

ACHIEVEMENTS AND PROBLEMS OF JAPANESE URBAN PLANNING (1)

—Ever Recurring Urban Dual Structures—

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SUMMARY

This article is based on an unpublished paper read at the Tokyo International Symposium 1988, Centennial Anniversary of Modern Urban Planning Legislation in Japan, held on November 9, 1988.

Japan, a country that was late in becoming capitalistic, has adopted the policy of 'catching up and outstripping' the other capitalist nations in every field, and urban planning has been no exception to this policy. However, in early years of Meiji, the conditions of cities in Japan differed greatly from those in Western countries. The national and urban structures of Japan in the early years of Meiji existed as a dual system, one of growth and the other of stagnation and decline, and had many problems to be solved including the contrast between Daimyo mansions and 'Munewari-nagaya' (back-to-back tenement houses), unpaved streets, disastrous fires, and contagious diseases such as cholera and typhoid. Solving these problems and remodeling the entire area of Tokyo was beyond possibility. Then came the idea that urban remodeling must be conducted by limiting to a demarcated specific area and to a few issues on which Tokyo should concentrate its energies, and promote them positively as national projects. And this become one of the characteristics inherent to Japanese urban planning.

The achievements of Japan's modern urban planning may be brilliant. But it must be remembered that these achievements were attained by improving only the important areas, town center and sub-centers such as Marunouchi and Shinjuku, repeatedly, and leaving the difficult tasks behind or creating new low-standard urban areas such as 'Moku-chin zone' to be improved. In this way, the dual structures for urban areas remain unaltered, though different in their ever-changing forms. We may term this procedure as 'ever recurring urban dual structures'.

Now we must reconsider the characteristics of Japanese urban planning and reexamine the prosperous aspects of economic and cultural vitality of the ever growing Metropolis;

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Tokyo. Moreover, we must clarify many problems behind the prosperity and problems which could evolve in the near future, and propose the measures to manage sustainable metropolitan growth.

Introduction:

Headed by Tomomi Iwakura, the Japanese mission to Western countries arrived in Paris on December 16, 1872, after visiting England. Paris at that time had only recently changed its appearance through a great renovation conducted by Napoleon III and G.E. Haussmann. Although the City of Paris still remained in slight confusion after the Commune of Paris, it was magnificent enough to surprise the members of mission who journeyed all the way from Japan. Every member of the entourage, including ambassador extraordinary and plenipotentiary Iwakura, fully realized a big difference in city quality from the conditions of Japan in those days. The Japanese mission members had heard that until 100 years before their visit, Paris had been a confusing community with narrow roads and stores and houses mixed up in complete disorder [Kume, 1878, Iwanami-bunko ed, Vol. 3: 43-53]. Through this information and seeing this grand city all around them, they quickly recognized the necessity of urban renovation in Japan. They apparently also felt it was their responsibility to make it possible.

For more than 100 years since then, Paris and London, and other European and American cities have constantly been a target image for Japanese urban planners, and their urban planning and urban planning technology has also been an example to follow [2].

Japan, a country that was late in becoming capitalistic, has adopted the policy of 'catching up and outstripping' the other capitalist nations in every field. Urban planning has been no exception to this policy. This first contact with European and American cities and their methods of urban planning and development has to this day strongly influenced the character of Japan's urban planning, greatly influencing both successful results and issues still to be resolved [3].

Priority Given to the Possibility of Implementation:

In the early years of Meiji, the conditions of cities in Western countries differed greatly from those in Japan. The record of the Iwakura mission to America and Europe [Kume, 1878] repeatedly describes the development of streets, especially pavement of streets. Because streets in Japan at that time were narrow, unpaved, and had no sidewalks. Even in Tokyo, they became as muddy as paddy fields or rough and dry enough to raise a cloud of dust — depending on the weather — making it extremely difficult for all vehicles. But streets in large European and American cities were completely paved, allowing a constant, smooth stream of traffic. The Japanese mission members realized that road development would be of supreme importance to support urban prosperity and thus the economic growth of any country [Kume, 1878, Iwanami-bunko ed, Vol. 1: 195-199]. However, to widen and pave all the streets in Tokyo, which were said to total 800 kilometers, was inconceivable at that time.

A reconstruction project after a disastrous fire in 1872 began with the policy that Tokyo would be totally rebuilt with brick houses and buildings, which would help protect it against frequent big fire.

This project, however, was discontinued after constructing only the Ginza brick street area. Clearly, remodeling the entire area of Tokyo was beyond possibility [Fujimori, 1982: 1-44].

