Architecture and Urbanism in Modern Korea

Inha Jung

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Introduction

This book traces the transformation of architecture and urban space over the course of the last one hundred tumultuous years of Korea's history, a time when the built environment changed so fundamentally that it is difficult to grasp completely its transfigurations. Judging from pictures taken by an Australian photographer in 1904, Korea at that time was a land of seclusion and isolation, remote from modern civilization. The urban population was barely 3 percent of the total; the population of Seoul, Korea's bustling urban capital, was less than 200,000. The majority of the land was blanketed with rice paddies and farm fields, sparsely dotted with thatched roof houses. Within a mere one hundred years, Korea transformed itself into a completely modern society. Today's population has increased fivefold, with more than 80 percent of it living in its urban centers. Much of the pastoral landscape has been converted into large, monolithic buildings and labyrinthine networks of streets. Obviously, the process was not easy. Buildings and cities were repeatedly destroyed and rebuilt due to a succession of vehement sociopolitical disturbances. Indeed, the changes were so dramatic that few buildings constructed one hundred or more years ago remain. The legacy of the twentieth century in Korea must be regarded as one equally made up of destruction and construction.

Ruptures and Continuities

Although modernization began more than a century later in Korea than it did in the West, it has been the predominant ideology throughout the past century, bringing about radical changes in Korea's architecture and cities. The nature of modernity, which continuously negates what existed in the past, brought with it the complete uprooting of the traditional lifestyle. As a result, the history of Korean architecture and urbanism over the last century has been characterized by discontinuities, ruptures, and transformations. Two thick fault lines are particularly significant: the first sandwiched between liberation (1945) and the Korean War (1950–1953), and the second, between the late 1980s and early 1990s. Although the second fault line, marking a transition in the South from a military regime to a democratic society, was perhaps not as dramatic as the events surrounding the first, it was still the case that architectural and urban discourse changed remarkably in both.

With these ruptures as boundaries, Korean architecture of the twentieth century falls into three distinct periods, with modernity taking on a different meaning in each. The first, coinciding with the period of Japanese occupation, was a time of colonial modernism. A particular strand of modern civilization, including some Western technologies, was transplanted to Korea via Japan, and a modern way of life started to take shape for the first time, albeit in a distorted way. The second period, extending from 1961 to 1988, was a time of developmental dictatorship when the Korean government presided over a large-scale construction boom, and architects sought to establish a modern identity through traditional means. The last period, which began to take shape in the mid-1990s, may be defined as a time when Korea's modernization was not only achieved, but also subsumed in the globalizing trend of the present era.

Because the modernization of Korea was belated, it condensed into a very short time period changes that had taken place over more than two centuries in the West. But while the rapid and radical changes that have occurred are undeniable, of greater significance for this study is the identification of elements that have remained unchanged. In Korea, long-standing relationships between humans and their built environment have formed continuities that are still deeply rooted in the way of life of the Korean people.

For this reason, regionalism exerted a powerful influence on Korean architects in the twentieth century, inspiring them to discover formal ideals in the method of organizing outdoor space which they found in old temples; the topological singularities in traditional gardens; the multilayered arrangement of walls in old palaces; and the different types of courtyards in traditional houses, all with a view to projecting them in a modern fashion. It is evident that the practices of Korean architects are deeply associated with the places where they grew up, and by exploring those places, Korean architects have pursued and found a modern identity that can be called their own. For that reason, identifying the elements of continuity and the process of their transformation through the last century is of great importance in this study.

Practicing in a Structured Field

Because it is impossible to consider all of the events related to architecture and urbanism in twentieth-century Korea, we need to be selective in our approach. The key task in this book is to identify the practical rules that were applied by architects in the spatial reconfiguration of modern Korea. To this end, our discussion starts with lines that are drawn up on a plan. When a line is drawn for the first time to conceive a building or a city in an empty place, it already contains an extremely complicated signifying system. The subjective ideas of the individual architect and the objective structure of society are integrated by the act of drawing a single line, through which theory and practice work together to produce a unique built environment. By clearly understanding the process in which complex built environments are generated, starting from a single line, this book tries to present a comprehensive overview of architectural and urban development in modern Korea. Here both architecture and cities belong to the same discursive plane and are closely interrelated, rather than work as elements with an independent existence.

To develop these ideas effectively, we must look at the aforementioned periods as structured fields. They constituted the fields of possibility in which architects had to act, and the architects' design activities were a form of practice conditioned by those structured fields. When one visits a university campus, where buildings built in different periods are gathered together, one can verify how structured fields permeate everything—from the overall design to the individual details of the buildings. The majority of buildings built within the same structured field make common use of materials, construction methods, building codes, and design concepts. The same is true for urban spaces. Cityscapes, street networks, and even city boundaries change in accordance with the periods when they were planned. The urban spaces of the 1930s, 1970s, and 2000s were all conceived in distinctive ways and are endowed with the signifying systems of the practices and structured fields they at once embody.

One might well ask in what way a structured field affects an architect or planner's practice. A structured field acts in two ways. First, it acts as an existential horizon. All architects work within an objective social reality, and their designs also take place within a given set of constraints. It is extremely difficult to escape those constraints until they are considered inappropriate by most practitioners. To do so, one must accept the burdens of economic inefficiency and waste, and ultimately the risk of losing one's customary relationship with the outside world. In this sense, a structured field is composed of the limitations and constraints that are innate in an architect's practice. But it can also be productive, giving rise to new forms of activity, rather than simply censoring certain forms of activity. It provides a structure, like the rules of a game, and architects must understand their modus operandi intuitively or logically, and negotiate their course using those procedures. The more skillfully they do so, the higher the probability they will successfully compete with other architects, with the commissioning of better projects as the reward for success. But it is also possible for architects to point out the unreasonableness of certain rules rather than simply submitting to them, and in this way the ideas of architects interact with the social structure, affecting the process by which a structured field becomes internalized in an architect's practice.

There are many ways that preestablished structures become internalized, since structured fields are dependent on natural conditions, laws and institutions, representational methods, production methods, and existent spatial systems. In most cases, they have been formed before an architect starts to work, having been naturally acquired at home or at school. In Korea, residential spaces, in particular, seem to form at an early age as the "proto-scenes" in an architect's spatial consciousness. Because they were acquired unconsciously, these spatial concepts have appeared repeatedly in the work of Korean architects. When we compare the projects designed by two Korean architects, Hyo-Sang Seung and Kyu Sung Woo, we can see that while their architectural activities stem from completely different professional backgrounds, their design attitude relies on the same spatial consciousness derived from early experience of a form of traditional Korean housing called the urban *hanok*. This experience functions like a latent diagram in the architect's consciousness, and it repeatedly emerges whenever they come up with an image. This process is the reason this book focuses specifically on the formation of urban and residential space.

Structured fields are dynamic and ever changing, since they can be affected by internal as well as external forces. But what makes a structured field disappear, to be replaced in turn by a new one? There may be several factors, but large-scale changes in urban discourse, technological orientation, and regional identity can all play a role. Generational change occurs when architects and planners have to work in conditions completely different from those encountered by the previous generation and, as a result, need to restructure the rules of the game. It is the dynamic interplay between architects and structured fields that has consistently served as the driving force changing the practice of designing architecture and cities in Korea.

Chapter

1

The First Urbanization

The modern world arrived in Korea in force following Japan's annexation of the Korean peninsula in 1910. Although Koreans were initially captivated by the prospect of modernity, the occupation soon brought a succession of miseries, causing those sentiments of wonder to be subsumed in feelings of anguish and humiliation. The occupation ended in 1945, and it was followed by the outbreak of civil war in 1950. In spite of this troubled history, Koreans have never stopped yearning for modernization. For this reason, recognition of modernity as a primary goal of Korean society must be included in any analysis of Korea's history in the twentieth century. The development of modern architecture and urbanism in Korea can be defined as the path taken by intellectual and practical efforts to construct the country's built environment in forms appropriate to the transformation of the traditional society upon which Korea's national identity had been based. To extricate themselves from their historical bonds, Koreans have pursued modernization for over a century.

Colonial Modernism in Korea

When Korea was colonized in 1910, the newly dominant power, Japan, had already undergone its own modernization. Indeed, it had begun this process earlier than its neighbors, and this advantage enabled it to use the norms of a modern society, commonly identified as health, productivity, and efficiency,[1] as tools for dismantling a traditional social order. The antagonism that resulted played out in two directions—between Japanese imperialism and Korean nationalism on the one hand, and between modernism and the premodern on the other. This confrontation of oppositional forces spawned complicated fault lines that fractured in different ways, forming the major themes of the architectural and urban discourse of the colonial period.

