

# URBANIZATION AND CITY PLANNING POLICIES

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## I. CHARACTERISTICS OF URBAN FORM IN JAPAN

THERE IS A SAYING that "Rome was not built in a day," and also that "God makes the villages, but men build the cities." In Japan there is the proverb "sumeba miyako"<sup>1</sup> or "a man's home is his castle." It may indeed be said that cities are things which are built by human beings, but it would be a mistake to think of cities as things which may be created in one or two years.

In recent years, scientific techniques have progressed to an enormous extent, and it has become possible to construct gigantic buildings and huge collective housing estates in a comparatively short time. Looking at this development and at the construction of the so-called new towns in the great cities of the world, one might easily fall into the error of thinking that men are able to create not only the physical fabric of cities, but the very life within them. However, environmental disruption and pollution have assumed a central role in the contemporary urban problem and this may perhaps be a natural reaction to the excessive confidence men have had in their own ability to create cities merely by the simple application of their knowledge and technology.

Accordingly, before beginning to discuss the issues thus raised, I would like to touch upon the natural and historical conditions within which the development of Japanese cities has occurred, and the type of organization and structure which the big cities, as constructed by their occupants, possessed.

### A. *Japan as a Sea-bound Country*

The predominant and perhaps most influential condition is that the islands of Japan are surrounded by sea on four sides. Furthermore, although on one side they lie close to the continent of Asia, on the other side, they open out onto the Pacific Ocean. The natural condition of being surrounded by sea makes Japan in some ways similar to Greece. However, the Mediterranean Sea adjoins Europe, Africa, and Asia. Accordingly, the cities which developed on the Grecian Peninsula are similar in form to Japanese cities, but in Greece, the sea did not necessarily fulfill the function of defensive and protective ramparts which it did in the case of Japan.

### B. *Japan's Mountainous Terrain*

The islands of Japan are, for the greater part of their area, heavily mountainous, and this may be considered one of the natural conditions which have had strong

<sup>1</sup> Literally—if one lives in a place, it becomes the capital, or Kyoto. The capital was regarded as the center of the civilized world in ancient Japan.

influence on city form. On the one hand, this condition has made difficult communication and the movement of people and goods within the islands, while on the other, it has made possible the growth of settlements and villages on a relatively small scale, and further, towns and cities which developed from these beginnings did not necessarily grow into large scale cities in the conventional sense. Until a century ago, when transport facilities developed considerably, this condition was one of critical importance. Simultaneously, it provided the base upon which the economic and social system of the developing feudal government was built.

Contrary to the cities of the Asian Continent, in every part of the country in the feudal period, comparatively small-scale wealthy families and the samurai class were able to maintain firm control over the peasant-artisan classes, and it may be said that this phenomenon is directly attributable to the nature of the country itself. It should be noticed also that relatively fast flowing rivers, along with the mountainous terrain made possible the formation of natural, unplanned settlements.

#### C. *The Racial Homogeneity of the Japanese People*

Cities, in their formation and character, are largely dominated by the race of the people who settle in them. In Europe, countries are all in close geographical contact. Accordingly, there are many extraneous elements in the composition of the various languages, customs, religious practices, and even in the manner of life. In the cities of America, each city itself is occupied by several small racial groups, so that one may go so far as to say that the American urban problem is simultaneously a racial problem.

In Japan, the urban population is composed of people of the one race and culture, and this fact may be considered an extremely important condition. Of course, in the beginnings of Japanese history, there was a struggle with the Ainu race who occupied a section of the islands. However, in two thousand years of history, this struggle was only a small incident, and at no stage became a problem within the Japanese archipelago. It bears no comparison with the Indian problem in America.

#### D. *Social Organization and Life Patterns*

In the formation of Japanese cities, the organization of life and living patterns of the people who built the cities should be noted as an artificial or human condition. Of these living and social patterns, those born of the three hundred year feudal period, which even today retain their influence, are to be regarded as decisive and of the most importance. Whereas in Western Europe there is the proverb that men make the cities, in Japan, it may be said that the feudal lord created the cities. The feudal lord in the Tokugawa Period (1600-1867) had right of possession of both the land and inhabitants in his domain, and upon his orders the inhabitants built the castle and precincts, and laid out the streets of the surrounding town. There is the saying, "Owari Nagoya wa shiro de motsu," or "Nagoya in Owari lives by its castle." This may be interpreted as firstly

singing the praises of the magnificence of the castle, while at the same time pointing to the fact that the people of the town owed their living, and perhaps existence, to the castle. The fact that today's cities almost all have their origins in castle, famous temple or shrine towns is a reminder of this time.

The fact that in the eyes of the common people, the most important thoroughfares and routes were all built for the highest authority in the land, the feudal lord—in other words, that the towns themselves were constructed around a system of feudal authority—may be regarded as proof of the validity of this fourth condition. The roads into the cities were built deliberately as “false roads” or labyrinths, so that should an enemy from surrounding districts attack, the road system would act as an obstruction. As will be dealt with in a later section, with the exception of Nara and Kyoto, in all major cities, the roads leading to the central castle wind and twist for the above reason. Consequently, the older the city, the greater is the amount of money required to improve the road system.