Then came the idea that urban remodeling must be conducted by limiting to a demarcated specific area and to a few issues on which Tokyo should concentrate its energies. In 1880, Michiyuki Matsuda, the then Governor of Tokyo, circulated a memorandum entitled "*Tokyo Chuou-Shiku Kakutei no Mondai* (The Issue of Demarcation and Improvement of the Central District of Tokyo)." This document expressed a concept that the very core of Tokyo should be immediately demarcated as the central district on which urban remodeling efforts must be concentrated to realize an urban area equivalent to European and American cities. To achieve this, it was even insisted that the poor and shabby dwellings, 'Ura-Nagaya' (rear tenement houses) should be expelled from the Tokyo central district. This insistence was the primary subject of enthusiastic arguments on the Tokyo urban improvement project then under way [Ishida, 1979].

Thus, urban improvement planning began with what was possible by giving priority to important tasks, promoting them positively as national projects for the rapid progress of Japan's capitalism, which was then severely behind the Western nations. And this became one of the characteristics inherent to Japanese urban planning.

The tasks that need to be achieved to help further the rapid progress of Japanese capitalism included the creation of heavy and chemical industrial zones to support the progress of the nation's capitalistic economy. Also included was the development of a big city, notably Tokyo, as Japan's political and economic center and the development of its central business and commercial district..

Dual Urban Structure in Many Aspects:

The national and urban area structures of Japan in the early years of Meiji existed as a dual system: one of growth and the other of stagnation and decline. These contradictions were most obvious in political, economic, and social conflicts such as those between central and provincial areas, rulers and subjects, and rich and poor which reflected deep roots in many years of feudalism.

Although feudalistic, however, the Edo periods (1615-1867) had been characterized by political and economic systems that functioned under the powerful centralization of the shogunate form of government. This allowed Edo, which was renamed Tokyo in 1868, to grow into an enormous city with a population of more than one million and thrive as the political, economic, and cultural center of Japan. In contrast to the provinces, which were based on the agricultural, forest and fishing industries, Edo was the capital city and had the functions of a unipolar centralization. This was the national level aspect of dual structure.

The urban structure of Edo was biased and also showed dual structure: 70% of the urban area, 'Buke-chi' was occupied by daimyo and samurai and only 15%, 'Machi-chi' by townspeople and the remainder consisted of temples and shrines. An almost even population, about 500,000 people, lived in both of Buke-chi and Machi-chi. Showing very high density, approximately 600 persons per hectare, the Machi-chi (residential area of townspeople), was vastly overpopulated with many wooden 1 or 2-story houses. In contrast, the daimyo or feudal lords, owned several large mansions; 'Kami-yashiki' (main residence and office), 'Naka-yashiki' (sub residence), and 'Shimo-yashiki' (villa), throughout the city of Edo.

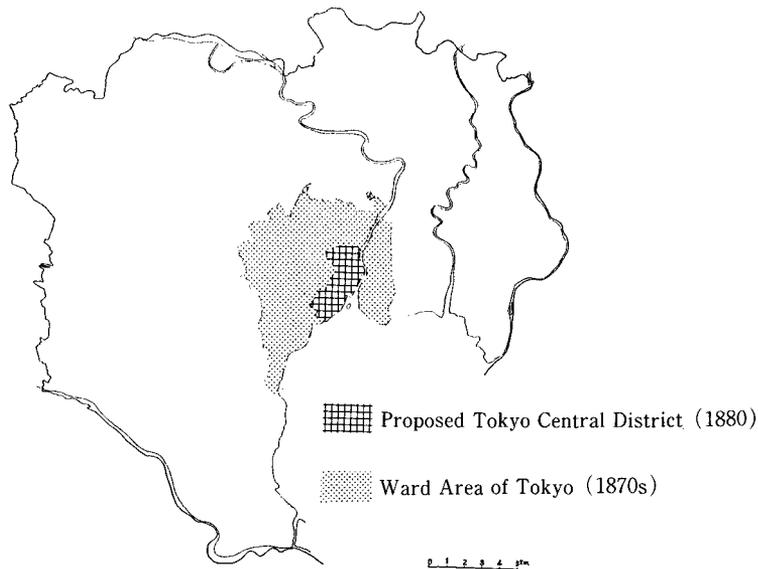


Fig-1 Tokyo Central District proposed in 1880

This was one aspect of dual structure in Edo.

Furthermore, the Machi-chi, townspeople area, consisted of square superblocks that were approximately 100 meters by 100 meters in size, and each block was divided into the 'Omote-chi' (frontal lots) and the 'Ura-chi' (rear lots). The Omote-chi, depth of which were about 9 meters, were occupied by prosperous merchants and their stores, and the Ura-chi, which could not face the street, were clustered with 'Ura-nagaya' (low-quality and ultrahigh density rear tenement houses) for the poor, the artisans, and the day labourers, jammed into their squalid quarters at the rate of 1000 or more persons per hectare. This was another aspect of dual structure in Edo [Tamai, 1986].

In feudal age, as mentioned above, the dual structures were being found in many levels; the national level dual structure between the enormous city of Edo and the provinces, the urban level dual structure between the Buke-chi for the samurai and the Machi-chi for the townspeople, and the residential level dual structure between the Omote-chi for middle and upper-class and the Ura-chi for the poor. And these multi-level dual structures were inherited by the early years of Meiji.