Because of this complexity, two contrasting views of the colonial period have been maintained: one is founded on a theory of colonial exploitation *(sikminji sutalron)*; the other, on a theory of colonial modernization *(sikminji geundaehwaron)*. Despite the emergence of postmodern criticism in recent years, the two approaches remain controversial because they are essentially concerned with a historical accounting of the colonial period. As Jonghoe Yang observes, "more nationalistic Korean scholars are prone to reject the colonial modernization theory by pointing to the contradictory and exploitative nature of colonial modernity. In contrast, more empirically oriented researchers, many of them are foreign experts on Korean history, tend to argue for the positive effects of the colonial legacy by analyzing statistical data on colonial industrialization."[2] According to these latter scholars, Korea's transportation and communication infrastructure, together with some of the industrial facilities built in the colonial period, all contributed to Korea's economic growth after liberation.

This book gives due weight to the recognition that the modernization of Korean society took place during the period of its colonization. Yet, as many scholars believe, the best conceptual account of the situation may be given from the perspective of Gramsci's theory of hegemony,[3] which provides an analysis of the intention of the ruling class in relation to space.[4] Gramsci's theory reminds us that the ultimate purpose of the policies formed during the occupation was to consolidate Japanese colonial rule in perpetuity. Although colonial modernism was dependent on cultural control, including control of the built environment, the goal of modernization persuaded many Koreans to believe that Japanese rule was not entirely repressive but productive, allowing them to accept, adopt, and internalize foreign norms and values. This was a fundamental limitation that led to the fluctuation that can be observed in various sectors according to the degree of Japanese interest in them. The imbalance proved an impediment in the advancement of modernization in Korea.

Notwithstanding this limitation, a modern way of life did begin to emerge in Korea during the colonial period, with attendant impacts on the built environment. In

the West, the Industrial Revolution had brought about radical changes in the urban landscape. Until this point, most people had resided in villages set in a landscape sparsely dotted with houses, and this pattern of spatial dispersion dictated the forms of everyday life. When migrants from the countryside flocked to the cities to pursue employment related to the manufacture and increased availability of consumer goods, the housing that was available was incapable of accommodating the sudden increase in the population. In due course, city dwellers had to accept the prospect of living in large-scale housing complexes and high-rise buildings, a new built environment characterized by enormous investment in infrastructure. This built environment could not be constructed in the short term, however, causing many social difficulties.

The first urbanization of Korea occurred during the colonial period, apparently caused by similar factors. Korea's population doubled, and the increase was largely absorbed in the cities.[5] Overall, the urban population rose from approximately 3 percent of the entire population to 13 percent. In Seoul, the resident population increased approximately fivefold during the colonial period. In addition, new modes of transportation accelerated the process. Korea built its first railway in 1899, and railway routes continuously expanded thereafter. Inland cities such as Daegu, Gwangju, Daejeon, and Pyongyang underwent rapid urbanization during this period. Upon analysis, however, the roots of the urbanization of Korea can be seen to lie not in the industrialization process per se, as occurred in Western countries, but in Japanese colonial rule. Industrialization did not start in earnest in Korea until the 1930s. The main reason for the migration of population from the Korean countryside to the cities was the ruthless exploitation of Korean peasants by the Japanese.[6] This meant that the increase in urban population did not occur through a typical "push-pull" process in which a growing demand for urban labor coincides with unused labor in the countryside.[7] The demand for an urban workforce was actually meager, and new immigrants to Korean cities led a hand-to-mouth existence, looking to be hired by the day without prospects of finding a permanent job. Moreover, the increase in the urban population was also caused by a large influx of new Japanese residents. The Japanese colonial government had allotted large tracts of land at subsidized prices to Japanese families wanting to settle in Korea. With this encouragement, landownership among Japanese residents, which in 1916 stood at 36.8 percent, jumped to 52.7 percent by the end of the colonial period. These land distribution policies formed a significant part of the urban planning that took place in Korea during this period.[8] In the early 1920s, Japanese residents made up about 30 percent of the urban population. With acute segregation the norm, Japanese residential districts inserted themselves into traditional Korean districts, splitting the urban fabric. Indeed, the most revealing aspect of Korea's urban planning at this time was its total dependence on Japanese interests. For example, when the colonial government designated thirteen cities three years after the annexation, only three of those cities corresponded to traditional definitions of a city. The others were created for economic exploitation. Najin, built in the 1930s, was designed as a logistical and military base for Japan's territorial ambitions on the continent of Asia. As a consequence, most of the cities that flourished in the colonial period did not develop further after liberation.

Despite these origins, there can be no doubt that the urban spaces created during this period were forms of colonial modernism. In particular, the street systems of Korean cities and their infrastructure became formative influences on subsequent developments. Even with land use plans being continuously deformed as cities continued to grow, the street systems remained largely unchanged. As we review the urban planning of the colonial period, we will have occasion to examine how these street systems were formed.

The Urban Planning of Open Ports

The first wave of urbanization in Korea dates back to 1876 when, under pressure from Japan, Korea dropped its long-held policy of isolation. The Joseon dynasty, which had ruled Korea for more than five centuries, opened its doors to foreign countries and signed treaties granting them commercial rights and the lease of a certain territory to support consular affairs and trade. Ten ports in Korea—Busan (1877), Wonsan (1880), Incheon (1883), Mokpo (1897), Jinnampo (1897), Gunsan (1899), Seongjin (1899), Masan (1899), Yongampo (1904), and Cheongjin (1908)—opened in succession, and five inland cities, including Seoul, Pyongyang, and Uiju, opened to trade. The opening of these ports brought a new way of life and a need for modern urban planning. Prior to the port openings, Korea's major urban areas had been located inland. Although there were ports for marine transportation

and fishing, their scale was insignificant by comparison. The areas selected for the treaty ports had been chosen by the foreign powers, and their urban planning took place under the foreign concession system. This was a system developed originally in China and Japan "in which a certain tract of land within the treaty port is allocated for foreign settlements, and all or part of the local administrative power in the district is transferred to foreign governments (consuls), or the committee of foreigners residing in the district."[9]

Although the open ports in Korea followed in the footsteps of the Chinese and Japanese models, their urban space was organized somewhat differently. As Japan gradually consolidated its dominance in Korea during these decades, the formation of the open ports took place in accordance with Japanese planning models. Incheon, the third port opened, offers the clearest example of this. Because of Incheon's strategic importance as the gateway to Seoul, three independent settlements—Japanese, Chinese, and general foreign—grew up at Incheon, and it became a model for the planning of the open ports that were developed later. The Japanese Concession was the first of the foreign settlements to be constructed. Indeed, preparations for it had begun even before the Joseon government agreed to open Incheon. There are eleven documents dating from September 1883 to November 1884 that reveal the planning process for the settlement.[10] A drawing attached to the report sent by the Japanese consul at Incheon on September 8, 1883, shows us Japan's original concept for the settlement. In a site measuring 43,627 sq m, the Japanese consulate was to be placed at the center with three layers of residential blocks laid out symmetrically. The dimensions of each block were 20–30 m x 120 m, with 12-m-wide roads inserted between the blocks. These dimensions and the partitioning scheme seem to have stemmed from the Japanese *jobo* system, on which the commoner districts in Tokyo were also patterned.[11] A similar scheme was also discovered at the Japanese district of Yokohama.

