social class of inhabitants. We can say that most of Bombay is heterogeneous in composition.

The fundamental idea of urban planning introduced from Europe to Japan, is to order land-use and social class in each district of the city, that is, to clarify the function of each district of the city. At one time in Yokohama and even now in most of the port cities in developing Asian countries, there existed a sort of slum which we can call a servant-type slum. In the developing countries, as the labour force is abundant and cheap, the rich may employ many servants as guards, porters, maids, nurses, and cooks or gardeners. Working hours are not so precisely defined and often inflexible requiring that they live side by side with their employers. In the suburbs of Chittagon, one room houses are being constructed of less than 20 m² adjacent to apartment houses more than 10 times as large.

The daily life of the inhabitants in this servant-type slum is tightly connected to the upper class residential district, a small community onto itself in the city. This intimate symbiosis can be found not only in the "modern residential estates" in the "new part" of the city, but elsewhere as well. We can even find servant-type slums or squatter villages in the modern CBD of the "old part" of Bombay, where slum dwellers are not exactly employed by any office but working at or waiting for menial jobs.

(2) Downtown-type slum

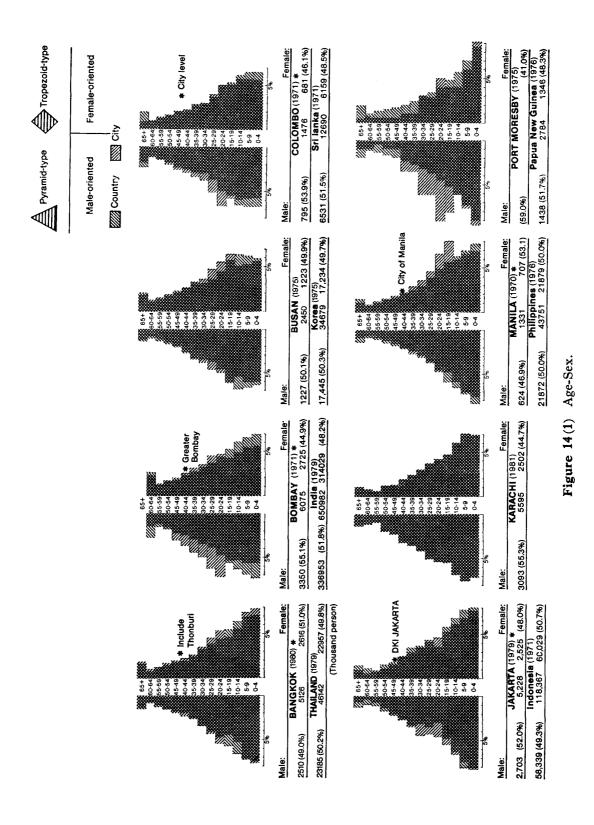
The servant-type slum does not form its own social area alone, but is a part of the neighbourhood community within each existing social area. The downtown-type slum, however, is really a sort of neighbourhood community, which is an important element of "old and new spontaneous settlements". We term this sort of physical slum as "downtown-type",

because its landscape is rather similar to the traditional downtown areas of Japanese cities or we can say that it has the same atomosphere as "non-modern core of old part" of the city. For example, in these areas we find blacksmiths repairing agricultural tools and hardware, a seamstress mending clothes, or a cabinet-maker (joiner) remaking furnitures. Each worker may have inherited this trade from his ancestor. Though most of the inhabitants of "new part" are new comers from the countryside and represent unskilled workers in modern industries, they are very often the artisans or apprentices of the traditional type.²²⁾

Such work activities are so dynamic that one person may be working in various industries. Such slums exist as a sort of small and half-independent neighbourhood community, where the young and the old, the rich and the poor, workers and merchants or managers are living together, with a common consciousness about their district. In Japan, however modern urban planning has condemned this sort of district with mixed functions and having a variety of inhabitants, because one of the principal aims of urban planning has been to order land use areas such that the industrial estate becomes segregated from the residential district, and it becomes the home of a narrowly defined group of workers.