Dual Structures Remaining up to Now in a Different Form:

It has been more than 120 years since Japan's modernization began with the Meiji Restoration (1868) and over 100 years since an urban planning system was established by the Tokyo Urban Improvement Ordinance (1888). But, have the dual structures of national and urban area been dissolved? Certainly, urban problems facing Tokyo 100 years ago, including the contrast between Daimyo mansions and 'Kushaku-niken no Munewari-nagaya' (2.7m by 3.6m back to back tenement houses), unpaved streets, disastrous fires that could easily destroy several thousand of houses at time, and contagious diseases such as cholera and typhoid, were all solved. And Tokyo has continued to thrive as a highly vigorous

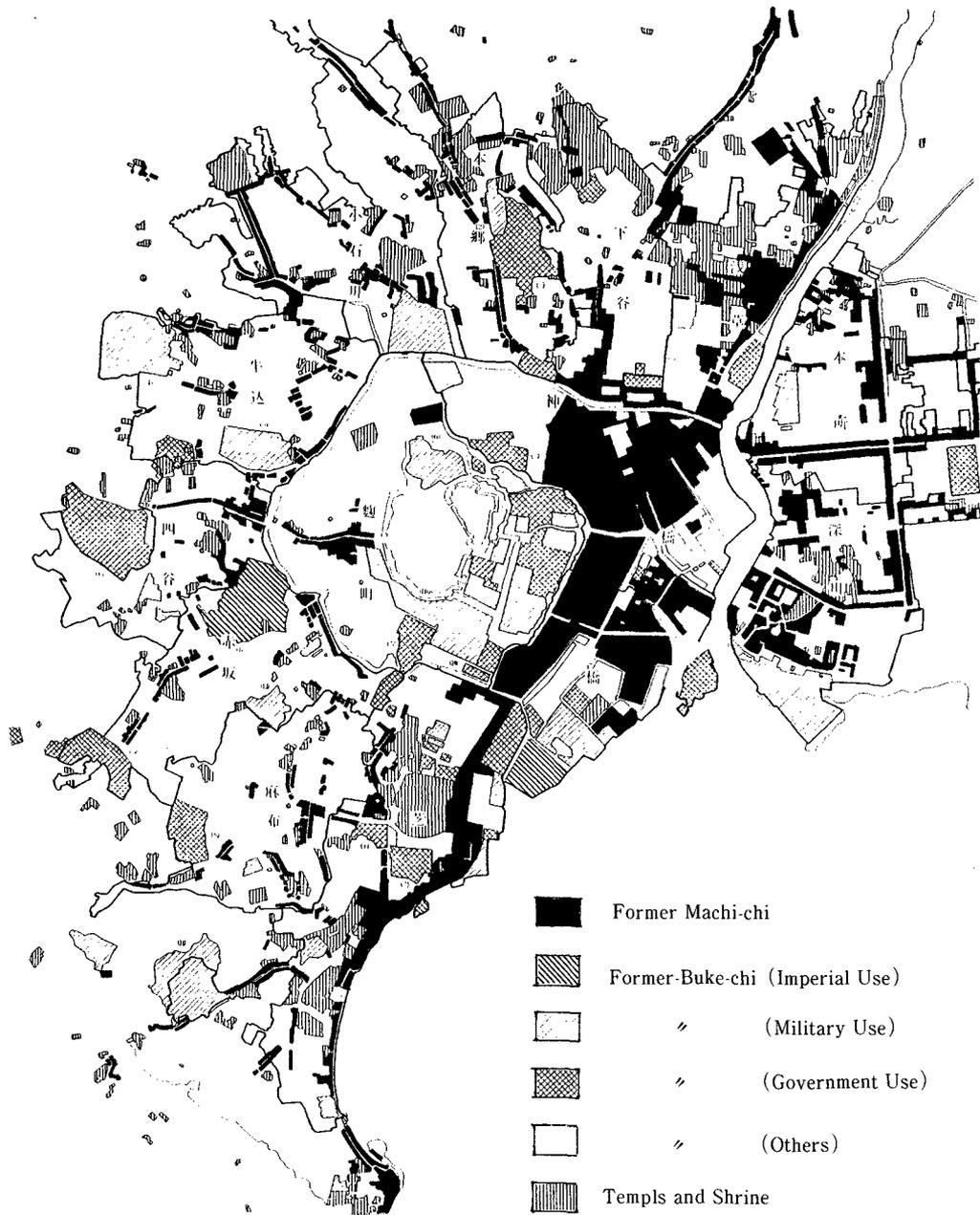


Fig-2 Land Use of Tokyo in 1870s (Ishizuka, 1968)

and attractive city and serve as a global economic, financial, and information center. Although it has twice suffered heavy damage during the past 100 years — first by the Great Kanto Earthquake of 1923, then by air raids in World War II — no discernible indications of this damage remain today.