The construction of the Japanese settlement spurred China and the Western powers to speed up the planning of their settlements in Incheon. A Chinese settlement was established on a hill west of the Japanese settlement in December 1883. The site measured 26,700 sq m and was subdivided into irregular tracks. Based on this layout, Chinese soldiers stationed in Seoul undertook the construction of building lots and roads in April 1884 and finished the work in March 1885. The planning of

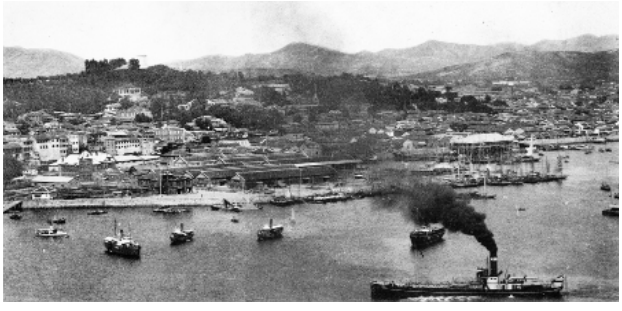
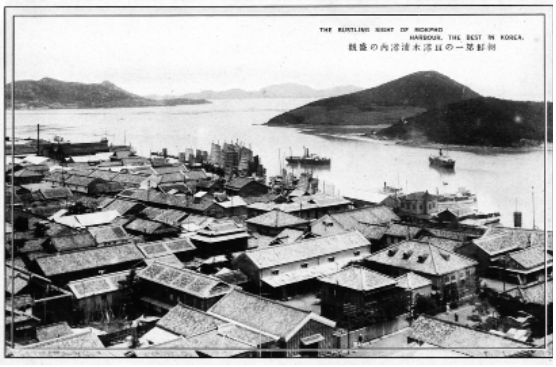
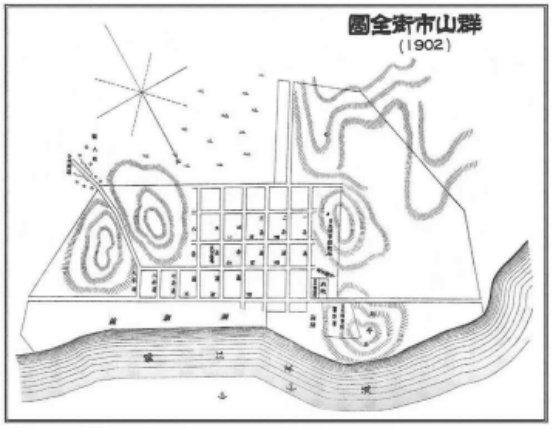


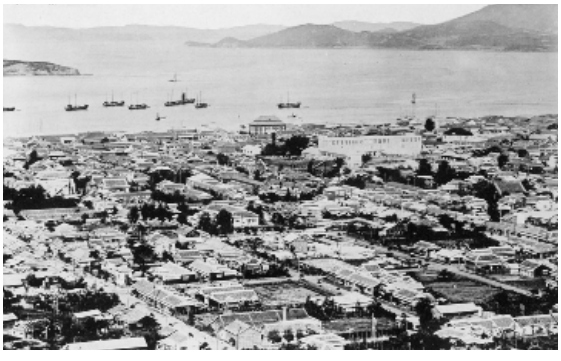
Fig. 1.1 Plan of the general foreign settlement at Chemulpo (present-day Incheon) (National Archives of Korea, CJA0002274)

Fig. 1.2 The general foreign settlement at Incheon, ca. 1915 (Gyu-Heon Lee 1996, 64)

the general foreign settlement, a concession shared by the Western powers, owed much to William George Ashton, who had been appointed British consul-general for Seoul in 1884, becoming the first European diplomatic representative to reside in Korea.[12] Ashton had experienced the general foreign settlements in Kobe and Osaka and did not have any difficulty in drafting the land regulation and plan for the common concession.[13] The land regulation segregated the lots into four categories to determine an upset price and rental value consistent with location and geographical features.[14] The layout of the blocks and the street system were patterned after the existing Japanese settlement. However, the average size of each lot was 900 sq m, considerably larger than in the Japanese settlement. This can perhaps be explained by the fact that the commercial value of the lots was a significant index of their importance to the Westerners, while the Japanese intended to develop their settlement as an outpost for the invasion of the Korean peninsula (figures 1.1, 1.2).







In the wake of the opening of the first three ports, the remaining ports were unilaterally opened by the Korean government, under pressure from Japan, rather than through diplomatic agreements with foreign powers. Regulations for the foreign settlements at Chinnampo (Jinnampo), Mokpo, and Kunsan (Gunsan) were promulgated in October 1897, and regulations for Masampo (Masan) and Songjin (Seongjin) were issued in June 1899. They all had the same form and contents. The location of the ports had been determined by Japan's interests. Japan was intent on establishing its supremacy over Korea after its victory in the Sino-Japanese War, and it needed new ports to maximize the economic exploitation of the peninsula. Mokpo and Gunsan were opened to facilitate rice exports from Jeolla province. In the new settlements, the subdivision of urban space followed the precedent set by the general foreign settlement in Incheon. After removing all Korean houses within the settlements, the Korean government prepared, filled in, laid out, and subdivided the lots, selling them at public auction to the highest bidder. To ensure consistency in the public auctions, the lots were partitioned into grids of the same size. Land was sold in three categories: (a) village, rice-field, or low-lying lots not requiring filling in; (b) hill lots; and (c) foreshore lots requiring further filling in.[15] The lots had minimum and maximum sizes: 500–1,000 sq m for Class A and Class C lots, and 1,000–5,000 sq m for Class B lots. In Mokpo and Gunsan, the block size was largely determined by these lot sizes. In Mokpo, there were two block sizes: one was approximately 60 m x 80 m, or 4,800 sq m; the other was approximately 90 m x 90 m, or 8,100 sq m (figures 1.3, 1.4). In Gunsan, the block size was 40 m x 60 m (2,400 sq m). These were blocks that were easily rentable if they were subdivided into four parts. Except for restrictions on building access and sanitary facilities, land use in the blocks was unregulated. Various buildings began to fill the blocks according to their partitioning, including public facilities such as consular buildings, customs offices, and warehouses, as well as Japanese-style housing called *machiya* to accommodate the Japanese who were rushing to the new ports. This general pattern became a common way to organize the urban space of treaty ports in Korea (figures 1.5, 1.6).

Fig. 1.3 Plan of Mokpo (Seok-Kyu Ko 2004, 58)
Fig. 1.4 View of Mokpo, ca. 1930? (Photo courtesy of Sam-Geon Han)
Fig. 1.5 Plan of Gunsan, 1902 (Ei-Won Kim 1982, 652)
Fig. 1.6 View of Gunsan, ca. 1930? (Photo courtesy of Sam-Geon Han)

Cheongjin was the last port to open in 1908. When Korea was annexed by Japan in 1910, all of the open ports lost their original function and meaning. The Japanese government opened negotiations with the foreign governments over their concessions in Korea and completely abolished the system in 1914. Consequently, the urban planning that took place on the Korean peninsula after 1910 assumed a completely different character.

Annexation and the City Ward Improvement Plan

After winning the first Sino-Japanese War (1894–1895), Japan focused its national force on the colonization of Korea. It concluded a treaty for the first Anglo-Japanese Alliance in 1902, which laid out an acknowledgement of Japanese interests in Korea. In the peace treaty ending the Russo-Japanese War (1904–1905), a defeated Russian empire acknowledged and henceforward deferred to Japan's military, political, and economic interests on the Korean peninsula. A separate agreement, signed in secret by the United States and Japan, recognized both the Japanese interests in Korea and the American interests in the Philippines. With this recognition, the Japanese government sought to formalize its sphere of influence by forcing the Korean cabinet to sign the Protectorate Treaty, giving Japan complete responsibility for Korea's foreign affairs and placing all trade through Korean ports under Japanese supervision. The treaty was signed in November 1905, allowing Japan to set in motion a large number of urban policies aimed at extending its power in Korea. It would only be a matter of time before it seized full control of the apparatus of government.

Railways and Fortress Walls

The Japanese colonizers consolidated their control of inland cities by constructing railways. Japan had obtained the right to construct railways in the Korean peninsula in 1894 but transferred the license for the Seoul-Incheon rail line to an American businessman, James R. Morse, in 1896, amid soaring anti-Japanese sentiment in the wake of the assassination of the Korean empress the previous year. Two years later, when construction of the line was halted due to financial difficulties, Morse relinquished the rights to a Japanese firm, and the first rail line was opened in September 1899. Japan continued to operate the Seoul-Busan line in 1905 and the Seoul-Sinuiju line in 1906, which served as a stepping-stone for Japan's invasions of Korea and Manchuria. As newly constructed railways and roads became operational, inland Korea began to see how a new transportation system would open a new era of growth. Several new cities arose at the intersection of the newly established railway lines. Daejeon, the sixth largest city in present-day Korea, took form to facilitate the settlement of Japanese workers who took part in the railway construction.[16] With the expansion of railway lines, railway stations became new centers of urban growth, triggering a great increase in land prices. One result was the surfacing, in the 1920s, of sharp conflicts between Koreans and Japanese over the relocation of railway stations in Daegu.[17]

Along with the opening of the railways, the electric streetcar brought great changes to the perception of urban space. In 1898, King Gojong had authorized the creation of a joint venture with two American businessmen, Henry Collbran and Harry Rice Bostwick, called the Hanseong Electric Company. The new company, of which the king owned 50 percent, was charged with establishing an electrical lighting network in Seoul and an electric streetcar system as well. Hanseong Electric completed its first power plant in 1899 at Dongdaemun, and, by the end of that year, had successfully launched its streetcar service from Seodaemun to Cheongryangri. In later years, the streetcar service was extended into the surrounding suburbs of downtown Seoul, such as Mapo, Ahyeon, and Yongsan.

