

Chapter 2

Dialectic Developments of ‘City’ and ‘Country’ in Japan’s Metropolitan Regions

Atsushi Katagi

Abstract Japanese city planning in the 20th century reveals the dialectic developments of ‘City’ and ‘Country’, particularly around the three major metropolitan regions of Tokyo, Osaka and Nagoya. Since land readjustment under the City Planning Law (1919) was based on arable land readjustment, a method to steer the development of arable land was applied to urban areas. In the 1930s, green area plans were drawn up for the Tokyo, Osaka and Nagoya metropolitan regions and subsequently changed into air defense plans, some of which were realized during the Second World War. These metropolises were completely destroyed by wartime bombing and rebuilt according to reconstruction plans. The green area in the Tokyo Reconstruction Plan (1946–48) and the Suburban Area in the First Metropolitan Area Service Project (1956–58), both of which were based on the former green area and air defense plans, were never realized due to the objection of farmers, who became the owners of agricultural land under the Agricultural Land Reform (1947–). Thereafter, the new City Planning Law (1968) divided the city planning area into so-called ‘urbanization promotion areas’ and ‘urbanization control areas’. While many parcels of agricultural land are included in the former, some building activities are allowed in the latter. ‘Agricultural promotion areas’ are separately designated through the Agricultural Promotion Area Law (1969). Some challenging experiments to harmonize ‘City’ and ‘Country’ have been carried out in peripheral areas, even under the current rather complicated legal system.

1 Preface

Ebenezer Howard (1850–1928) originally conceived the ‘Garden City’ as a happy marriage of ‘Town’ and ‘Country’ and intended to allocate self-sufficient regions, each composed of an industrial town (area 1000 acres, population 30,000) and an agricultural country (area 5000 acres, population 2000), around a metropolis to

A. Katagi (✉)
Nagoya University, Nagoya, Japan
e-mail: katagi@corot.nuac.nagoya-u.ac.jp

prevent its infinite sprawl. Although realized Garden Cities such as Letchworth and Welwyn did not develop into economically independent regions, the idea of securing open space of agricultural country in advance was later developed into the notion of the green belt in regional planning.

The current conditions of the three metropolitan regions of Tokyo, Osaka and Nagoya in Japan are instances of the 'City' unhappily encroaching on 'Country'. In the following, the development of organizing 'City' and 'Country' in the peripheries of metropolitan regions through the history of Japanese city planning is examined.

2 From Arable Land Readjustment to Land Readjustment

In Japan, under the City Planning Law and the Urban Building Law (1919), land readjustment was introduced as an effective method of city planning. The land readjustment formulated in the City Planning Law was adopted from the revised Arable Land Readjustment Law (1909), which aimed to regulate paddy fields to larger and more regular lots with straight farm roads and waterways. Arable land readjustment was also used to create a new city area for the first time in the First Imamiya Village Land Readjustment, Osaka (1910). It is important to notice that arable land readjustment for agricultural land and land readjustment for city areas were initially conceived as equivalent and hence interchangeable. Even after the enactment of the City Planning Law, arable land readjustment was still applied to city areas until it was finally abolished in 1931.

In the First Imamiya Village Land Readjustment, Osaka, a block of 108 m × 108 m was defined with narrow streets of 3.6 m in width and divided into halves by a central waterway of 1.8 m in width. Similarly, in the First Section of the Ayuchi Arable Land Readjustment, Nagoya (1920), a block of 54 m × 54 m was defined with streets of 1.8–5.4 m in width and divided by a central waterway of 2.0 m in width. In the Suwa Section of the Complete Tamagawa Village Arable Land Readjustment, Tokyo (1925), a block of 50 m × 50 m was divided by secondary streets and the building lines were newly introduced for the future widening of streets.