The characteristics included in the first Japanese urban planning programme back in 1880s remain

completely intact today. In other words, the method for demarcating districts and limiting the tasks and objectives achievable in the short term and promoting them positively as national projects have been applied to rapid progress of urban renovation. Consequently, midtown areas and sub-centers of Tokyo have been repeatedly improved during the progress of urban renovation, and this has achieved successful result. On the other hand, however, belated and insufficient urban planning has given rise to new urban problems and low-standard urban areas. For example, an area clustered with so called "moku-chin" (wooden lease) apartments along the Yamate line, a loop urban railroad, was formulated in the years around the enactment of the 1919 Town Planning Act, because of delays in applying the techniques of urban planning for controlling urban expansion to rapidly advancing urbanization. Today, nearly 70 years later, the problems of this areas have remained unsolved, becoming more complicated and serious as the years pass. In this way, the dual structures for urban areas remain unaltered, though different in their ever-changing forms.

The problem of unipolar centralization of Tokyo, which is the most important task to be solved by today's national development planning, is the inherited problem, though in a different form, from the dual structure in feudal age; between the enormous city of Edo and the provinces.

The achievements of Japan's modern urban planning may be brilliant. But it must be remembered that these achievements were attained by improving only the peaks, the town center and sub-centers, repeatedly, and leaving the difficult tasks behind or created new issues to be solved.

Repeatedly Improved Midtown and Sub-center:

Marunouchi

The midtown and sub-center areas of Tokyo have been repeatedly improved since the Meiji Restoration. Taking the Marunouchi district for example, where, aiming at the 21st century's CBD, the high-density redevelopment plan of 2000% floor/plot area ratio was proposed recently [Mitsubishi Jisho Co. Ltd, 1988], the author intend to discuss how the midtown area has repeatedly been improved and has acquired its superb conditions for the CBD.

This district was improved during the Edo period for Kami-yashiki for powerful daimyos and used not only for their residences, but also for what today we would call offices. After the Meiji Restoration, the government requisitioned the district for use as military area, and in 1890, it was sold to the Mitsubishi Company, marking a major step toward the company's establishment of a business center in Tokyo. Of chief significance is that the Estate Division of the Mitsubishi Company, the present-day Mitsubishi Jisho Co. Ltd., as the district's single landowner repeatedly invested in the construction of buildings, and modern superblocs thus evolved according to the Tokyo Urban Improvement Plan decided on in 1889. No reconstruction projects were implemented in the Marunouchi district following the Great Kanto Earthquake of 1923, mainly because this district had suffered almost no damage. However, reconstruction projects in the damaged surrounding area, improved the road system and transportation facilities connecting the district with the rest of the city, and helped to enhance the status of the Marunouchi district.

What made Marunouchi's position unshakable as the business center was the concentrated improvement of transport facilities at all levels: within the city, between cities, and throughout the entire nation.

Beginning with the establishment of Tokyo Station in 1914, these transport facilities have been repeatedly improved, resulting in what today is an extensive railway network centering on Tokyo Station (a complex of one ground level station and two underground level stations). Nationwide trunk lines include the Tokaido, Tohoku and Joetsu Shinkansen bullet train lines and the conventional Tokaido trunk line. Medium-distance transport facilities within the metropolitan area include the Tokaido local, Yokosuka, Sobu, Keiyo railway lines, and suburban commuter lines include the Chuou and Keihin-tohoku lines. There is also the Yamate line, which encircles the Tokyo ward area in a broad loop connecting main sub-centers. In and around the Marunouchi district there are 7 subway lines routes and 6 of which are directly linked with suburban railways and conduct mutual through-operations [Hirose, 1988].

The Meiji Restoration changed the Marunouchi district from a area of daimyo mansions to military facilities. Henceforth urban renovation projects, along with repeated improvement in transport facilities, have successively converted the area to brick street commonly known as "One Street London," through a modern American style office building area, and then to a world-famous CBD. The Marunouchi of today is a teeming urban center of busy streets connecting row upon row of high floor/plot area ratio office buildings.

Similarly, the Ginza district, Tokyo's midtown commercial center, has since 1872 been repeatedly improved by construction projects that included the brick building streets project, and by the reconstruction project after the Great Earthquake of 1923. Transportation has also been immensely improved: from stagecoach to horse tramway and streetcar, and now today's extensive subway network that is being expanded.

Shinjuku Sub-center

Regarding the Shinjuku sub-center of Tokyo, which was called Naito-shinjuku during the Edo period, it thrived as a Shukuba-machi, a post town along the Koshu-kaido Road, and also as an amusement quarter on the outskirts of Edo. When the Yamate railway line was opened by the Nihon Tetsudo Railway Co. in 1885, the station was established in Naito-shinjuku. With this station as the terminal, suburban private railway lines such as the Seibu-Kidou, Keio, and Odakyu lines were constructed from the 1910s, providing a basis for this district's progress as a key point connecting Tokyo and its suburbs.