Although all the large cities of Japan, including Tokyo and Osaka, are in all cases castle towns, the reconstruction and modernization of the road system was only achieved after the Second World War, when the fact that most of the cities were burned to the ground made the construction of newly planned roads a comparatively simple matter. The city which is most representative of the success of this policy is Nagoya, the third largest city in the country. It is interesting to note this city, which was once said to gain its living from its castle now prospers due to its wide, spacious streets and avenues.

#### E. *The Historical Background*

The historical background is the condition which occupies a special role in the formation of Japanese cities. This condition may be best expressed in terms of the existence of the emperor system in Japan. While the feudal period had a history of only three hundred years, the monarchic age, that is, the period of more or less direct imperial rule had a long history of over one thousand years. City construction in the prefeudal period was not for the feudal lords and the samurai class who held control in the provinces by actual power, but was to make the dwelling place of the symbol of the nation, the Emperor, into a city.

The word *miyako* originally meant the dwelling place of the Emperor. The meaning of “the place of residence of the holder of authority or governor” is not included in the concept of the European word “city” or “metropolis.” Furthermore, the Japanese Emperor was not merely the source of ultimate authority, but was regarded as a living god, and as such as an object of faith for the people. Because of this fact, in the feudal period, Kyoto was still regarded as *miyako*, so that any new works carried out on the city were different from those in the castle towns under the feudal system.

It was natural that the old capitals of Nara and Kyoto should have as their centers the imperial palace, and that consequently the road and street pattern should be arranged in chessboard fashion which permitted free access to the palace from each direction of the compass. However, the original pattern was one which had been learned from the Asian mainland, principally China. In

China, the castle walls were in fact the city walls in so far as the area contained within them was immense, and the city population was contained within these walls. Within the outer walls, there was thus not necessarily any need to create mazes or labyrinths as defensive measures.

In contrast to Kyoto and Nara, the present capital Tokyo, is a city of the feudal type, and although over one hundred years have passed since the Meiji Restoration of 1868, and despite repeated efforts, of the great cities of the world, its roads and thoroughfares are the least satisfactorily adjusted to modern conditions. It may be said that herein lies the cause of the traffic problem.

In the light of the basic factors in the formation of Japanese cities as outlined above, the greater cities of Japan, that is, those with populations of over 1 million, ten in number, may be analyzed and classified. Under the Local Autonomy Law, when the population of a city reaches 1 million, and if it is judged to have within the city center appropriate financial, administrative, and cultural facilities, it is designated a "greater city" by the national government. The existing greater cities are: Tokyo, Kyoto, Osaka, Nagoya, Kobe, Yokohama, Sapporo, Kawasaki, Kitakyūshū, and Fukuoka.

Of these, only Kyoto and Sapporo are inland cities with no direct contact with either harbor or bay. Kyoto was built in the golden age of direct imperial rule, when the actual authority of the Emperor was at its highest point and in the history of Japanese city building is a rare exception. It must be remembered also that, in Kyoto, together with the imperial palace, also stands the castle, Nijō-jō, although it is of a scale which does not allow comparison with the palace and is of a later date. Thus, Kyoto may in no sense be called a castle town. In another sense, neither is the largest city in Hokkaidō, Sapporo, a castle town. In the feudal period, it was under the direct administrative control of the magistrates of the central feudal government, and was not part of the domain of any one feudal lord. Thus Sapporo is a postfeudal city, and the fact that it has a chessboard pattern layout, similar to Kyoto, is important to a knowledge of Japanese cities.

## II. THE BLIND SPOT IN JAPANESE CITY CONSTRUCTION

Considering Japanese cities from the point of view of their formation, the introduction of principles of modern city planning may be seen to be a task of some difficulty. In addition, the common people, who, from the age of imperial rule right through the feudal period should have been a prime factor in determining the form of the cities, have lived passively within the constrictions imposed by the structure of the city.

The word "community" has, for the Japanese, many meanings and tends to be used very loosely in a variety of ways depending on the context. One meaning might be taken as being a cooperative body. Another would be the town, village, or hamlet in its entirety, and another, the most general, would be that of the regional or area society. However, in the concept of community, two simultaneous elements of great importance must be considered. These are firstly, the

existence of a situation wherein people are settled within a fixed space, and secondly, that between the members there must exist mutually a degree of consensus of aims and attitudes. The regional self-government and municipal bodies of Japan are not necessarily the spontaneous expression of the area societies which they in name represent; particularly in cities whose roots lie in the feudal period, a consensus and organization created by the citizens themselves is generally something quite unthought of. Accordingly, the authority, techniques, and methods required for the building of new cities was entrusted to the central government or its subordinate bodies without reference to the various area societies and the people they represented, and this state of affairs continues today. It is said that Japan's regional self-government, including that of the major cities as well as rural areas is only "30 per cent self-government," and it must be pointed out that this is a voluntary self-admission of the lack of community consciousness on the part of the citizens themselves.