The shape and dimension of blocks, lots and streets were discussed, for example, in the 'Theory of Land Readjustment' (1929, Fig. 1) and officially standardized in the Planning Standard of Land Readjustment (1933). Within land readjustment, land allocation was undertaken in two dimensions, similar to arable land readjustment. There was a distinct lack of future vision for a newly created city area, without any detailed regulations neither on usage nor on the three-dimensional design of buildings. Interesting examples were, nonetheless, realized in Nagoya, such as the Eastern Hill Development, Nagoya (1921, Fig. 2), featuring irregular winding streets to accommodate the undulations and irregular shapes of existing

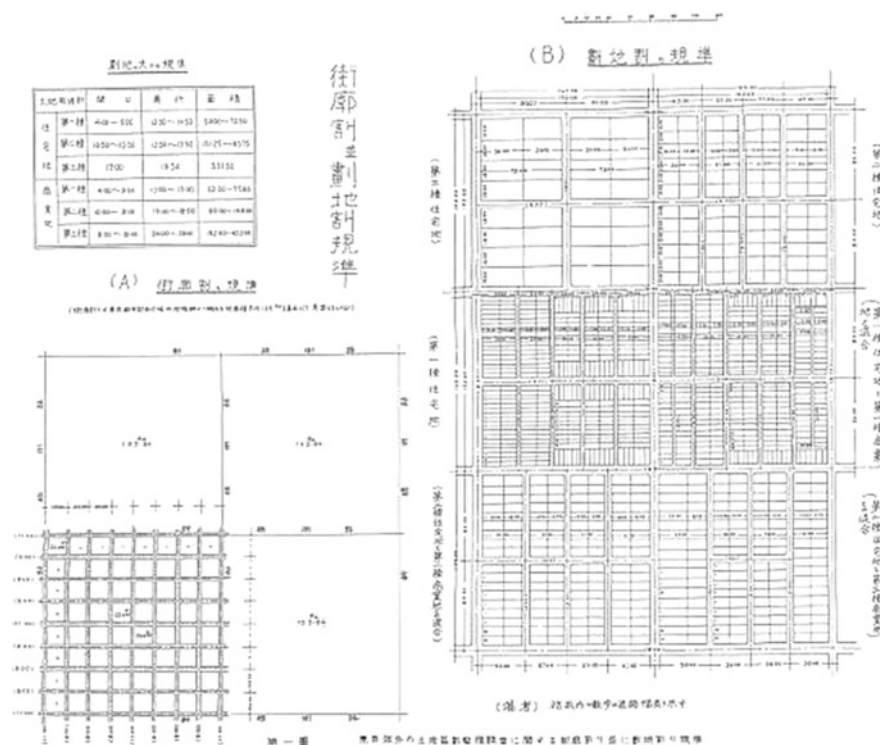


Fig. 1 Proposed Standard of Block and Lot, Teikichi Ibe, 'Tochi-kukaku-seiri-ron (Theory of Land Readjustment)', *Kenchiku-zasshi* (Journal of the Architectural Institute of Japan), Vol. 43, Nos. 524, 525 and 527, 1929

land, and the Tashiro Land Readjustment, Nagoya (1929), with streets radiating from a central public park.

3 Planning and Execution of Green Areas

Although the concept of the Garden City as well as the example of the First Garden City, Letchworth, was introduced early to Japan through the book *The Garden City* (1907) published by the Department of Local Affairs (Ministry of the Interior), only its image was applied to some suburban developments and was much advertised. Thus, Denen-chofu, Tokyo (1923) was developed by the land readjustment of Denen-toshi (the Garden City) Co. Ltd., which was later absorbed into the Meguro-Kamata and Tokyo-Yokohama Railway Companies. After its success, similar suburbs were developed along the lines of both railway companies.

The Garden City Movement in England had grown into the International Federation for Town and Country Planning and Garden Cities (1913, now the