Now let's take a look at some of the characteristics exhibited by urban projects in this district. Many interesting urban planning projects, which were the first cases of such type of projects in Japan or in Tokyo, were since been implemented in this area. For example the Shinjuku 3-chome area was destroyed by disastrous fire in 1921, and amid the ruins a reconstruction land readjustment project was implemented through the procurement of road site according to designated building lines and through voluntary exchange and consolidation of titles and leaseholds to estates. This project was the first case of the land readjustment implemented for urban built-up area in Japan since the land readjustment system provided in the 1919 Town Planning Act and was a trial effort that was developed into the reconstruction land readjustment project after the Great Kanto Earthquake in 1923 [Ibe, 1931].

The Shinjuku sub-center area currently clustered with skyscrapers was converted in 1960s from the Yodobashi water purification plant. The plant was originally constructed in the first half of 1890s during the city water betterment programme of the Tokyo Urban Improvement Project. So, the decision to change the site of the water purification plant from the first planned site near Yotsuya-ohkido, was the root of today's Shinjuku sub-center. In 1934, the factory site of the Monopoly Bureau, Ministry of

Finance in the rear side of the Shinjuku Station (today's West exit) was developed into a station-front plaza. At the same time, land readjustment project were implemented to create blocks for the construction of multi-story buildings through excessive condemnation of surrounding land. The land readjusted under the project had a minimum height regulation on buildings, and tenders were received on the condition that construction should be started within three years. This project was based on the technique of "land readjustment for site improvement" through excessive condemnation stipulated for in the 1919 Town Planning Act, which had been implemented in only three cases until the clauses for the technique was repealed in 1954 [Suzuki, 1988].

For the area between the site improvement land readjustment area and the Yodobashi water purification plant (now the Shinjuku sub-center), the plan for an ordinary land readjustment project was determined in 1936.

The main project of war damage rehabilitation town planning after the World War II in the Shinjuku district was the land readjustment project for the surrounding area of the Shinjuku Station, a total area of 44 hectares, including both of the Nishiguchi (West exit) and Higashiguchi (East exit) area. This was



Fig-3 Street Pattern of Shinjuku
(Showing contrast between sub-center area and others)

thus the second improvement project for the Shinjuku Nishiguchi (West exit) area. In the war rehabilitation land readjustment project in the Nishiguchi, it was curious that the area of station front plaza was once reduced to about two third of previous area and recovered again by land readjustment project. The reduced one third of previous plaza area was converted into the site of the station building (today's Odakyu department store).

Regarding the Shinjuku sub-center today, land utilization is undeniably too high in density, 1.7 to 1.8 times the original planned floor/plot area ratio [Yamada & Suzuki 1989]. However, this can be considered a successful case of Japan's modern urban planning and not suffering by comparison with that of Western countries. Repeated urban planning projects executed for the Shinjuku district, and the construction of transport facilities that began with the opening of Shinjuku Station by the Nihon Tetsudo Co., provided the basis of the Shinjuku's development. Now in the Shinjuku Nishiguchi district, where the new office buildings of the Tokyo Metropolitan Government opened recently, the need to improve infrastructure, such as station front plaza, access road to the sub-center district and new subway line No. 12 is keenly felt.

It must be remembered that all these town planning projects executed by the public created high development potential for the district and provided inflated development profits for land owners of the district. However, the betterment levy system in Japan has been insufficient to recoup funds which have been invested by the public to improve the infrastructures for the district.

The Successful Aspect of Japan's Modern Urban Planning:

The midtown districts, such as Marunouchi, Ginza, Kasumigaseki, and Ohtemachi, the sub-center districts, such as Shinjuku, Shibuya, and Ikebukuro, and the infrastructures supporting all these districts have been improved to keep pace with enhanced international position of Japan and Tokyo, or even more rapidly than that pace. Having filled the great gap in quality between Tokyo and Western cities of 100 years ago, Japan's capital now ranks in efficiency with them and in some aspects exceeds them. This evaluation can also apply to the midtown areas of other principal Japanese cities.

In the course of development, road, railway, and subway networks especially have been improved one after another, creating the vital hubs of transportation that produced the locational potentiality of urban land utilization. In the postwar period, a policy to decentralize low utilized land within midtown areas has been consistently taken. Industry was first decentralized, followed by distribution, research, higher education, and freight train transport; these sites were converted for grand-scale land utilization, thus changing the urban structure. Setting aside how much these results were calculated and planned, these remodeling projects should be accepted as successful because they have continued to support such a rapid expansion and functional development of Tokyo and the metropolitan area as we experience today [Kawakami, 1990].