It can be said generally that the inhabitants of residential estates in Japan's "New Towns" are officers and administrative managers about thirty to fourty years old, married, with one or two children less than ten years old.²³⁾ This type of homogeneity is not attractive to the young nor to the old. But in the downtown-type slum, almost all generations and a variety of various professions can be seen. One of the problems in these areas is that there are so many single male workers who have come from the countryside, leaving their family behind. These migrants make the sex ratio of many Asian cities unbalanced, with the exception of Manila, Penang, and Bangkok. For example, less than 70 females per hundred males can be found in Port Moresby and Chittagon, and about 80 females per hundred males in Bombay or Karachi.²⁴⁾

Though there is ongoing construction in the downtown-type slum or squatter villages the infrastructure is not yet in good condition. The water taps, for example, are clearly insufficient in this area. But women and children are able to gather in certain places to obtain water and for washing. Such gathering spots exhibit a pleasant atmosphere, something which has been lost in fashionable modern residential estates in Japan. It is said that passing through the slum is very dangerous in the United States, but most parts of



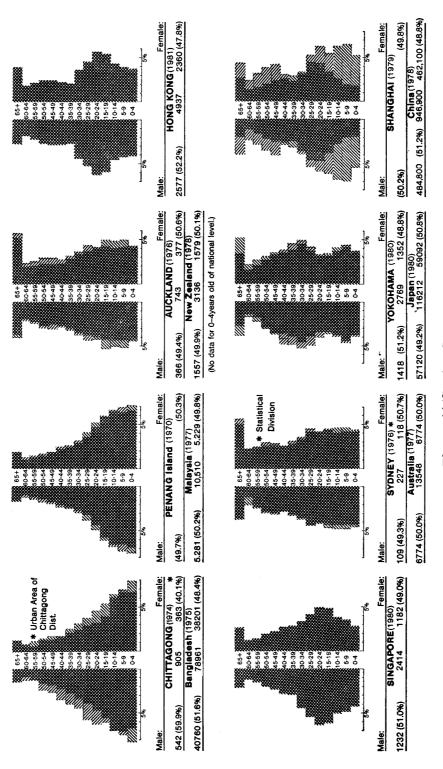


Figure 14(2) Age-Sex.

slums in Asian cities do not appear to be so. In contrast, the major problem of these areas is an inadequate physical infrastructure.

V. Urban Planning

Even though several decades have passed since their independence, the Asian port cities display remnants of the colonial era. The dualism found in the CBD is always apparent, but we have become so accustomed to the modern, planned CBD that we often mistake only the modern core for the central part of the city and neglect its non-modern core. In discussions at the Y'LAP, we pointed out that we should not expel the small-scale repair workshops and the mini-scale retail shops from non-modern or downtown-type CBD's, but that we have to plan to arrange this type of downtown to accommodate street stalls or small stands. The urban infrastructure should be developed in the non-modern area, but one of the attractive features of this area is the dynamic activity of the informal sector and the relatively small amount of commuter migration in comparison with that in the modern CBD.

The dynamism of the non-modern area of the Asian port cities gives us another suggestion about the urban planning. As we have seen above, the heterogeneous composition of the inhabitants' professions, religion, race, or demographic structure in this area makes the neighbourhood unit a much more active and familiar community than in the modern residential estates of Japan. We should be careful to order land-use and to plan the residential estate in terms of such heterogeneous needs. In Singapore, Hong-Kong, and Karachi, for example, we can find apartment houses where the lower floor is occupied by commercial or artisan activities. This heterogeneous composition within buildings is, of course, not typically Asiatic, because we can find the same pattern in pre-industrial Occidental cities. But in part based on the evolution of planning in the East and West, it is important to organize land-uses in terms of a given area's social and cultural characteristics.