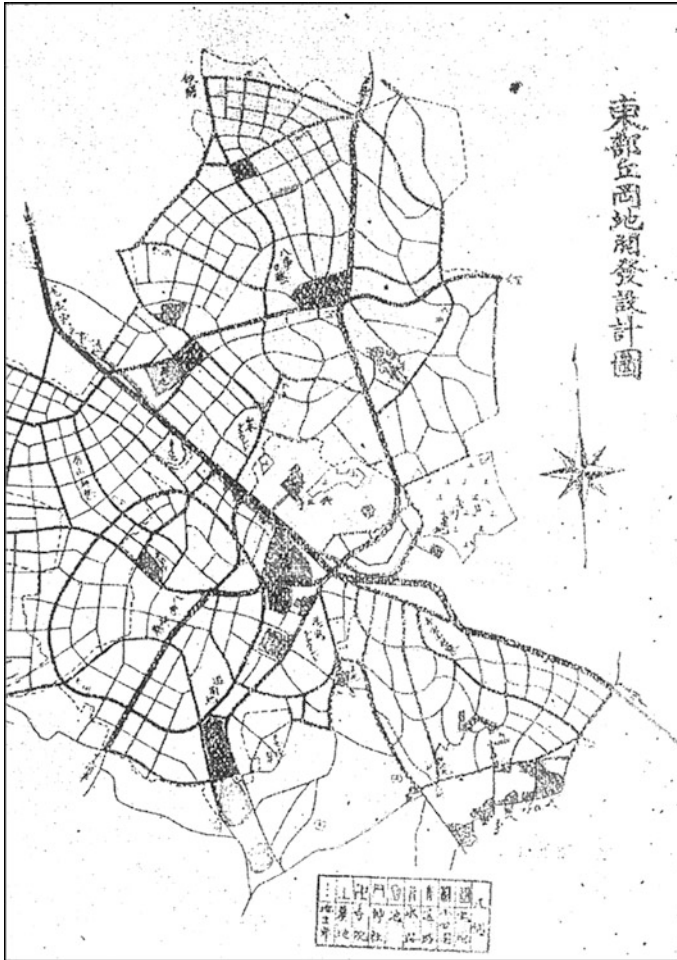


Fig. 2 Eastern Hill Development, Nagoya, c.1925, Hideaki Ishikawa, 'Nagoya no Kukaku-seiri no Tokushitsu (Characteristics of the Land Readjustment in Nagoya)', Toshi-mondai (Urban Problem), Vol. 9, No. 4, 1929

International Federation for Housing and Planning (IFHP)), which started to hold International Town Planning Conferences. Japanese city planners, who joined the conferences from the 1920s, were much influenced by the seven principles of metropolitan regional planning as well as the model of a metropolis surrounded by a green belt and satellite towns discretely sited outside.

The result was the Tokyo Green Area Plan (1932–39, Fig. 3), drawn up by the Planning Committee of the Tokyo Green Area. In it, the English term 'open space' or the German term 'Grünflächen' was translated into 'ryokuchi (green area)'. The green area was defined as 'permanently unbuilt open space', systematically categorized, and planned within a 50 km radius of Tokyo Station. A green belt of 1–

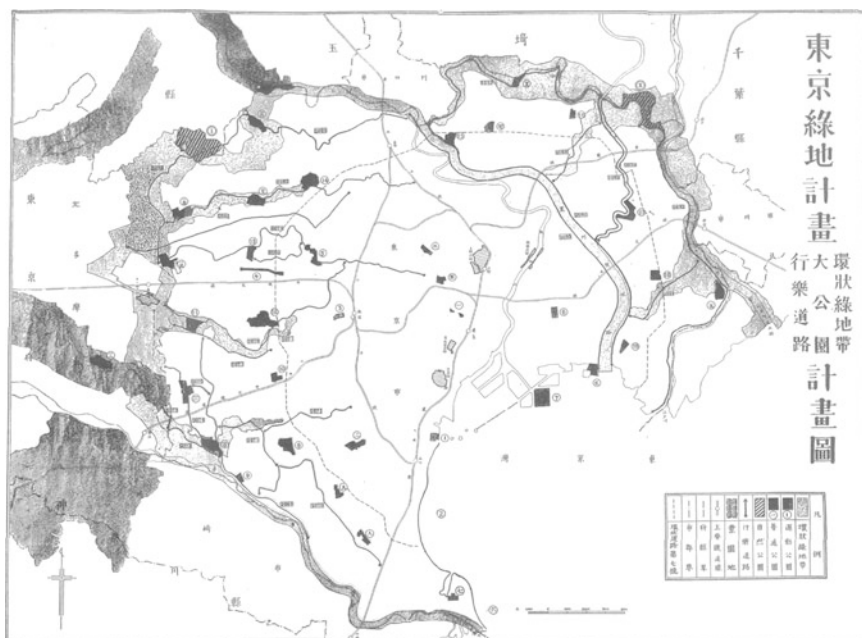


Fig. 3 Tokyo Green Area Plan, 1932–39, Koen-ryokuchi (Park and Green Area), Vol. 2, Nos. 2 & 3, 1939