As the wave of modernization began to overtake traditional urban structures, the demolition of fortress walls became symbolic of the disintegration of premodern urban space and the emergence of a new urban order. With new regulations for land and building certification taking effect in 1906, making it lawful for Japanese to own land throughout Korea, large numbers of Japanese rushed into Korean cities to form new settlements. The resulting tensions intensified with the demolition of the city's fortress walls. To the Japanese, the walls blocked off not only a smooth stream of traffic, but also Japanese commercial penetration of the old city. They began to demolish the fortress walls as part of a campaign to construct new roads and improve the urban infrastructure. This began in Daegu in 1906, and Jeonju fortress followed in 1907. In Seoul, fortress walls to the left and right of Namdaemun Gate were demolished in 1908. In all, about 140 fortress walls had played an instrumental role in the local administration of the Joseon dynasty, and their demolition marked the death of a traditional spatial order and the birth of a new one.[18]

Military Cities

The urban planning undertaken between 1905 and 1910 was closely tied to the Japanese military's plans to advance into Korea and China. The one-sided expansion of Seoul amply demonstrates this fact. During the Sino-Japanese War (1894–1895), two divisions of the Japanese army had been stationed on the Korean peninsula, one of them in Yongsan, a southern suburb of Seoul. Ten years later, with Korea falling under its control at the end of the Russo-Japanese War, Japan made Yongsan the headquarters of its occupational forces. It purchased all the land at dirt-cheap prices, installed barracks for Japanese soldiers, and built Yongsan Station as the starting point of the Seoul-Incheon railway line.[19] Yongsan, which had been nothing but a sandy plain near the Hangang River, became a place of strategic importance. Two arterial roads from downtown Seoul to Yongsan were constructed after 1906 to improve access to the area, and many residences for military officers were established around the base. As a military camp, Yongsan stood in the way of normal urban expansion, and this became a decisive hindrance in Seoul's development.

Nanam and Jinhae were two new cities built for military purposes. Nanam, located 550 km northeast of Seoul and next to Cheongjin, was surrounded by mountains. In 1907, Japan began construction of the new city on an empty site measuring about 3,300 ha, judging the area to be strategically advantageous in several respects. Located 90 km from the borders of China and Russia, it would be ideally located for the rapid mobilization of soldiers following any outbreak of hostilities, and it could facilitate the direct import of war materials from Japan by ship. It remains unclear exactly who initiated the city planning, but well-trained urban experts clearly had a hand in it. The planners divided the city into two parts, making the northern sector a site for military barracks and the southern sector an urban area. The urban area contained two blocks 150 m wide and 160 m deep, each of which was subdivided into 40 m x 15 m street blocks. A notable feature in the plan was X-shaped avenues with a park placed at the center. The Japanese army would later praise Nanam as "a highly civilized example of city planning."[20]

The planning of Jinhae in 1910 was carried out in a similar manner. After Korea was obliged to become a Japanese protectorate in 1905, the Japanese navy forcibly acquired an enormous tract of land to build a military port and a new city. Little is known about

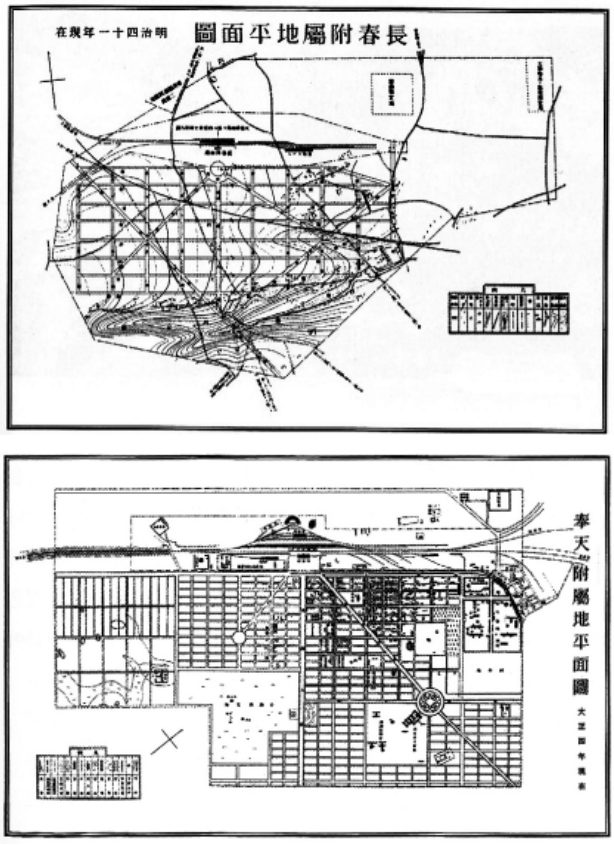


Fig. 1.7 Plan of Changchun, 1908 (Kobayashi 1996, 57)
Fig. 1.8 Plan of Mukden, 1915 (Kobayashi 1996, 57)

the men who carried out the planning. However, their methods appear similar to the way the South Manchuria Railway Company (Mantetsu) planned the construction of cities around railway stations in Manchuria.[21] Analysis of the urban formats of Changchun and Mukden (Shenyang), and of other Chinese cities planned by the railway company in the first decade of the century, reveals several similarities (figures 1.7, 1.8). First, they commonly placed railway stations at the center of urban areas, allotting the front half to public, commercial, and residential areas, and the rear half to factories and warehouses. Second, a regular grid-shaped street network was employed if the ground was flat, and radial streets were added with railway stations at the center. Third, planners attempted to avoid creating an undifferentiated urbanscape by inserting large-scale buildings around the railway-station squares. Fourth, urban amenities such as parks and water reservoirs were built to be self-contained. Last, the average ratio of road coverage in the entire urban area was never less than 23 percent.[22] These formats are significant

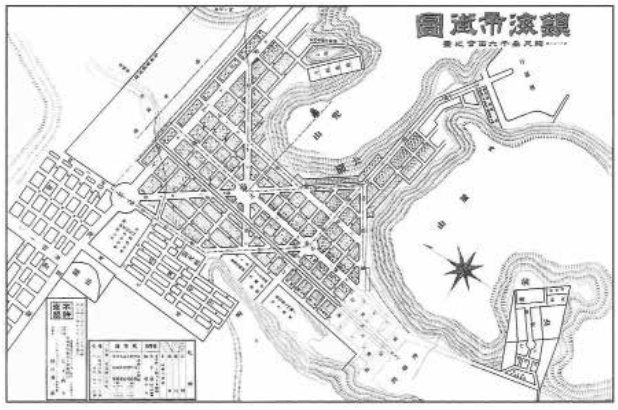


Fig. 1.9 Plan of Jinhae, 1910 (Ei-Won Kim 1982, 659)
Fig. 1.10 View of Jinhae, ca. 1930? (Photo courtesy of Sam-Geon Han)

because Japanese urban technocrats applied them to the planning of Korean cities until the enactment of the Urban District Plan Decree of 1934. Jinhae Railway Station was located at the center of the city, with a frontal area subdivided into grid-shaped blocks 60–80 m long, and radial streets were formed by connecting three urban centers (figures 1.9, 1.10). The Japanese settlement at Pyongyang, planned in the 1910s, shows a similar scheme.