As an example of the way in which this negative attitude of the people themselves has been made still more submissive, the introduction of centralized transportation facilities and industrial city planning will be discussed.

#### A. *Control of City Planning by the Japan National Railway*

In the development of Japanese cities, the fact that transport facilities have been governmentally constructed and run is a problem of some importance. Had the railway system been privately built and run, the form of the cities may have been very different. There are several reasons for this.

At first in any matters which were jointly the concern of both local government and the Japan National Railway (JNR), the railway had absolute power, or this was so at least until recently when a popular movement against JNR began to make itself apparent. Accompanying the growth of the railway system, it follows naturally that communities situated along the railway line prosper and benefit by greater ease of movement. Thus, even if excessive expenditure was required by local inhabitants, the railway station was placed, if possible, in close proximity to the major commercial and shopping area of the town. Consequently, whatever plan may have been made for city development, the position of the National Railway station building and its entrances may even change the plan itself. The truth of this statement may be seen when one considers the way in which cities in country areas have "cooperated" recently in the selection of station sites for the planned extensions of the new high-speed rail network throughout the country.<sup>2</sup>

<sup>2</sup> When railways are constructed, nobody at all wants the proposed line to pass through or near their property, but everybody wants to have the stations, and the prosperity and convenience they bring to the towns. A prime example of "cooperation" was the way in which an "elder statesman" of the Liberal Democratic Party, one Bamboku Ōno, used his personal influence to force the construction of a totally redundant station in a small, unimportant town by the New Tōkaidō Line. As it happened, the town Gifu-Hashima was his birth-place, and to the great irritation of travellers whose time is wasted every time the train stops amid the fields surrounding the station, the townspeople erected a bronze statue of Ōno in front of the station as a token of thanks.

Secondly, the preferential position held by JNR in the cities continues to be maintained even in the present day, when the use of motor vehicles has increased enormously. The difficulties of how to deal with the "automobile society" will be discussed in a later section, but the National Railway, from its position of absolute priority among the transport mediums, is not necessarily inclined to show much concern for the motorcar and its users.

In Europe and America, and particularly in the larger cities of the United States, the railways are not nationally controlled, but are run by private enterprises, and the role which they play in the national transport system as well as the use made of them by travellers and commuters is different to Japan. From an early stage in their development, the railway terminals in the central city areas were constructed underground. This was the case in New York, Chicago, and Los Angeles, as well as in other big cities. Very recently, Tokyo Station has been enlarged by the addition of a new underground terminal,<sup>3</sup> but in Osaka, Nagoya, and Kyoto, the major terminals are raised above the ground by elaborate structures, and these terminals are a major obstruction to vehicular traffic in the city.

Thirdly, the National Railway does not deal only with inter-city traffic, but, depending on the apportioning of traffic within the cities, carries a good deal of metropolitan traffic, and in spite of this, the degree of coordination with local governments is not necessarily adequate. As a result, the solution at a basic level of the traffic problem within the cities is being obstructed by this existing state of affairs.

In Tokyo, with the Yamanote Line,<sup>4</sup> Osaka, and Nagoya, JNR is responsible for the running of the major transport arteries within the main cities and between the adjoining areas and the cities themselves. In New York, and also London, transport facilities are unified into one "system," but in Japan the situation is different. While the various lines and routes are all interconnected, in basic terms, the controlling bodies for each are all separate identities. This is causing increasing complexity of the urban traffic and transport problem in Japanese cities.

#### B. *Imbalance of Road Planning*

Laws concerning city planning had been in existence for fifty years before they were at last revised in 1967. Until then, final decisions concerning road planning, which was the central concern of city planning laws were made by the Minister for Construction, who held final authority in all matters. Thus, all roads within the cities, similar to the railway lines and stations, were constructed according to the arbitrary discretion of the central government. This, of course, meant that the local authorities were ignored and that the decision-making pro-

<sup>3</sup> For the Sōbu Line. However, the other lines including the New Tōkaidō Line (the "bullet" trains) still have their terminals above ground.

<sup>4</sup> A circular line, to which all major commuter lines in Tokyo connect at least one point. Should this line be stopped for some reason, Tokyo's railway system becomes almost completely paralyzed.

cess was quite one-sided. Under the revised laws, part of the authority has been given to prefectural governors and city mayors, who as heads of provincial and local government bodies reflect the desires of the people, so that this may be regarded as a progressive step.

However, governmental road policy, together with the advance in techniques of expressway construction has reflected upon the cities a form which is markedly different from that of the traditional city.

Firstly, these new techniques have resulted in the placing of vast masses of concrete over existing roads, rivers, and canals. These new expressways, along with improvements to existing roads, have by making possible enormous increase in volumes of traffic, limited the traditional functions of urban roads as connecting links among people in area societies made up around primary and middle school area units. The elevated pedestrian crossings, which have been newly developed by the road authorities might have possibly been expected to maintain the continuity and community sense of the area societies, but, in reality, they served simply to reduce the traffic accidents on the roads. More and more the area societies in the large cities continue to suffer destructive effects due to the ever-growing transport system.