2 km in width was established on the periphery of the Tokyo city area, with the Arakawa and Edogawa Rivers as the northern edge, the Tamagawa River as the southern edge, and the city boundary (along a 15 km radius) connecting the north and south edges to form a circle. From this circular belt, wedge-shaped belts were specified inwards along the rivers and canals to form a radiating pattern. Outside of these green belts, most of the hillside and riverside lands unsuitable for paddy fields were designated as scenic park areas, for which parkway access was also planned. During the Second World War, the initial planning aim of controlling urban sprawl was replaced by air defense and the Tokyo Green Area Plan was turned into the Tokyo Air Defense Open Space and Open Space Belt Plan (1943). This was based on the newly institutionalized concept of 'air defense open space' under the revised Air Defense Law (1941). Under this plan, an inner circular air defense open space belt along a 10 km radius as well as radiating open space belts from it were added to the former green belts in the Tokyo Green Area Plan. The green space was institutionalized in the revised City Planning Law (1940) and six large green spaces (Kinuta, Kojiro, Koganei, Toneri, Mizumoto and Shinozaki) were planned as major projects of the Imperial Era 2600 Anniversary celebrations. Thereafter, further 14 air defense green spaces were added in 1942 and eight in 1943. Since most of those corresponded with the sites for large public parks in the Tokyo Green Area Plan, it

can be said that the Tokyo Green Area Plan was implemented during the war at least in part in the name of the Emperor and air defense.

Under the influence of this plan, the Osaka Green Area Plan (1941, Fig. 4) was drawn up. It a mountain belt for preserving the surrounding mountains and hills along a 15 km radius from the center of Osaka, a circular green belt along a 10 km radius as well as wedge-shaped green belts radiating inwards along the Yodogawa and Yamatogawa Rivers. Four large green spaces (Hattori, Tsurumi, Kyuhoji and Oizumi) were planned and implemented at the intersections of the green belts. It is striking that the swampy lowland was designated as part of the circular green belt connecting the two rivers. The Osaka Air Defense Open Space and Open Space Belt Plan (1943) was made similar to the one in Tokyo. An inner circular air defense open space belt of 300–500 m in width was established along a 5 km radius



Fig. 4 Osaka Green Area Plan, 1941, Koen-ryokuchi (Park and Green Area), Vol. 5, No. 9, 1941

from the center. As this belt was directly adjacent to the existing built-up area, the inner radiating open space belts could not be included therein.

In Nagoya, a green area plan similar to those in Tokyo and Osaka was not planned. In the Nagoya Green Space Plan (1940, Fig. 5), five large green spaces (the Shonai River, Obata, Makinogaike, Aioiyama and Odaka) and three types of road access to the green spaces were planned and implemented within the combined city planning areas of Nagoya, Moriyama and Narumi. An air defense open space belt was also planned, with a circular and an east-west connecting strip, yet details on this have so far not been uncovered.



Fig. 5 Nagoya Green Space Plan, 1940, Nagoya Toshi-keikaku-shi (History of City Planning in Nagoya), Nagoya Urban Institute, 1999

4 Designation of Green Space in the Reconstruction Plan and Its Annulment by the Agricultural Land Reform

The three metropolitan regions of Tokyo, Osaka, and Nagoya suffered widespread damage by aerial bombing at the end of Second World War, with damaged areas totaling 16,100 hectares (ha), 5000 ha, and 3850 ha respectively. Only a few months after the end of the war, the Bureau of Reconstruction was established in November, 1945. The Basic Policy for Reconstruction of War-damaged Areas, which aimed to control the excessive growth of metropolitan areas and to reconstruct local small cities, was decided by the cabinet in December of that year. This policy announced that the main streets in small or medium-sized cities should be wider than 36 m, while in large cities the main streets should be wider than 50 m and broad streets or plazas should display 50–100 m in width. Furthermore, the total extent of parks and green spaces should exceed 10% of the city area, and where possible they should be linked to green belts in the periphery. Under the Special City Planning Law (September, 1946), reconstruction plans were implemented in 115 war-damaged cities.