The Low-Standard Urban Areas Affected by Edo's Urban Structure

So far, I may have been too optimistic in describing the successful aspects of Tokyo's urban development. As I pointed out earlier, the urban structure of Tokyo was originally that of dual structures with

Buke-chi and Machi-chi, front and rear, namely, the sunshine and the shade. This is true, more or less, of cities in any country. But in Tokyo, the problem is that the dual structures have not yet been totally solved even today.

Historically, low-standard urban areas in Tokyo are of two types. One takes over the problems of urban areas started in Edo, and the other results from nonexistent, belated, or improper urban planning after the Meiji Era.

In the urban areas of Edo, the townspeople areas were extremely overpopulated, and the so-called rear tenement house zones were especially poor living environments, as I briefly stated earlier. These overpopulated areas and the poorest districts called the Four Notorious Slums of Edo as well, remained in the Meiji Era. Today, not only these slums and but also back-to-back tenement houses have already been eliminated.

However, the poor standards for urban areas that inherited from the Edo period to the Meiji Era have evolved to present-day low-standard urban areas. An example is the narrow roads, known as the 'Niko-doro' system. This system exceptionally authorizes sites along roads whose widths are less than the statutory minimum of four meters as qualified building sites. At present, about two thirds of the housing sites in Tokyo are under this authorization to make building possible. This system originated in the status of road system in Edo. In the urban areas of Edo, main roads encompassing approximately 100 meters by 100 meters superblocks exceeded three 'ken' (5.4m) in width, however, only frontal buildings were along such roads, while a majority of rear buildings in the superblocks faced alleys of only 0.9 to 1.8 meters wide. The configuration of narrow roads and building sites in Edo's urban areas remained through the Meiji Era and through the course of the reconstruction urban planning project for the Great Earthquake of 1923, and it is still found today in many areas in Tokyo.

Moreover, the 1919 Urban Building Act, predecessor of today's Building Standard Act, regulated the minimum width of roads along which houses were built to be about 2.7 meter following the narrow alley conditions from the Edo period, and this very low standard had maintained until the 1938 revision of the Act. Urban areas newly built nationwide from the 1920s to the 1930s were based on the low-standard urban areas of the Edo period, leaving today's Japan with an extremely serious problem [Katoh & Ishida, 1987].

New Low-Standard Urban Area:

Even after the enactment of the Tokyo Urban Improvement Ordinance in 1888 and the establishment of the Japanese urban planning system, because of its imperfection, delayed or improper application, the urban planning system created many new low-standard urban areas. In Tokyo, for example, we can mention as such areas, wooden lease apartment belt which were built in so-called 'Dark Age of Urban Planning' from 1900 to the 1920s and have since been left disordered and high in density; industrial and semi-industrial districts which are scattered throughout suburban residential areas as a result of the munitions plant dispersion policy during the wartime; the sprawl of urban areas extending 20 to 30 kilometers from Tokyo's center have resulted from the poor green-belt policy [Ishida, 1978]; and high floor/plot area ratio condominiums and their clustered districts which were the results of the period from the 1950s to the 1960s when the floor/plot area ratio regulations and the Act for the Divisional Owner-

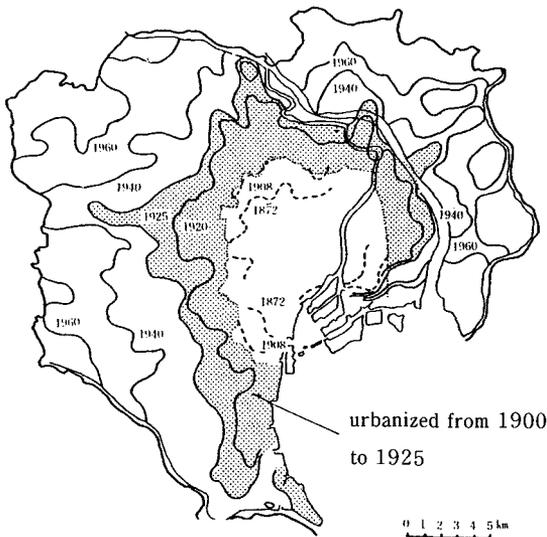


Fig-4 Low-Standard Urban Areas Urbanized from the 1900s to the 1920s

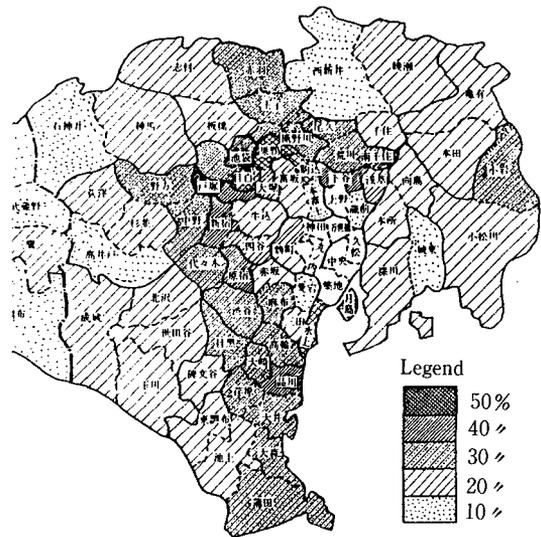


Fig-5 Ratio of Moku-chin Apartment Units to total Houses (Miyake, 1971)

ship of building did not exist.