The urban planning of the Manchurian railway company was closely associated with the ideas of Goto Shimpei, the first director of the company, who had implemented urban improvement projects as the head of civilian affairs in Taiwan. These experiences had taught him that the success of colonial rule depended on the establishment of balanced, advanced urban planning, supported by infrastructure built to the standard to which the Japanese had grown accustomed.[23] He therefore emphasized scientific and statistical surveys and conducted in-depth research on the urban planning methods of Western countries. The predominant urban planning methods of the time had been developed in Europe and applied to new American and Australian cities since the late nineteenth century. Cerda's plan of Barcelona showed a typical method of creating a modern urban space. In his network-oriented approach, street layout and grid plans were optimized to accommodate pedestrians, carriages, horse-drawn trams, urban railway lines, gas supply, and large-capacity sewers to prevent flooding without neglecting public and private gardens and other key amenities. Urban planners in the United States, particularly Daniel Burnham, looked to the European models and concentrated on working out an elaborate system of infrastructure rhythmically punctuated by public monuments. Burnham's plan of Chicago was a typical American example, and the methods he followed provided a template for developments in Manchuria and colonial Korea, albeit with some regional modifications. Jinhae exemplified this kind of adaptation.

City Ward Improvement Planning

After the annexation of the Korean peninsula in 1910, the Japanese empire implemented new urban policies to strengthen its hold over Korea. It introduced city ward improvement planning to transform the traditional cities of Korea where thatched-roof houses were clustered together in a disorienting fashion, separated by snaking alleyways. Historically, the city ward improvement plan carried out in Tokyo was the Japanese government's first intervention to improve premodern urban structures. Its model was a modernization program in Paris led by Georges-Eugène Haussmann between 1852 and 1870. At that time, Tokyo was already overcrowded. The population was close to 1 million and the density of some wards exceeded 500 persons per hectare. After years of studying the issue, the government enacted the Tokyo City Ward Improvement Ordinance (Shiku Kaisei Rei) in 1888. Its contents covered roads, rivers, bridges, railroads, public parks, markets, crematoriums, and graveyards. The project was never carried out, however, because of insufficient revenue, and a new scaled-down plan was announced in 1903.[24] The major achievements of the revised remodeling program included the construction of thirty-two parks, seven canals, new waterworks and sewage systems, and the improvement of 123 roadways up to 1919. Once the program demonstrated its adequacy, it was applied to other cities such as Osaka, Kyoto, Taipei, Seoul, and Pyongyang.[25]

According to Iwao Miake, who published *Urban Studies* in 1908 after surveying the extensive literature on Western urban planning, "the first requirement of the system lies in the widening of roads, and the second in the unified, technical design of an entire street network."[26] His statement pinpointed what the program of city ward improvement entailed. The term itself contained strong overtones of urban improvement, a notion often allied in England with town planning.[27] Accordingly, the goal of city ward improvement was the enhancement of urban functions in old towns rather than the development of new towns, and its most conspicuous feature was an emphasis on the construction of urban infrastructure, as opposed to a comprehensive account of overall land use.

To ensure effective implementation of the program, the Government-General of Joseon (Joseon chongdokbu in Korean, Chousen soutokuhu in Japanese)[28] created a variety of legal and institutional structures. A comprehensive land survey of Korea had been carried out from 1910 to 1918 to systemize land registration and make land—particularly agricultural land—a secure and easily marketable item for anyone, whether Korean or foreign.[29] As a result, many Korean farmers were forced to become tenant farmers because they could not produce any documented proof that they owned their land. Together with the land survey, the Government-General of Joseon issued several decrees concerning architecture and development of the cities. The Land Expropriation Decree (Toji Suyong Ryeong) and Road Regulations (Doro Gyuchik) were promulgated on April 17, 1911, as the colonial government's first steps in the implementation of its urban policies. The first decree allowed the government to expropriate, subject to the governor-general's approval, any estates required to facilitate the construction of military installations, public buildings, educational facilities, railways, roads, and bridges. The Road Regulations specified in detail the planning and construction methods of roads, breaking them down into four categories.[30] The City Ward Improvement Decree (Sigu Gaejeong Ryeong) was issued on October 7, 1912, to regulate the development of urban areas. It ordered the Korean people to seek permission from the Government-General of Joseon whenever any remodeling or expansion of main urban districts was desired.[31] This law well illustrated the repressive nature of Japanese urban policies. The following month, the Japanese colonial government announced a plan to improve twenty-nine routes in Seoul. In accordance with the plan, castle walls were demolished and new roads were established in a grid formation alien to the existing urban environment. Water supply facilities and sewer systems were also installed at the same time. On February 25, 1913, the Government-General of Joseon made public a set of Regulations for Urban Architecture (Sigaji Geonchuk Chwije Gyuchik) intended to regulate building activities in urban areas.[32] Together, these laws served as the basic legal foundation for maintaining control of all urban development in Korea until the Urban District Plan Decree (Joseon Sigaji Gyehoek Ryeong) of 1934. On October 10, 1913, the Japanese empire began to implement its *"bu"* system *(buje)*, enabling local governments to establish a level of expenditure for urban projects in their budgets. This meant that a local government could invest part of its finances in city ward improvement projects.[33] On October 12, 1914, the Government-General of Joseon sent written instructions to provincial governors regarding the authorization of city ward improvement projects.[34] From that time on, local governments had the authority to conduct their own city planning in accordance with their financial situation.

The Record of Civil Works in Korea (Chousen doboku jigyoushi), published by the Government-General of Joseon in 1928, itemized in detail the construction process and expenditures for public works ranging from roads, rivers, harbors, and urban renewal projects to water supply and drainage systems.[35] The evidence contained in this record verifies that city ward improvement projects were civil works intended to reorganize the colony's territory in accordance with Japanese interests. Urban remodeling occurred in thirteen Korean cities from 1913 to the early 1930s with significant transformations at the center of major cities such as Seoul, Daegu, Busan, and Pyongyang.[36] In these projects, the colonial government paved the most frequently used roads, making them straight, separated sidewalks from carriageways, and installed the needed infrastructure for water and sewage systems.

In Seoul, the Government-General of Joseon designated twenty-nine roads as targets for remodeling on November 6, 1912. The plan was revised five times until 1928[37] when its scope was finally extended to forty-four roads (figure 1.11).[38] Yet only twenty-five of the forty-four roads were actually completed before liberation. Prior to the city ward improvement planning, street networks in Seoul had not departed very much from a framework that dated back to their medieval origins.

Fig. 1.11 Road remodeling in downtown Seoul (Map redrawn from land registration of 1918 and digitized by Sang-Koo Lee)

In fact, main roads in old Seoul were never intended to be crossed at right angles, apparently for military and geomantic reasons.[39] The first city improvement plans for Seoul showed an intention on the part of the colonial government to change this closed street system into an open system as part of the city's transformation into a modern metropolis. The city center of Seoul was composed of blocks approximately 200 m to 300 m in size. The plan intended to place the Government-General of Joseon's headquarters at the center of power (figure 1.12b), so radial roads were created that led out from the headquarters building, centering the axis of the urban scheme on the building. As a way of expressing political power in urban space, similar schemes had been adopted in Versailles and Washington, D.C. The plan was changed, however, when it was decided that the colonial headquarters building should be relocated directly in front of Gyeongbokgung Palace, requiring significant changes in the street system. The newly prepared plan of 1919 reflected these changes. Radial streets moved to the front of Gyeonbokgung Palace, and all the radial streets and plazas at the old building site disappeared (figure 1.12c). The 1919 plan still maintained a grid-pattern layout of street networks; as in the 1912 plan, minor streets continued to be aligned with the linear patterns of the old streets. Most of the arterial roads in the old center of Seoul were built at that time.