As a result, growing antipathy and movements of the general populace in the large cities against city planning have become evident recently and are growing increasingly strong. Until now, town and city planning has generally meant the application of engineering and construction techniques to road building, and the production of proposals in the form of blueprint drawings to which residents submit unconditionally, but it is now becoming increasingly difficult to gain the consent of residents to this type of planning.

### *C. Inadequacy of Water Supply and Sewage Facilities*

In considering Japan's urban problem, one important but little known element is that of water supply and drainage. As stated at the beginning of this paper, the greater part of the Japanese archipelago is covered by mountains, and thus rivers are numerous. Furthermore, the islands are surrounded by water, so that the Japanese have not necessarily a strong sense of "water" as a commodity. In addition, Japan lies in the path of the seasonal typhoons, so that considering the control of rain water separately, the islands are comparatively blessed with a plentiful supply of water.

Dams have been built in mountain regions for the storage of water which has been used not only for city water supply, but also for the generation of electric power. Until the Second World War, in the older parts of the major cities, wells were still in use, and a belief existed, verging on faith, that water from the wells was better in quality than that of the town water supply. Because the major part of the economy was agricultural, the rivers were utilized mostly for irrigation, and the prewar period was one in which water for industrial purposes was something almost unthinkable.

However, after the war, the gradual transformation from an agricultural to an industrial economy began, and the heavy industries which were concentrated

around the cities especially required large amounts of water, so that the ready availability of adequate supplies of water became the decisive factor in the growth and prosperity of each city. Particularly in the years from 1960 to 1970, when the new national development plan for constructing new industrial cities was put into effect, the problem of water supply was given added emphasis. If, at the time, sufficient consideration had been given to the problem of disposal of water used in the factories in and around the cities, the pollution problem would have now been at least partly solved. However, because the drainage and sewage systems, which ought have been planned simultaneously with the water supply network, were well behind in construction, effluent from the factories was allowed to flow freely into the rivers and bays, and the resulting pollution has reached a stage where from being a sea-bound country, Japan has become an effluent-bound one.

Suwa-ko, a lake in mountainous Nagano Prefecture is a suitable example. Famous as a place of post-card-like mountain scenery, the surrounding area has been developed as a new industrial city, so that waste from the factories and effluent from the adjacent and nearby towns of Suwa and Okayama have polluted the lake to a degree where at present a species of fish called *wakasagi* for which the lake was famous have neared extinction.

The Setonaikai, Japan's Aegean Sea, has been famous for the purity and beauty of its waters, but with the rapid development of nearby industrial cities, especially Okayama, Mizushima, Fukuyama, and Kure, the purity of the water has seriously deteriorated, and a phenomenon called "the red tide" (*akashio*), in which marine life dies in vast quantities has occurred repeatedly.

#### D. *Serious Contradictions in the Affluent Society*

The above-mentioned phenomena, together with the natural and social conditions which influenced the form of Japanese cities are only a few examples to be considered when the urban problem as a whole is raised. Japan now has achieved the third largest GNP in the world, and at a glance may seem to be following intently the way to growing prosperity. However, those islands of prosperity within the archipelago, the cities, contain within them serious contradictions which may threaten their future course of progress. The essence of the problems may be summarized in the following two points.

Firstly, although Japanese cities may at first sight appear to be freely organized, the influence of the authoritarian control of the central government has been strong in the past as well as in our times. This is directly and clearly expressed in the book, *Nihon rettō kaizō-ron* [A plan for remodeling the Japanese archipelago] by the prime minister, Kakuei Tanaka.<sup>5</sup> Accordingly, the urban problem is not one which can be completely and fundamentally solved by meeting each problem, i.e., location of industry, housing, traffic, etc., as it arises. The problem lies rather in the extent to which the governing bodies of the cities and country

<sup>5</sup> English translation of the book is [1].



areas can enlarge their spheres of authority and self-government in relation to the central government.

A certain degree of increased independence has been partly gained by the efforts of top administrators of local governments. In recent times, however, residents of the cities have come to react strongly against planning schemes proposed by both the national and prefectural governments. They have also been able to take part in the decision-making process in the construction of the new high-speed rail network, and have resisted high-handed urban policies of the governments. These days, they gradually became aware of the importance to reconsider what a city is, and should be. This must have been a great incentive for stimulating a new movement towards a solution of Japan's urban problem.

Secondly, the cities tend to be built up artificially to an excessive degree, so that nature in any form has become something rarely seen. To this state of affairs, the people have strongly reacted, not only as city dwellers, but due to a natural instinctive reaction of human beings to life in such conditions. The university unrest which continued over the past three or four years all over the world is not merely an explosion of dissatisfaction with the universities which continue to enlarge their already mammoth proportions. One other cause is a reaction to an environment in which life is gradually being closed in upon by excessively functionalized cities, multistory buildings, expressways and the mechanisms of mass transport networks. This is obvious if one looks at the increasing strength and vehemence of the movement of city dwellers spontaneously demanding direct "participation" in administration concerning the urban pollution problem.