The Tokyo Reconstruction Plan (1946–47, Fig. 6) assumed a population of 3.5 million in the special ward area of Tokyo and a further 4 million in satellite towns and their accompanying smaller satellite towns in the outer periphery. The special ward area was organized by the street plan with seven broad streets of 100 m in width and two broad streets of 80 m in width and by the land use plan with several urban units surrounded by green areas originating from the wartime air defense plan. In this green area, less than 20% of the building coverage ratio is permitted for houses of farmers' families and other agricultural facilities, and less than 10% for detached and semi-detached. Although this strong restriction was intended to control urban sprawl, the designated green areas were gradually diminished before being completely abolished by the new City Planning Law (1968). Furthermore, the air defense green spaces, which were once purchased by the authorities and then used for food production during the war, were included as objects of the Agricultural Land Reform by the Law on Special Measures for Establishment of Landed Farmers (1946). In the Tokyo Metropolitan Area, 63% of 746 ha of land purchased for air defense open spaces were sold to cultivators at extremely low prices and repurchased later. In the meantime, the so-called 'Dodge Line' of March, 1949, a policy drafted by an economic adviser to the General Headquarter of the Allied Forces (GHQ), Joseph Dodge, called for stabilization of the economy as well as budget reductions. The cabinet then issued a basic policy to re-examine the reconstruction plan in September, forcing a considerable reduction in the reconstruction projects. The Tokyo Metropolitan Area, where the reconstruction projects were much delayed, suffered under this radical change of policy. From the initial land readjustment area of 20,166 ha, only 1652 ha of land next to national railway stations was in fact reconstructed.

In the Osaka Reconstruction Plan (1940, Fig. 7), the former air defense open space belt was not preserved, resulting in extensive urban sprawl towards the

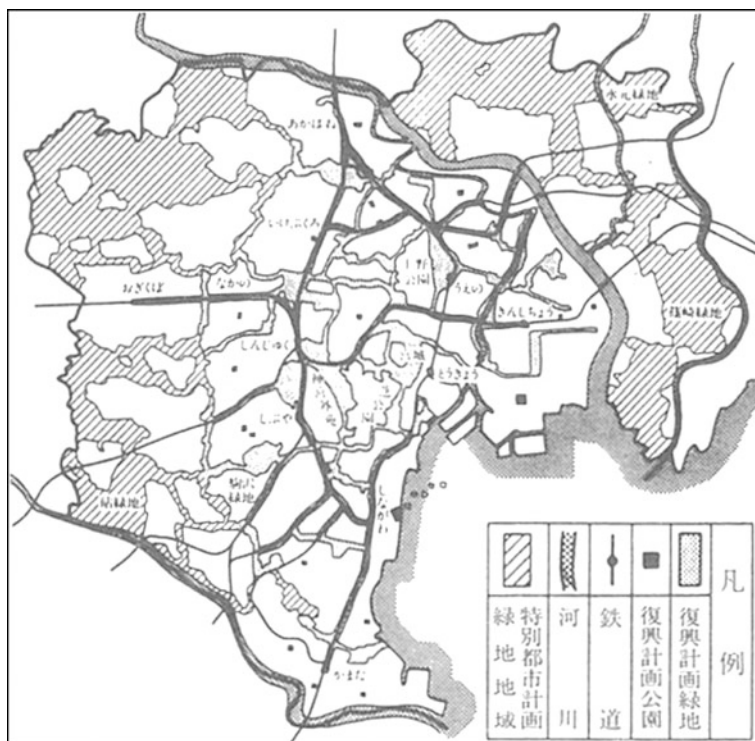


Fig. 6 Tokyo Reconstruction Plan, 1946/47, Akira Koshizawa, Tokyo no Toshi-keikaku (City Planning in Tokyo), Tokyo, 1991

swampy lowland connecting the two rivers and hence the breakdown of the encircling open space belt. After the land originally purchased in order to establish three green spaces was sold (except Hattori Green Space), most of the land for the Tsurumi Green Space was repurchased, though only 70% of the Oizumi Green Space and 30% of the Kyuhoji Green Space were obtained.

The Nagoya Reconstruction Plan (1947, Fig. 8) was regarded as one of the successful examples of urban development. Its grid pattern street plan, with two parkways of 100 m in width and nine main streets of 50 m in width, as well as the relocation of the temple graveyards scattered in the downtown area to a suburban cemetery park, were highly praised. The Nagoya Reconstruction Plan was quickly devised and executed. In spite of the reduction of the land readjustment area from 4407 ha to 3491 ha, two parkways, Hisaya Odori and Wakamiya Odori, and a cemetery park, Heiwa Park, were realized as planned. Here again, 48% of 830 ha of land originally purchased for air defense green spaces were sold to cultivators.