The author intends to focus briefly on the wooden lease apartment belts. This area is an overpopulated, low-quality housing area shaped like a ring along the Yamate line about 10 kilometers from the center of Tokyo. Because the ratio of wooden lease apartments is very high, this area is called "Moku-Chin" apartment area. Word 'Moku-Chin' is an abbreviated form for 'Mokuzou Chintai Kyodo-Jyutaku (wooden lease apartment)' and also a pun written in the same Chinese characters as "Kichin-Yado" or cheap lodging house, which was the residential facilities for the lowest class of urban citizens from the Edo to the Meiji Era.

There are three reasons why this area was formulated. First, the area was urbanized from the 1900s to the early 1920s, a period when Tokyo had no effective building regulations. Second, it was not covered by reconstruction urban planning projects even though many parts of areas were damaged by air raids during the World War II. Third, many wooden lease apartments were built in this area for low-income young labourers who concentrated in Tokyo during the period of high economic growth and whose residential locations were strictly limited, which resulted in overpopulation [Miyake, 1971].

Regarding the first factor, several attempts were made in Tokyo to enact a building ordinance during the Meiji Era, but all met failure, and an urban expansion began in the 1900s with no building regulations. In 1919, by enactment of the Town Planning Act and the Urban Building Act, planning control measures for creating new urban areas such as zoning, building line system and land readjustment were established. However, the Great Earthquake of 1923 caused the Urban Planning Bureau to concentrate its energies on the reconstruction without attending to the suburbs, thus leaving these new measures unapplied to urban expansion until 1925. Triggered by the earthquake, a grand-scale reconstruction was implemented as a national project, and it improved the center of Tokyo to the level it deserved as the capital of Japan, a capitalistic nation, in the short span of only 7 years. As implied by an old proverb,

"turning misfortune into a blessing," this was a great success in urban planning of Tokyo. However, it is extremely regrettable that huge low-standard urban areas were allowed to exist. Furthermore, it remains a problem that although midtown and sub-center areas have been repeatedly improved, such low-standard urban areas have remained unimproved for six to seven decades, and today they are more overpopulated and deteriorated than ever, and gradually changing into residential quarters of ethnic people. The current wooden lease apartment belts form a great challenge to be dealt with in the urban planning of Tokyo.

Uncertainty behind Success:

I have discussed the aspects of success in Japan's modern urban planning and on the other hand failure i.e., formulation of low-standard urban areas by using Tokyo as an example. The improvement and solution of low-standard urban areas, namely, the elimination of the dual structure in a city, are an important yet heavy task to be achieved in the urban planning of Tokyo. Also, a solution to the problems of unipolar centralization on Tokyo that suggests "the country of Tokyo" with all other Japanese districts regarded as other countries, namely, the dual structure in a national perspective, is a task of prime importance facing Japan in regional and urban planning.

Here, the author intends to discuss the matter by focusing especially on the tasks which still remain to be solved behind the aspects of success in the urban planning of Tokyo; namely the prosperity of the midtown and sub-center areas.

The infrastructures currently supporting the development of these areas are by no means sufficient for urban activities. For example metropolitan expressways are jammed daily, and so are the ordinary roads in Tokyo. Although the number of automobiles has continued to increase this decade, road improvement and enlargement of parking space has become more difficult because of financial problems in both the central and local governments and because of soaring land prices. As a result, it is quite difficult to make an estimate for an urgent improvement in the situation.

Ever since the 1960s, commuter transportation facilities have been enhanced through heavy investment to improve the subway network, increasing capacity by through-operation of suburban private railways and subway services and strengthening by four-track line operation of JR (Japan Railway Companies; former Japan National Railway Corporation) lines, thereby meeting growing demand in transportation [Hirose, 1988]. However, it is impossible to improve the present situation that requires many commuters to withstand long-hour, long-distance, and overcrowded conditions. In the 1980s, the population of Tokyo metropolitan areas has tended to decentralize rapidly again to the suburbs. This has been brought on by the conversion of land utilization in Tokyo urban areas, mostly to office building sites. Therefore, it is inevitable that construction works for more commuter transportation facilities hardly realize by using the underground at great depths and by a system for taking future transport improvement costs in advance which adopted by the private railway companies in 1988.

Such difficulty can apply to other urban facilities including, for example, electric power supply, city water and sewerage systems, and garbage treatment.