Japan's urban problem is now moving from a stage of considering both separately and together the various problems of population density, traffic congestion, the housing shortage, pollution and so forth to a stage where the total urban situation is being considered at the most basic level, and the question, "For human beings, what is a city?" is being pursued.

### III. TRENDS IN URBAN POLICY

#### A. *The First Stage of Postwar Urban Planning*

Urban policy in the large cities played a significant role in the rapid recovery and development of Japan's postwar economy. The main characteristics of city form and formation in the prewar period have already been outlined, but these characteristics came to change greatly after the Second World War, chiefly due to the policies adopted by the Allied Occupation Forces and also due to the influence of American culture.

The occupation authorities considered that before the war, the centralization of power sustained by the great financial cliques (*zaibatsu*) and the military cliques (*gumbatsu*) had brought about the growth and subsequent triumph of militarism in Japan, and in every field adopted policies promoting the decentrali-

zation of authority to the provinces. The various division and regimental headquarters of the Japanese army in the main cities and the naval facilities in the major ports were all abolished, and the sites were turned into universities and parks. However, a part of these facilities was retained and used by the Americans as army bases.<sup>6</sup> As a result, people living around the U.S. army bases, amid the dire circumstances of immediate postwar life, were forced into a position of dependence upon the bases for their livelihood, and this situation to some extent still continues even today.

In the ten years after the war, the policy of the occupation forces theoretically followed decentralization of authority, but, in actual fact, all authority rested in General MacArthur's headquarters in Tokyo, and the Japanese Government was placed in a position of acting on its behalf. Eventually, authority was centralized once more in Tokyo. Consequently, the National Capital Region Development Act was enacted, with the purpose of readjusting and regulating the excessive density of population and industry in the Tokyo area. Similar legislation was also enacted for the Osaka and Nagoya areas. It should be noticed that in the period of postwar reconstruction with the revival of industry, the town and city planning policies for these three important areas were designed to bring about changes in general urban policy throughout the country.

However, while this modest decentralization policy succeeded to some extent in dispersing both population and industry from the central city area to the peripheral areas, the main company offices concerned with supervision and administration of industry tended to concentrate in the central business districts of the three great cities, and as the construction of multistory office buildings became possible, the two problems of traffic congestion of the city center and excessive density of dwellings in the suburbs came into existence.

#### B. *The Second Stage of Postwar Urban Policy*

After 1960, the growth of industry proceeded smoothly, and with the rapidly growing economic development the concentration of population and business in the three great cities became even greater. The flow of population from rural areas, particularly western and northern parts of Japan, to the Kansai and Kantō areas became enormous, so that in country areas, the so-called uninhabited villages began to appear.

It was then that the government, at the instigation, perhaps, of members of parliament from country areas, adopted members' legislation for the promotion of new industrial city construction, and established a course aimed at achieving the dispersion of factories and industry to the depopulated areas.

The areas chosen were Tōhoku, Hokuriku, Shikoku, Chūgoku, Kyūshū, and Hokkaidō, and fifteen places throughout the country were designated as sites for development. In these areas, the policy was to reclaim land from the sea, to waive or reduce taxes on factories which moved into the areas, and to improve

<sup>6</sup> As Japan's constitution forbids the country having armed forces of its own, a treaty, commonly called the Security Treaty, or "Ampo" was signed, whereby America undertakes the total defense of Japan. It was for this purpose that the bases came into existence.

urban facilities in the designated cities. Moreover, when it was aimed to achieve the relocation of factories only, legislation of special areas for the adjustment of industry was put into effect to achieve the removal of factories from the main cities to depopulated areas not designated as new industrial cities.

In England and America, the so-called new towns were intended to bring close together dwellings and places of work. But in Japan's "new towns," the emphasis was placed on only the relocation of factories. The new industrial cities tended to provide sites for newly expanded factories in correspondence with the rapid growth of the economy, so that the stated aim of the relocation of existing urban factories to rural areas was not necessarily achieved. Furthermore, because the construction of the new industrial cities held a great attraction for local cities in country areas with declining populations, in their efforts to welcome industry, local governments in designated areas went as far as the modifying of local regulations for preferential treatment in regard to the siting of factories. However, after some time elapsed, the negative aspect, that of environmental pollution caused by the newly located factories, became apparent. The following will serve as an example.

Along the Tōkaidō Line is an area called Tagonoura. Facing the Pacific, it is a place famed for the beauty of its scenery, and from olden times has been the subject of poetry, both ancient and modern. It was at some time designated as a special industrial area, and very soon the small inlet had been turned into a dredged-out harbor, and seaside factories soon mushroomed. However, the effluent discharged from the factories, called *hedoro* ("colloidal sediment"), soon not only covered the entire water surface of the harbor, but had polluted the surface of the adjacent Pacific Ocean. In the passage of a mere ten years, the policy of population had developed from aiming to reduce the density of factories in the cities to being the cause of environmental pollution. It might be true to say that at the present time, Tagonoura has become the focal point of the pollution problem.