Dissatisfied with the First Agricultural Reform initiated by the Agricultural Land Adjustment Law (December, 1945), the GHQ proposed the notes on agricultural land reform. Based on this, the Law Concerning Special Measures for

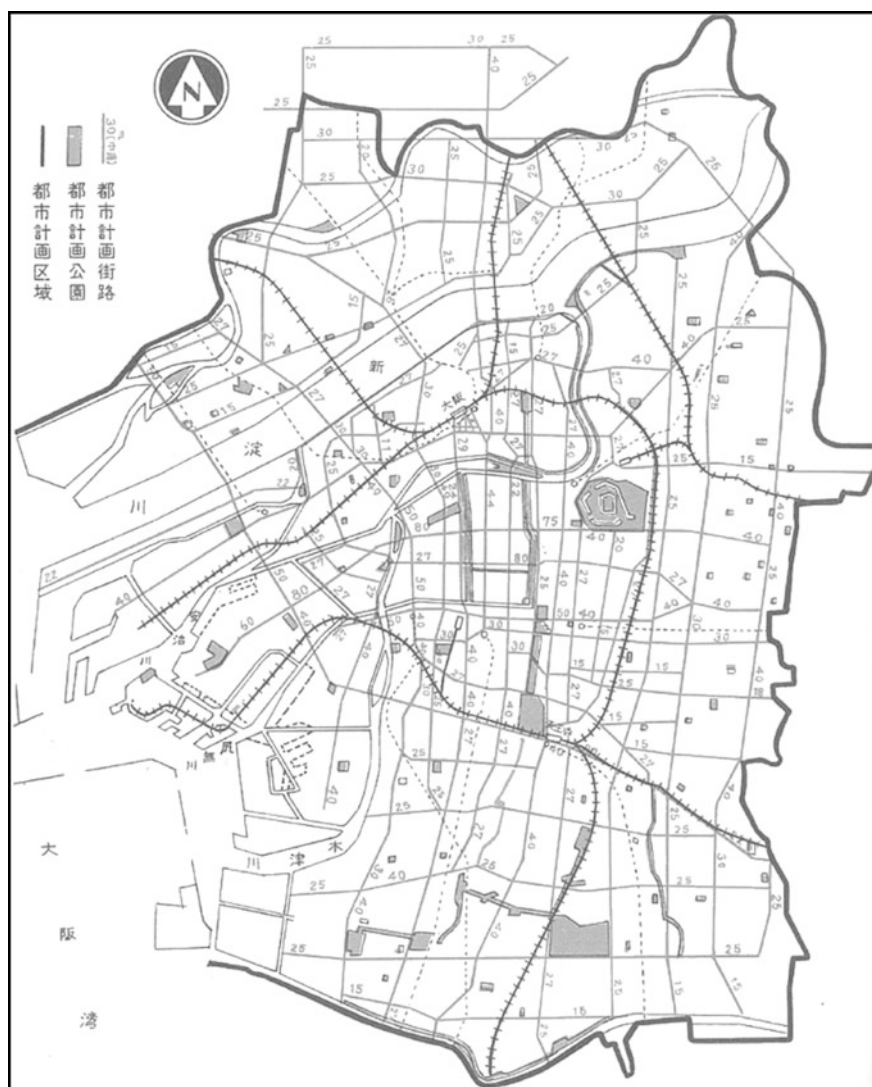


Fig. 7 Osaka Reconstruction Plan, 1940, Osaka-shi Sensaifukko-shi (History of War Damage Reconstruction of Osaka City), Osaka City, 1958

Establishment of Landed Farmers and the revised Agricultural Land Adjustment were promulgated in October of 1946. This led to the Second Agricultural Reform, which stipulated that large agricultural areas owned by large estate owners are to be subdivided and transferred to the farmers who cultivated them. The new small landed farmers were willing to meet the rising demand for food production but unwilling to facilitate the land readjustments in the post-war years.