Conclusion:

In 1973, several serious incidents occurred over the urban problems of Tokyo; 'the Riot at Ageo Station' by angered commuters; 'Garbage War' between Koto Ward and Suginami Ward; direct legislative movement of 'Sunshine Regulations'. In the same year, the Economic Planning Agency published the Interim Checks on "Shin Zen-so (the 2nd Comprehensive National Development Plan)" that candidly points out limits of an enormous city: Tokyo. This argument resulted from consideration of the urban issue in a period of high economic growth and of the pollution problem. Unfortunately, it is hard to say whether adequate discussions were carried out about what measures should be taken involving the limits of such a growth of an enormous city and how the problems could be overcome. However, an earlier report, "Basic Direction for Urban Improvement from Long-term Point of View," had been submitted in 1979 by the Central Planning Council to suggest an essential basis for such discussions [Kensetsu-sho, 1979].

In the 1980s, urban planning conditions have greatly changed because of various factors. These include the national policy of 'Kisei-kanwa' (to ease building and urban planning regulations) and 'Min-katsu' (to vitalize the activity of private enterprises), which were actively promoted by Mr. Nakasone, the then Prime Minister, and the increased demand for greater floor space resulting from advanced international and information oriented activities in cities such as Tokyo. This has caused increase of land demand, including speculation, and rigorous construction activities. As a result, land prices have soared unbelievably, allowing "Jiageya" or wicked realtors to engage in secret maneuvers involving lands.

Now we must reconsider the metropolitan growth and reexamine the prosperous aspects of economic and cultural vitality of Tokyo, and disclose many problems behind the prosperity and point out problems which would evolve in the near future, and propose measures to manage sustainable metropolitan growth. It is crucial for us to review history in such a rapidly changing period as today to form a proper outlook for the future. Although it is important to look back on the 100-year history of modern planning in Japan, our review of the past 20 years, or even 10, should bring about several lessons to prevent us from making the same mistakes.

NOTE

[1] This article is based on an unpublished paper read at the Tokyo International Symposium 1988, Centennial Anniversary of Modern Urban Planning Legislation in Japan held on November 9, 1988 [CPIJ, 1989].

[2] In 1889, pictures entitled 'Tokyo in the day of 40 years hence' which were modeled on Paris and London, published in a book by Jyun Okamoto [Fujimori, 1982: 77 & Fig. 29, 30]

[3] As a general perspectives of the Japanese urban planning history please refer the books by the author [Ishida, 1987 a; 1987 b; Ishizuka & Ishida, 1988].

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日本近代都市計画の成果と課題——継続する都市の二重構造——

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要 約

この論文は、1988年11月9日に開かれた「近代都市計画法制の百年記念事業：東京国際シンポジウム1988」で筆者が行なった「日本近代都市計画の成果と課題」という報告を基礎にし、加筆訂正したものである。加筆訂正では、全般的なチェックの他に、会議の時にはなかった図をつけ加え、また、その後の状況を踏まえた訂正、結論部分への加筆なども行なった。

この論文は、東京を中心とした日本近代都市計画の100年以上の歴史を、それが達成してきたことと、やり残したこと、さらには計画の遅れ不適切な運用などによって新たに発生させてきた解決すべき課題などを検証することを通じて考察したものである。

まずはじめに、江戸から東京に引き継がれた日本の国土・都市構造が、繁栄する巨大な江戸と貧しい地方という国土の二重構造、大名が幾つもの屋敷を持つなど江戸の70%を占めていた武家地と、わずか15%の土地に平均で1ヘクタールあたり600人近い密度で人々が居住していたという町地という江戸市街地の二重構造、商人が店を持つ表地と貧乏人の住む裏長屋が密集する裏地という町地の内部の二重構造という重層的な二重構造を持っていたことを述べている。

日本近代都市計画は、そのスタートの時点から、欧米都市の実態に追いつき追い越せを課題にして、対象地域・取り上げる問題を短期間で達成可能なものだけに限り、国家事業として強力に押し進めるという方法をとってきた。その結果、都心・副都心などの重点地域は繰り返し整備する結果になってきていることを、丸の内・新宿などを例に述べた。また、その対極に、江戸以来の過密市街地の影響を残して未解決になっている課題として狭隘道路の問題、都市計画の適用の遅れで劣悪な市街化が行なわれ、その後過密悪化が進んでいる地域として木賃アパートベルト地帯問題を取り上げ、都市の二重構造が形を変えながらも依然として存在していることを述べた。

また、都市計画の成果、繁栄する東京と考えられている現象の背後に、例えば、道路・通勤交通、電力供給、ゴミ処理など、インフラストラクチャーの整備で大きな遅れがあり、重大な不安を残していることを示した。

いま東京は、このような重大な問題をかかえ、不安のない市民生活、安定した都市活動を維持して行くために、「成長の管理」を充分意識した政策をとらなければならない段階にきている。

Key Words (キー・ワード)

Urban Planning History (都市計画史), **Tokyo (東京)**, **Urban Dual Structure (都市の二重構造)**, **Achievements of Urban Planning (都市計画の成果)**, **Remaining Issues (残された課題)**