In spite of the expectations of the depopulated areas that industrial development would occur, the factories and plants still showed as before a tendency to cluster in the areas around the three great cities of the Pacific belt of Honshū. In addition to this, in the 1960s, in this belt area, the New Tōkaidō Line linking Tokyo and Osaka was completed and two new expressways, the Tōmei, linking Tokyo and Nagoya, and the Meishin, linking Nagoya, Kyoto, Osaka, and Kobe were built, so that this region further developed to become one giant urbanized area, commonly called "megalopolis." The population density, accumulation of industry, and the productivity of the region have made it comparable in scale and size to the world's megalopolis, the American East Coast, stretching from Boston in the north to Washington, D.C., in the south.

### C. *The Change in Urban Policy*

During the thirty years since the Second World War, the urban policy throughout has been focused on "dispersion." In the above-mentioned book, *Nihon rettō kaizōron*, not unexpectedly, the policy of dispersion is heavily emphasized. In

its contents, it is an extension upon the lines set out in the "new industrial city" proposal. In addition, all factories of certain types, for which standards are to be set, are to be "banished" from the cities and relocated in country areas. In this case, it is provided that the relocated factories must be rebuilt as "industrial parks." The attachment of this condition is from consideration of the requirements of those who live in country areas and provincial cities, for until now, relocation of factories has always been accompanied by pollution. Under the Tanaka plan, cities, towns, and villages throughout the country have been classified into three areas, i.e., those areas from which dispersion is to be encouraged (mainly the large cities, including Tokyo and Osaka), those areas in which relocation is to be encouraged, and a third, neutral area, and measures for subsidizing the relocation of factories are being forwarded respectively.

As for the transformation of the policy for new industrial cities, it is possible to say that the use of a certain amount of coercion in achieving the dispersion of industry has been a turning point in urban policy. However, the fact that postwar urban planning policies have, in effect, failed to achieve the aimed-for dispersion of industry, and have brought pollution to the provincial cities has provoked opposition from the local people in each area so that it became impossible to predict whether or not the Tanaka plan, in its present form, would be acceptable to them. At the present time, the government is attempting positively to forward large scale development plans in the depopulated areas of Kagoshima and Aomori prefectures, but in both cases, the projects have met with strong opposition from the local people, and progress is behind schedule.

On the other hand, in Tokyo and Osaka, where the tendency to extreme high density is strong, pollution continues to develop simultaneously with the growing congestion of city functions. In the above-mentioned book, Prime Minister Tanaka applied the metaphor "physically handicapped" to Japan's large cities.

#### IV. THE FOCUS OF THE HOUSING PROBLEM

In discussions concerning the problem of housing, emphasis is frequently laid upon the number of housing units, but this is not necessarily the essence of the problem. The urban dwellings of Japan differ from those of both the Asian continent and of Europe and America in so far as the main material used in construction for over two thousand years has been timber. This may be regarded in two ways, one as negative, the second as positive. The first is that because buildings were almost all of wooden construction, loss due to fire has been great. In the Nara and Heian (Kyoto) periods of imperial rule, even the imperial palaces were destroyed by fire. In the feudal age, the Tokugawa capital of Edo (the present Tokyo) was so often ravaged by fires that the saying "Kaji wa Edo no hana" or "fires are the flowers of Edo" remains today, and change in the physical form of the city due to fire was considerable. As opposed to this negative aspect, the fact that the major building material, timber, was easily carved and sculpted made possible an architecture of a high degree of artistry. The oldest wooden buildings remaining today in Japan, the Shōsōin, which is an old treasury, and

the temple Hōryūji in Nara not only symbolize the beauty of the city but are also highly regarded artistically. The reason that the ancient capitals, Nara and Kyoto, have become internationally known is almost certainly that they have the appearance of a city built of wood. However, the wooden construction of Japan's cities meant that they were for the most part burnt to the ground during the Second World War, and consequently, in the postwar period, the need for a non-inflammable building material meant that suddenly, reinforced concrete was adopted as the main structural material.

At Harvard University I had the fortune of meeting Lewis Mumford, the famous critic and architectural-social historian. I remember clearly that he was of the opinion that the change from timber to reinforced concrete as the main building material in Japan's cities was inevitable, but was critical of the fact that the majority of dwellings were being built in Western style. He considered that the form of dwellings expresses the culture of a people, and that Japan was thus losing its uniqueness.

However, in the postwar urban housing problem, the loss due to fire was not the only cause of the absolute shortage. In addition to the concentration of population in the great cities, the following may be pointed out.