Pyongyang, the present-day capital of North Korea, offers a glimpse of how old walled towns

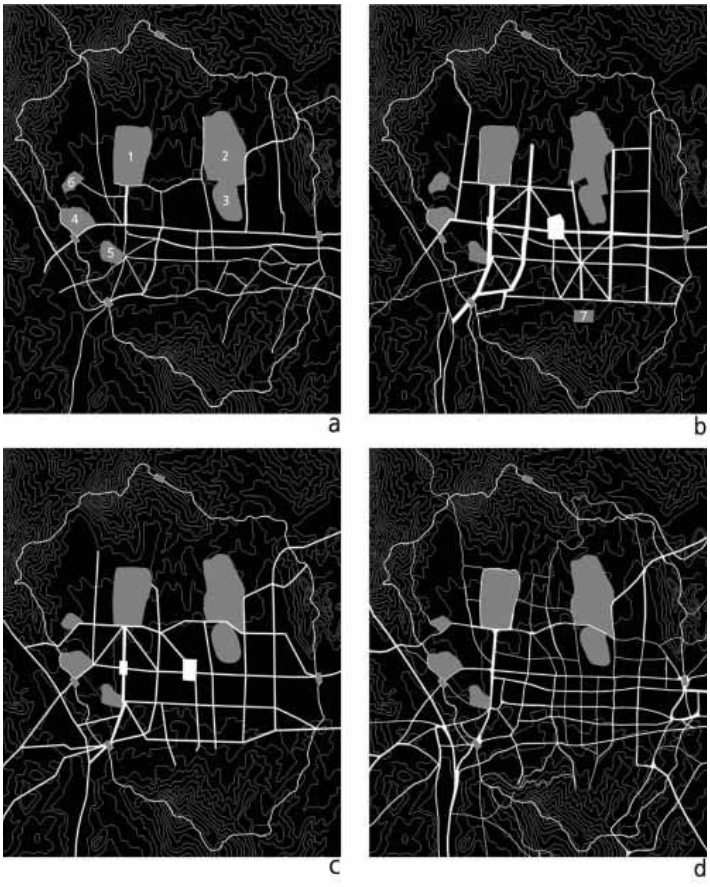


Fig. 1.12 Changes in the urban structure of downtown Seoul: (a) city fortress of Seoul before modernization; (b) city ward improvement plan, 1912; (c) city ward improvement plan, 1919; (d) present-day urban structure of downtown Seoul

1. Gyeongbokgung Palace
2. Changdeokgung Palace
3. Jongmyo (the ancestral shrine of the royal family)
4. Gyeonghuigung Palace
5. Deoksugung Palace
6. Sajik (altar to the state deities)
7. Government-General of Joseon headquarters building before the relocation in front of Gyeongbokgung Palace

in Korea were transformed into colonial cities through city ward improvement projects. As a place of strategic importance in the northwestern region of the Korean peninsula, Pyongyang had formed its urban core within four layers of fortress walls between the Daedonggang and Botonggang rivers. However, after the opening of a railway line between Seoul and Sinuiju in 1906, the old town began to dissolve. In addition, when the construction of Japanese army barracks near Mt. Seogi ignited a Japanese rush to Pyongyang, the city government formulated a plan for a new town to meet the urgent demands of the Japanese settlers. Its design resembled the Chinese cities conceived by the Mantetsu with streets laid out in a grid and arterial roads radiating from a railway station at the town center. It is intriguing to contemplate how the plan also reflected a traditional urban layout from the sixth century, imitating ancient Chinese urban formats characterized by a clear division into distinct city blocks or wards. The size of each block in the new town was 84 m x 84 m. Prior to the construction of a Japanese supply base in 1917, the site to the rear of the station was left empty, existing only in traces on maps. By maintaining the existing layout, Japanese planners had intended to link the new town to the old fortified city of Pyongyang.

Afterwards, Pyongyang underwent two major changes that prompted the overhaul of its urban structure: the introduction of streetcar service in 1922 and the construction of Daedong Bridge in 1923. Of the two, the construction of Daedong Bridge provided momentum for the expansion of the city's boundary into the east bank of the Daedonggang River. Until then, both the old and the new town had been contained by the west bank. However, in spite of the rapid population growth that industrialization brought to the city, the city government had trouble selecting suitable sites for the expansion of urban space because many ancient remains surrounded the city. The Government-General of Joseon decided to span the river with a bridge to resolve these problems. The construction of the streetcar track also had a substantial impact on the urban structure. In 1922, the city government established a five-year plan for the first city ward improvements to meet the new requirements. However, the initial plan to widen and straighten the existing roads in accordance with the new traffic system was not accomplished within the expected timeframe, only reaching its conclusion in 1927. Through these projects, the new town was directly linked to the old town of Pyongyang. The second round of city ward improvements were carried out from 1927 to 1933, remodeling four roads to renovate the old town (figures 1.13, 1.14).

Since city ward improvement planning left a lasting influence on the urban structure of Korean cities, a look at the historical context of its implementation may be instructive. Above all, there was a significant difference in purpose between its development in Japan and its application in Korea twenty-four years later. In Japan its purpose was the remodeling of premodern cities, especially the capital of Japan, into modern ones; in Korea the same program was carried out to extend colonial rule. This difference can be verified by history. When Haussmann transformed the old center of Paris into a modern city, incorporating wide avenues and open spaces, the population of Paris was more than 2 million, and its density, at a maximum, was 340 persons per hectare.[40] Haussmann's planning was in fact a response to dire urban conditions resulting from overpopulation. In contrast, when the improvement work for 31 routes was undertaken in Seoul, the population of Seoul was 250,000, with a density of only 69 persons per hectare. The housing shortage was less than 6 percent. Therefore, it can be argued that the City Ward Improvement Ordinance was not introduced to solve urban problems but to strengthen colonial rule. Along with a comprehensive land survey conducted between 1910 and 1918, the ordinance aimed to establish a strict spatial partitioning of the national territory, and its main purpose was to make an accurate map that could be used to consolidate political power. As Arie Graafland has pointed out, a perceptual apparatus is never neutral to its observation, but can be used for other purposes.[41] In their promotion of urbanism, the common aim of Japanese colonial officials was to make urban spaces identifiable and more easily governable rather than to solve, like Hausmann, serious urban problems stemming from overcrowding.

City ward improvement planning followed a distinctive path in Korea because of its sponsor, the colonial regime. That is to say, while the plan focused on improving street networks, it was never part of a comprehensive urban planning scheme like Haussmann's renovation of Paris or the initial city ward improvement plan in Tokyo. Because the city ward improvement plan in Korea focused on road works for Japanese new towns, delaying any large-scale intervention into traditional urban tissues, it caused severe imbalances in the urban domain. For example, there was a widespread shortage of access to a water supply. According to a 1925 survey,

Fig. 1.13 City ward improvement planning of Pyongyang (Redrawn from a 1915 map of Pyongyang)

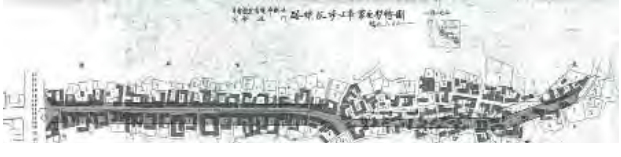


Fig. 1.14 Through road from Sinchangli to Botongmun, the western gate of the old city of Pyongyang, 1923 (National Archives of Korea, CJA0013073)

the water supply access rate for Korean households living in Seoul was no more than 28 percent whereas that of Japanese households reached 85 percent. Such disparities accounted for the inadequate sanitation in the areas of Korean residence in the 1920s.[42]

The Experience of Modernity in Colonial Cities

Subtle signs of change began to appear in the urban discourse of the early 1920s, for several reasons. First, there was an apparent change in the style of Japanese rule, shifting from the iron-fisted domination of the early years to a more cultural approach, because the former was seen to be undermining the long-term stabilization of the colonial society. An uprising on March 1, 1919, expressing a nationwide outcry against the intolerable aggression, oppression, and plundering of the Japanese colonialists, had been a watershed event. In the urban domain, one of its outstanding results was a transfer of power from the Japanese government to local governments. As a result, most urban plans in the 1920s were drawn up by local governments, and planners and civil engineers were usually invited to participate. The reason local governments came to the forefront at that time was the necessity of adjusting the conflicting interests of residents before urban projects could be executed. In particular, a sharp conflict between the Government-General of Joseon and Japanese residents in Seoul over the expansion of Seoul reveals how different segments of the Japanese ruling class took differing stances toward urban issues. At that time, the Government-General of Joseon had planned to develop the northern districts of Seoul, where most Koreans lived, in order to secure its command of the entire urban area. But the Japanese, who mainly lived in the southern districts, opposed this plan and insisted on expanding Seoul toward Yongsan and the Hangang River.[43] This debate sparked a fierce controversy because the direction of urban development decisively influenced land prices.