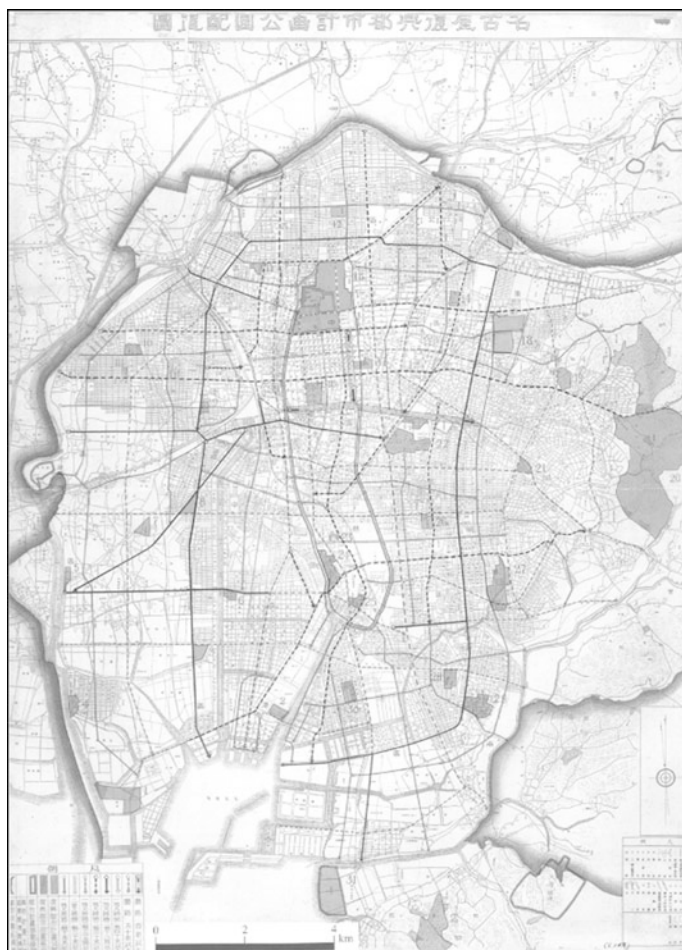


Fig. 8 Nagoya Reconstruction Plan 1946, Nagoya Toshi-keikaku-shi (History of City Planning in Nagoya), Nagoya Urban Institute, 1999

Such difficulties can be found in the First Capital Region Development Plan (1958, Fig. 9). Similar plans for Tokyo's metropolitan regions such as the Kanto Regional Plan (1936) were conceived before the war and the Tokyo Reconstruction Plan presupposed these regional plans as mentioned before. Although the Tokyo Metropolitan Government was forced to abandon its Reconstruction Plan, it tried again to reconstruct the capital by means of a national project. The Committee for Capital Construction organized under the Capital Construction Law (1950) proposed the Draft for the Capital Region (1950). Subsequently, the Committee for Capital Region Development organized under the Capital Region Development Law (1955) drew up the First Capital Region Development Plan (1958). The plan was said to be much influenced by the Greater London Plan (1940), featuring a

defined zone that aimed to develop built-up areas and to preserve green areas at the same time. A compensatory law, the Suburban Green Area Preservation Law in the Capital Region (1966), could designate only limited green areas.

Under a burgeoning capitalism based on landownership, the regional plan to control metropolitan sprawl was destined to fail. The Tokyo Plan 1960 by Kenzo Tange, published in 1961, criticized this situation. It planned the further extension of the metropolis not overland but overwater, with multi-story highways and high-rise buildings lightly floating on the waters of Tokyo Bay.

The Kinki Region Development Law (1963) and the Chubu Region Development Law (1966) did not propose any substantial regional planning. In the Chubu region, the Future Plan for Greater Nagoya (1955) envisaged an extensive green belt including the five large green spaces along the eastern hill of Nagoya. The eastern hill was, however, rapidly developed by land readjustment after the success of the Idaka Nishiyama Land Readjustment (1969, Fig. 10), which proved



Fig. 10 Land Readjustment Plan, Nagoya 1969 (History of City Planning in Nagoya), Nagoya Urban Institute, 1999

that even land readjustment with a quite high ratio of land decrease could be profitable. The Urban Green Area Preservation Law (1973, now renamed the Urban Green Area Law) obliged each local authority to formulate a master plan of green areas to define a vision for the future as well as the means to secure it within the city planning area. However, this has not worked well in practice.