#### A. *Atomization of Family Structure*

There can be no mistake that the root of the postwar housing problem lies in the fact that families are becoming "atomized" into much smaller units than the prewar family, and that the common family unit now consists of husband, wife, and children. Recently, the period for which children live with their parents is becoming gradually shorter and shorter. This is because when children marry, the tendency to move and live separately from the husband's parents has become very strong, to an extent where almost 99 per cent live separately. I have called this phenomena "atomization."

Accordingly, because of this tendency to atomization, the scale of houses has become increasingly small, and, particularly in the large cities, very small houses built at high densities have appeared. While they appear to be at a glance independent houses, in actuality there is little difference between them and the small, tenement-like houses which have been referred to as slums. However, this type of development occurs in suburban areas around the large cities where land prices are somewhat lower because, by regulation, all buildings in the central business district must have fire and earthquake resisting structures. Consequently, it is feared that they might be turned into new slums.

#### B. *Limits of Public Housing*

To meet the postwar housing shortage, the local governments built publicly-owned housing for low income groups while the Japan Housing Corporation (Nihon Jūtaku Kōdan) carried out the role of meeting the shortage among middle income groups. At present, there are considerable numbers of large housing estates (*danchi*) in the surrounding areas of the large cities, and for the most part, these have been built by the Housing Corporation.

It might be true that they played a major role in meeting the housing shortage in the early postwar years, but as the needs for housing in the cities change from quantity to quality, this role is now reaching a turning point.

When very large housing estates are built, they bring considerable change and dislocation to the traditional patterns of life of the original inhabitants of the surrounding areas. Furthermore, the new occupants will demand various facilities in the community for their daily life. All the basic services, from water supply and sewerage to nurseries and schools will be required, and there has been a strong reaction to a situation in which original residents of the area bear the burden of providing the new facilities. Accordingly, the following conditions for the construction of new housing estates have been proposed:

(1) When an estate is built within the administrative area of a city, town, or village, residents in the area should have preference if they wish to live in the new buildings.

(2) The Housing Corporation should "cooperate" in the construction of the new roads and schools required.

If these proposed conditions turn out to be ineffective, new, extensive construction of housing estates would be increasingly difficult.

The publicly owned housing for low income groups has been part of the social welfare policy until now, but confronted with demands for a fair welfare policy within the greater problem of the conflict between present occupants and the growing number of those seeking accommodation, this organization too is reaching a turning point.

### C. Residential Environment

As the functions of urban living develop particular characteristics and differentiate, the apartment buildings and blocks of flats which contain compact, capsule-like units providing at high concentration for the functions of everyday life are being developed into collective housing systems at a rapid pace. Japan is not an exception in the general worldwide tendency of urban architecture to multi-story building, not only for office buildings, but for housing as well.

However, the resistance to multistory buildings of residents in the surrounding one or two story dwellings, demanding sunlight and environmental improvement, is gradually growing stronger. It may be said with some certainty that in the large cities, the construction of multistory buildings, except in the central business districts, will increasingly become in practice, although not necessarily in theory, an impossibility, because of the enforcement of new town planning legislation which permits citizens' participation in decision-making process of town planning.

Within the development of this sort of urban housing problem, an increasing concern by the average citizen for the quality of the space in which he lives, i.e., the environment, may be seen. Thus the precondition for the emergence of a new consciousness which may lead to a new sense of community in Japan's urban society has appeared.

## V. THE OUTLOOK FOR THE TRAFFIC PROBLEM

In the urban traffic problem, as was pointed out in the Section II, the difficulty arises because the National Railway, as before, plays a decisive role in formation of urban structure. This role, through which the eastern coast between Tokyo and Osaka has been transformed by the New Tōkaidō Line into a giant megalopolis will continue to influence the future formation of urban structure.

According to Tanaka's plan for rebuilding the Japanese islands, the extended network for the new high-speed train system when finally completed will have a total length of nine thousand kilometers. However, the New Tōkaidō Line, has had a significant effect on the surrounding areas different to other train lines. The effect has been the transformation of Tokyo and Osaka, and the intervening areas into one vast urban area, in which the New Tōkaidō Line acts as an axis around which the whole megalopolis revolves. In other words, Tokyo and Osaka are developing a relationship similar to that between Marunouchi and Shinjuku in Tokyo. This means in fact that the whole belt area along the Tōkaidō Line has become just like one city area. However, it is indeed a different matter as to whether the development of the Pacific Belt in this way is desirable or not. What must be pointed out at this stage is that in discussing the traffic problem in this country, it is impossible to ignore or circumvent the existence of this megalopolis and axial function of the new train line system.

The prime minister's book states that if the possibilities of mass communication in society are realized, it will not be necessary for people in country areas to come to Tokyo and Osaka to have a stable and satisfied life, because the necessary information and communication will be provided by television and other media. However, this way of thinking is not adequate. When human beings receive information, they select from what is received that which is required and act upon it. Information promotes and furthers human activities. Furthermore, the sources of information are placed in Tokyo, Osaka, and the other large cities, which may be reached in a short time by the new railway system. Consequently, the tendency for people to concentrate in the large cities will increase even more. It is not likely that people will be content to simply receive information only at a distance, and continue a quiet, dull existence.