Second, technocrats of the colonial government were researching a wide range of urban methodologies and coming to the conclusion that the city ward improvement plan did not effectively handle expansion of urban space, because its priority was the renovation of old, degraded urban centers. In this research, diverse urban theories and methodologies were energetically discussed. It was the early 1920s when Ebenezer Howard's idea of a garden city and Le Corbusier's urban theory were introduced in *Chousen to Kenchiku*, the colony's only architectural magazine.[44] The urbanism of modern American cities provided an important template. Another significant reason for the appearance of different urban perspectives was the influence of Japan itself. A huge earthquake struck Tokyo and the surrounding Kanto region in 1923, providing sudden

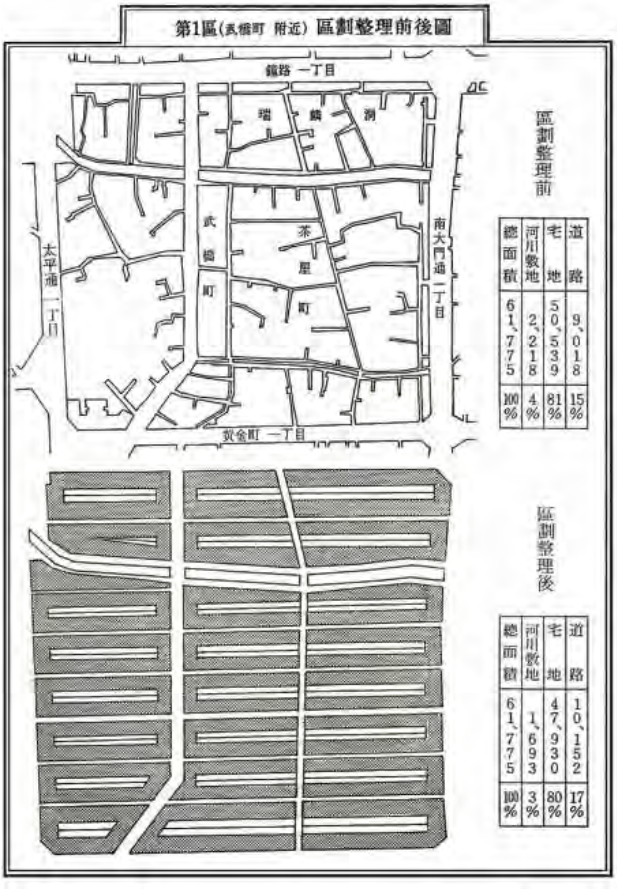


Fig. 1.15 Second master plan for Seoul, 1928, showing the First District (Mugyo-Dong) before and after execution of the land adjustment plan (Jung-Mok Sohn 1996a, 153)

impetus for the restructuring of Japanese cities and their transformation into modern ones. As it became more feasible to disseminate in-depth studies on new urban theories and methods, the intellectual ferment had a great impact on colonial technocrats.

Attentiveness to urban issues had already led to the formation of the Study Group for Gyeongseong (old Seoul) Urbanism in 1921, organized by colonial technocrats and pro-Japanese collaborators. The members of the group agreed on the necessity of drawing up a master plan for a city of 1 million inhabitants. The first of three master plans for Seoul was established in 1926 by Takayoshi Honma, director of a newly organized city planning department in Seoul's city government, who had inspected examples of European urbanism. As soon as the plan was announced, it faced severe criticism for its unrealistic scale, which included both Seoul and Incheon. After a reduction in scope, the second plan was issued in September 1928. The major objective of this plan was the renovation of Seoul's old downtown area, amounting to about 158 ha, by means of land adjustment, including a revolutionary idea to raze the area to the ground and fill it with Western-style roadside buildings (figure 1.15).[45] This idea evidently originated in the Earthquake Recovery Plan established in Japan in 1923 under which land readjustment projects were carried out in the 3,300 ha area destroyed by fire. Restoration on this scale had never been seen anywhere else in the world: an irregular urban sprawl was cleared away and transformed into precise districts with grid-like streets and pocket parks.[46] For Seoul, however, the second plan was at some remove from the actual urban situation, and the colonial government did not have the financial resources to carry out the plan. More realistic methods would be needed after the 1930s, when the spatial expansion of Seoul was finally undertaken.

What was most remarkable about the 1920s was the appearance of a new generation of urban dwellers who rejoiced in its everyday culture. "Starting at the turn of the century, the urbanizing process stimulated the formation of a new sensibility, giving rise to intellectuals and a new kind of human. They accepted the urban way of life as it was, looking at cities as an object of commentary and criticism."[47] These so-called modern boys strutted along newly opened streets and experienced for themselves the cold-bloodedness, melancholy, and despair that modern cities engendered. The sensibility they expressed produced a great change in the spatial consciousness of colonial intellectuals and artists. To them, the city was both the distillation of modernity and, because it was the essence of the modern, the place where the representation of modernity was embodied. The emergence of an avant-garde in Seoul revealed the experience of those who lived in colonial cities from a different perspective. The works of the novelist Man-Sik Chae and the poet Sang Yi provide eloquent examples of how the urban avant-garde portrayed modernity in a critical fashion.

A Muddy Stream (Takryu), by Man-Sik Chae (1902–1950), depicted the social life of Gunsan, one of Korea's open ports, during the 1930s. The narrative unfolds in two contrasting areas of the city, capturing the tensions, abhorrence, and proximity of the inhabitants of the two areas. The Korean district is a shantytown supplying cheap and plentiful labor to support the colony's economy. In contrast, the Japanese settlement follows a well-defined gridiron plan highlighted by imposing buildings. This clear dichotomy between

the periphery and the center, the premodern and the modern, the dominated and the dominant structures, enforces a sense of inferiority among the local Koreans. By showing the enormous discord inherent in colonial cities, the author exposes the pretense of colonial modernism for what it truly is—a mask of power. To Man-Sik Chae, it had already become clear that the dominant power in the colonial period was transforming the built environment of the colonized society to make it serve its interests, economic or ideological. *A Muddy Stream* presented the critical insights of colonial intellectuals who tried to plumb the contradictions and inconsistencies underlying the urban space of colonial cities.

Sang Yi (1910–1937) was a graduate of the architecture school at Gyeongseong Engineering College who worked as an assistant engineer in the colonial government for four years. Resigning his post in 1933, he devoted himself to literature and developed a reputation as a controversial poet. His writings, especially his early poems written in Japanese, have been compared to those of Franz Kafka as forms of "minor literature."[48] This poetry marked the impasse felt by colonials who were barred access to the dominant discourse. In depicting the transformation of urban space in Seoul, Yi refused to bow to the architectural and urban discourse of the Japanese authorities, preferring instead to point out their camouflaged hypocrisies. Yi's poetry reveals the emergence of a new subjectivity in Korea, reflecting a moment when the modern way of life was becoming embedded in the culture. To express the chaotic everyday life of a large city as it evolved, Yi used highly visual forms of language. In this, he shows an affinity with the perspectives of Charles Baudelaire and Walter Benjamin, who witnessed the urbanization of their respective cities, Paris and Berlin, and made modern cities, their architecture, and the life of their residents the themes of their work. Moreover, all three believed that understanding modernity required a critical examination of the governing principles of urban life. Through their works, they proposed a new vision of the urban landscape, one that has continued to have an impact on architecture. Each of them placed the experience of urban shock, associated with the impersonality of crowds of strangers, at the center of their work.[49] Moreover, unlike the disinterest and apathy expressed by some, all three confronted the shock of urban life in a combative way, a continued resistance that eventually wore them out. Baudelaire, Benjamin, and Sang Yi were modern writers who battled to their deaths against the depredations of the urban condition, making their works exemplary first-hand accounts of the turbulence that engulfed their time.

Yi's best-known poem, "Crow's-Eye View, Poem No. 1," clearly expresses the point of view of the contemporary urban avant-garde.[50] The poem uses metaphor to insinuate the author's spatial consciousness. A bird's-eye perspective has two underlying meanings. One is the desire to escape from the disorderliness of Seoul so that he can understand its space more clearly; the other is his desire to transcend the bondage of reality. The poem also uses two contrasting spatial expressions, an open alley and a dead-end alley, which seem to express Yi's response to changes in urban space.

Along with documenting the shock caused by crowds in the modern city, Yi's early poems depicted the wonder and astonishment Koreans experienced upon first contact with Western science and technology. The signs and numbers that appear in Sang Yi's experimental poems are similar to the images and motifs used by Laszlo Moholy-Nagy to express his fascination with the process of visualizing the modern. They never literally represented anything but were used purely for the visual effects and movement that Moholy-Nagy tried to create. Indeed, they express the essence of modern spatial systems as abstract points dotted in a Cartesian coordinate system, making it possible to measure their exact position. The space containing these points is neutral and extensible. Sang Yi found similar spatial conditions in the colonial planning of Seoul, a new urban landscape created by Japanese technocrats, and his poems show how modern subjects interiorized that urban discourse (figure 1.16).