The neighbourhood community in the non-modern area makes for shorter daily migration than is seen in the large-scale urban complex with a modern CBD, industrial district, and residential estate. Though it is a serious problem to construct a modern system of transportation, especially mass-transportation, an attempt should be made to raise new neighbourhood communities in the city, where people can work near their families and can meet common professional friends and develop lasting social ties.²⁵⁾

As for the transportation system for urban planning, one of the main problems is to en-

courage pedestrian activity. It is interesting to note that people in the South Asian cities rely more heavily on taxi cab transport over short distances, even 300 m, while Europeans commonly walk as far as 500 m.²⁶⁾ It is of course partly because of climate and of cheep labour of taxi driver or other workers, but better landscaping along streets helps to make a walker forget distances in Europe. It must be pointed out, therefore, that there is a need to design the urban landscape more agreeably in Asian cities in order to resolve transportation problems.

For conclusion, we have learned the technology and concepts of urban planning from the Occidental world but we are inclined to abondon the traditional or non-modern urban structure in Asian developing countries as result.²⁷⁾ Even with the rapid industrial growth of Japan for these past twenty years, Japanese cities yet maintain non-modern features, where the infrastructure is not sufficiently developed. We should, therefore, examine what we have lost through modern urban planning and what we can learn from the non-modern areas of Asian cities so as to conserve the merits of the characteristics found in Japanese urban areas.

Notes

- 1) All documents and papers presented to Y'LAP which the author reffered to for this paper are not mentioned in the note and most of the following figures are originally drawn for the "Physical Profile of Cities in the ESCAP Region" (Background Report for the Regional Congress of Local Authorities for Development of Human Settlements in Asia and Pacific, 1982) by the team including the author.
- A. Gilbert and J. Gugler (1982): Cities, Poverty and Development, p. 33.
 H. Tanabe (1979): De la zone industrielle portuaire à la zone urbaine littorale (Ville et Ports, p. 259-268, CNRS) p. 261.
- 3) Physical Profile of Cities in ESCAP Region (1982), p. 9.
- 4) G. W. Skinner (1964): Marketing and Social Structure in Rural China (Journal of Asian Studies Vol. 34).
- 5) For example, Bangalore in Learmonth, A.T. and Bhat, L.S. eds. (1960): Mysore State, an Atlas of Resources.
- 6) Refer to Figures 2 and 3, taken from "Physical Profile"; op. cit., p. 64 and 210.
- 7) Figure 4. Ibidem, p. 8.
- 8) Figure 5. *Ibidem*, p. 148.
- 9) Figure 4 and R. Turner ed. (1962): India's Urban Future.
- 10) B. J. L. Berry and J. D. Kasarda (1977): Contemporary Urban Ecology.

- 11) Figure 6.
- 12) Figure 7, "Physical Profile" op. cit., p. 150.
- 13) "Physical profile" op. cit., p. 90 and the city monograph presented by Manila to Y'LAP.
- 14) "Conceptual Structure of Jakarta" in "Physical Profile" op. cit., p. 75 and K. Kitagawa (1982): Social area in Indian Cities (Chi-iki, Sono Bunka to Shizen, p. 212).
- 15) "Physical Profile" op. cit., p. 82 and A. F. Baillie (1980): Kurrachee p. 143.
- 16) *Ibid.* p. 113.
- 17) Figures 8, 9, 10.
- 18) T. Nakamura (1982): Ajia no Suramu (Asian Slum, Rekishi to Chiri No. 326) p. 9.
- 19) N. Harris (1978): Economic Development, Cities and Planning p. 56.
- 20) The city monograph by Karachi presented to Y'LAP.
- 21) Figure 9 of Shanghai as an example.
- 22) M. Saein (1982): Local Authorities and Upgrading the Quality of Urban Life, Report presented to Y'LAP.
- 23) H. Tanabe (1978): Problems of New Towns in Japan (Geo Journal, 2-1).
- 24) Figure 14.
- 25) H. Tanabe (1982): Ajia toshi no kōsatsu Shiten (View-point to see the Asian Cities, Chôsa-Kihô, No. 73).
- 26) O. Namiki's presentation at the panel discussion in Y'LAP.
- 27) H. Tanabe (1980): La géographie japonaise et sa contribution possible (l'Espace géographique, IX-2), p. 92.

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