Accordingly, with the progress towards a mass communication society, the traffic in, to and from the cities, particularly the large cities, will increase even more, so that naturally, congestion will become still more severe, both for traffic within the cities and for inter-city traffic, should no countermeasures be taken. If many-sided contact between large numbers of people is not possible, then the city loses its life and essence.

### A. *Proximity of Dwelling and Working Places*

The merit of urban living is the separation of work-place and dwelling, and depending on the distance which separates the two, the transport system will require appropriate modification. However, in the final analysis, it is impossible

to limit the amount of traffic generated, so that reduction of the distance is the only available choice. Particularly in the areas around the large cities, the commuting distance to the central business district has gradually extended, and will soon reach a stage when it is at its furthest limit. Consequently, it has become necessary to adjust the distance between home and work-place, so that they will be in closer proximity.

In the English new towns, this principle of proximity of work-place and dwelling has been applied in attempting to limit increasing amounts of traffic entering the London area. Even in Japan, areas to which the name of "new town" are attached have been constructed around Tokyo and Osaka, but in all cases they are no more than bed towns, and may even be regarded as a cause of generation of commuter traffic to the central business areas. In the construction of more of these new towns, if the policy of giving priority to the construction of dwellings continues, one cannot but say that the expectations for an effective countermeasure to excessive traffic densities will be fruitless.

#### B. *Directions toward a Twenty-four-hour City*

If we consider that the road to a total mass communication society is one which we cannot avoid, then the continued feasibility of an urban life pattern divided into the two sections of night and day is a problem which must be taken up. Already, in the field of leisure and recreation, the tendency to wide adoption of the "nighter," that is, an all-night session as opposed to a daytime session is gaining in strength and popularity. Further, not only in the field of leisure but in business and social activities, the direction toward uninterrupted functioning during the night hours is also strong. Still more, in the great cities of the world, information exchange systems are tending toward a state of simultaneous world unification. News generated in New York is relayed immediately to Tokyo. Between New York and Tokyo, there is, however, a time difference of fourteen hours, but the development of information handling systems is tending to reduce this difference to zero.

It is not only possible, but gradually becoming necessary that certain of the functions of places of employment change to a system where they are carried out at night. Furthermore, continuous twenty-four-hour working systems also are not only becoming possible, but necessary. This implies staggered working hours and thus staggered commuting hours, and although as a countermeasure, this is negative rather than positive, it is to be considered as part of an alleviating measure to growing traffic densities in the cities.

#### C. *The Five-day Working Week and Traffic Control*

Until the present time, a man's home has been a place of rest, and also a place of recreation. However, on one hand, individual dwelling units have become progressively smaller; on the other hand, collective dwelling complexes have appeared and dwelling spaces in the cities, with their various machines and tools all lined up, have become increasingly like the interior of a space capsule. More and more, the dwelling is ceasing to be the place of rest that it once was.



At this point, we have the introduction and increasing acceptance of the five-day working week. Until now, because in the handling of information, there were many areas requiring direct man-to-man communication, so that city dwellers left home every morning for work at the same time and worked together in the same places. However, if accumulated information is classified and stored and can be easily obtained when it is necessary, the possibility of the readjustment of the present system where people go to work on the same day at the same time becomes reality. Furthermore, as people's interests in extended vacation increase, the traffic problem could also be considered from the viewpoint of readjustment.

Considering countermeasures employed in the urban traffic problem until the present time, it cannot be said the policies adopted, i.e., limits on the use of the motor vehicle, limits on vehicle production—chiefly a general denying of “the automobile society”—have been sufficient. How this problem and effective countermeasures develop remain to be seen as yet.

## VI. CONCLUDING REMARK

Japan's urban policy has been developed to serve the will of “those above” or the rulers, especially in the postwar period of the reconstruction and development of business and industry. It may be said successful in the light of the enormous extension of the functions of Japanese cities in a relatively short period of time. It should also be said, however, that such a policy itself is also the underlying cause of the present state of paralysis of city functions. As has already been mentioned, the resistance of inhabitants against the projects of the National Railway, new industrial city programs, and others leading to environmental disruption is becoming increasingly strong and widespread. These movements of resistance should not be taken as showing the narrow selfishness of inhabitants turned against the benefit of the whole of society, but as the symptoms of the shortcomings of urban policy, now emerging on the surface. This is the reason why it should be pointed out that Japan's urban policy is now at the crossroads. Urban policy should be reviewed and reconstructed thoroughly, of course, in close coordination with other economic and social policies, in which the most importance should be to what extent the new target of policy would reflect the benefit of inhabitants, as human beings.

The Japanese archipelago has a characteristic regional formation of its own, and even in the development of the cities themselves there have been aspects differing from countries elsewhere. In the future, as in the past, the Japanese, as human beings, will surely create new means and ways of bringing new life to the cities which are symbols of their prosperity.

## REFERENCE

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