5 Conflict Between the New City Planning Law and the Law Concerning Maintenance of the Agriculture Promotion Area

The new City Planning Law (1968) institutionalized a division of the city planning area into two areas: the urbanization promotion area, which encompasses already urbanized areas as well as those which are primarily to be planned and urbanized within about 10 years, and the urbanization control area, where urbanization should be controlled, with accompanying development permission. Because of the loose demarcation between urbanization promotion and control areas, agricultural land totaling 0.31 million ha remained within urbanization promotion areas of 1.24 million ha. At the same time, small development activities of less than 0.1 ha were promoted in the urbanization promotion area, whereas extensive (more than 20 ha) and exceptional development activities were carried out in the urbanization control area. Therefore, the long cherished ambition to control urban sprawl has never been realized.

In the meantime, the Law Concerning Maintenance of the Agriculture Promotion Area (1969) designated the agricultural land promotion area of 17.58 million ha, which includes the agricultural land area of 547 ha outside the city planning area and inside the urbanization control area.

Regarding the agricultural land inside the urbanization promotion area, taxation based on residential land was applied to promote residential developments under the Law Concerning Temporary Measures for Promotion of Residential Land (1973). On the other hand, the Production Green Area Law (1974) designated the first (permanent) grade to agricultural land plots of more than 1.0 ha and the second (10 years) grade to agricultural land plots land of more than 0.2 ha in order to preserve the production green area.

Even though taxation based on residential land was nullified by various legal measures, the revised Production Green Area Law (1991) enabled specific cities within three major metropolitan regions to clearly discern the agricultural land inside of the urban promotion area to be urbanized and to be preserved (i.e. production green area per se) and then to apply tax equivalent to residential land on the former.

Finally, the peripheries of metropolitan regions have been subject to three ambiguous and inadequate regulations, namely the new City Planning Law and the Production Green Area Law by the Ministry of Land, Infrastructure, Transport and

Tourism, as well as the Law Concerning Maintenance of the Agricultural Promotion Area by the Ministry of Agriculture, Forestry and Fisheries. Under such a complicated legal system, Kohoku New Town, Yokohama (1975, Fig. 11) was developed under the land readjustment plan of the Japan Housing Corporation in which the exclusive agricultural district of 917 ha could be preserved through incorporation into the urbanization control area. Such a successful example is rare and even after revision of the Production Green Area Law, agricultural land plots to be urbanized and those to be preserved were mixed up with residential lots, resulting in a mosaic-like chaos in the peripheries of metropolitan regions.



Fig. 11 Kohoku New Town, Yokohama 1965, Urban Development Bureau, <http://www.city.yokohama.lg.jp/toshi/chiikimachi/nt/>, June 13, 2017

6 Conclusion

Against the backdrop of declining birthrate and growing aged population, the periphery between 'City' and 'Country' in Japanese metropolitan regions has been transformed to a new outlook.

In the 'Country' side, post-war Agricultural Land Reform saw agricultural land divided into small lots with strict regulations placed on the leasing of lots. As each holding of agricultural land was based on a family unit, its labor force depended solely upon the family members and the necessary capital was borrowed from the Agricultural Cooperative Association. This led to a situation in which the established farmers were discouraged to introduce mechanized agricultural management in large lots of land and they worked on small lots to produce small amount of agricultural products of high quality and high prices. Along with the processes of industrialization and urban sprawl, Japan has thus seen a drop in the numbers of people employed in agriculture as well as in the total area of agricultural land. The food self-sufficiency rate is the lowest of all industrialized nations at 39% (2014). As small landed farmers reach retirement age, the abandoned and derelict agricultural lands is to increase.

In the City, as residents in the public housing complexes built by the Japan Housing Corporation and local authorities, Senri (1958), Kozoji (1961) and Tama (1965) New Towns, and suburbs developed in the age of the 'Bubble Economy', become old, the abandoned houses are to increase. Along the main roads leading from the urbanization control area outside the city planning area, shopping centers as well as numerous shops and restaurants have arisen to form built-up 'strips'. While today they give the impression of intense commercial activities, they too will soon be abandoned when the aged population is no longer fit to drive.

Viewed from the perspective of the 'Country' and the 'City', abandoned lots of land will become ever more prevalent and more mixed up like an intricate mosaic. While it is vital that shrinking cities are moving towards a low carbon society here in Japan where there is a declining birthrate and a growing proportion of the elderly, the problem of reorganizing the periphery of the 'City' and 'Country' should be solved in a manner different to that proposed by Ebenezer Howard.

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