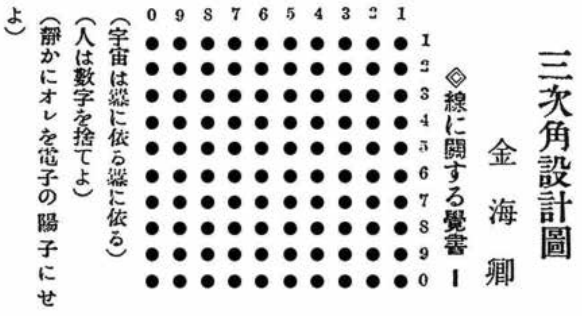


Fig. 1.16 "Pledge on Line 1," Sang Yi (Hae-Gyeong Kim 1931)

Suburbanization and the Land Readjustment Plan

The visionary plans drawn up in the 1920s proved to be an unrealistic solution to the serious urban problems triggered by the rapid population growth of Korean cities in the 1930s. Projects conceived as part of the city ward improvement planning were ineffective because they were intended to rebuild bad sections of the cities at a time when Korea was witnessing suburbanization for the first time. Throughout the 1930s, the population of twenty urban areas in Korea increased by 250 percent. These increases were mainly the result of industrial development. When Japan invaded Manchuria in 1931, Japanese militarists quickly saw the geopolitical importance of the Korean peninsula, since the three routes they set up to advance into the continent had to pass through the peninsula. Accordingly, the colonial regime set out to convert Korea's economy from rice-centered agriculture to heavy industry, centering on munitions. Investments in a large-scale industrial capacity capable of supporting a war in China increased greatly, together with a need for sweatshop labor. The increased production of war materials led to an economic boom, drawing many rural peasants to the large cities to seek work. The result was tremendous growth along the outskirts of the cities together with serious problems such as housing shortages and inadequate public sanitation. In response to this uncontrolled expansion, the Government-General of Joseon implemented two new policies. The first had the effect of enlarging the administrative district of existing cities, and the second promoted towns to cities.[51] An enormous expansion of the boundaries of Seoul in 1936 was the culmination of these policies (figures 1.17, 1.18). In addition, the Urban District Plan Decree, which the colonial government had enacted in 1934, provided a legal basis for developing suburban areas. This law involved two major methodologies, zoning systems and land readjustment, which brought about a shift in urban planning from a linear form to a planar one.

The Urban District Plan Decree

The enactment of this law led to great changes in the framework of urban planning. Article 2 of the law prescribed that all urban planning would be determined by the governor-general after listening to the opinions of local government officials relevant to the matter in question. This meant that the executive principle of urban planning had now shifted from local to central

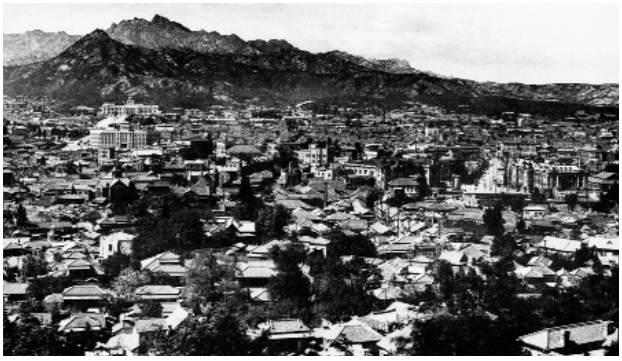


Fig. 1.17 Seoul city plan, 1937 (yellow indicates areas newly developed through land readjustment planning) (Seoul yeoksa bakmulgwan 2006, 110–111)

Fig. 1.18 View of Seoul, looking toward Mt. Bukhan, in the 1930s (Gyu-Heon Lee 1996, 10–11)

government. Until then, in order for an urban plan to be realized, a series of steps was required: local government first produced a draft that was sent to the central government. After collecting feedback from local governments, the Department of Civil Engineering organized the project's financing and order of implementation. The Council of Civil Engineering (Tomok Hoiui) was empowered to conduct the actual planning, which awaited the final approval of the governor-general. The Council of Civil Engineering had been established to regulate major civil engineering projects—as the name suggests, urban projects were regarded as part of civil engineering at the beginning of the colonial rule—but this organization was abolished in 1932 when enactment of the Urban District Plan Decree was being discussed in earnest.[52] Starting in 1935, the City Planning Committee was reorganized in order to play a similar role to that of the Council of Civil Engineering.

However, unlike the Council of Civil Engineering, which comprehensively dealt with public works in Korea, the City Planning Committee focused on urban planning projects.[53] This change indicates that the focus of Japan's public works shifted from civil engineering projects, such as the construction of ports, roads, and railways, in the initial phases to urban planning after the 1930s.

Based on this law, the Government-General of Joseon established city planning regimes for forty-three cities nationwide, some of which began to publish Explanatory Reports on City Planning Decisions (Sigaji Gyehoek Gyeoljeong Iyuseo) to state the purpose of city planning decisions and the decision-making process.[54] An analysis of these reports reveals that all city planning followed the same method. Urban planners would initially predict the population thirty years hence based on the demographic trends of each city. The calculation equation varied depending on the city involved. In the case of Seoul, demographic trends from 1916 to 1933 engendered the following equation: $N = 18.500T + 401.486$ (T: the year of the Showa era, N: the future population). According to this equation, Seoul's population in 1965 was estimated at 1,141,486 people (table 1.1). There was some consensus that an ideal population density would be 100 sq m for each inhabitant (100 inhabitants per hectare). The source of this criterion was not noted, but Ebenezer Howard had suggested the ideal of 75 inhabitants per hectare forty years earlier, and Raymond Unwin had set a norm of 30 dwellings per hectare in his book *Town Planning in Practice* (1912), arguing that it was cheaper to build in such low densities.[55] In addition, the number reflected the median population density of Japanese cities: 181.9 sq m per inhabitant (55 inhabitants per hectare).[56] After fixing the targeted density of population, planners set the boundaries of newly extended urban areas, taking into consideration the topography and the administrative zone. Walking distance also acted as an important factor. Thus the boundaries of a city were normally drawn up within a 5 km radius from downtown, a distance one could easily walk within an hour.

A similarly scientific approach was applied to arterial roads. Japanese planners analyzed the geographical features and existing traffic conditions of each city to design its arterial roads. The starting point was the establishment of roads to interconnect the cities. Next, the planners linked these roads to the inner street systems. They approached the design of the inner roads by subdividing cities into several wards or subcenters according to population and topography. In other words, the principal roads in the cities were created by connecting downtown areas and the subdivided wards, or the centers of the subcenters. In Seoul, Japanese planners subdivided the entire city into seven subcenters—the old downtown, Yongsan, Cheongryangri, Wangsipri, Hangangri, Mapo, and Yeongdeungpo—and then, placing the city hall at the center, created principal roads to connect them.[57] The roads had three different widths according to their functions: arterial roads connecting the downtown and subcenters were 24 m, 28 m, and 34 m wide; subarterial roads connecting major places within subcenters were 12 m, 15 m, and 20 m wide; and local roads were less than 12 m wide. The height of roadside buildings was limited to assist natural lighting in roads, following the Urban District Plan Decree.

Another remarkable feature of city planning under the Urban District Plan Decree was its awareness of the emergence of automobiles, which became a major consideration in the planning of the street system. Even though the number of cars at the peak traffic periods was no more than 8,000–10,000 in Korea,[58] Japanese planners wanted to factor them into city planning anyway, predicting an increase in their number thirty years later. The suggested number was 2.5 cars per 1,000

Table 1.1 Population predictions in the Explanatory Reports on City Planning Decisions

Cities	Population and density in 1934		Predicted population and density in 1965		Real population in 1966
	Population	Habitable area for each person (m^2)	Predicted population	Habitable area for each person (m^2)	
Seoul	382,491	65	1,141,486	83	3,793,280
Busan	163,814	98	400,000	100	1,426,019
Daegu	107,657	81	354,807	137	845,189
Incheon	75,558	88	184,570	138	525,827
Mokpo	55,667	127	138,856	127	162,166

persons, based on an analysis of Japanese cities.[59] This prediction may seem absurd from our perspective, but an accurate picture of the world thirty years hence was not available to Japanese planners. After defining principal roads, they designed diverse secondary roads, which remained parallel with the principal roads. These roads were conceived in close relation to land readjustments, a major way of partitioning the newly prepared sites.

Using this approach, a nationwide scheme for urban development, starting with Najin in 1934, led to the planning of forty-three cities. This initiative is of great interest for the history of city planning insofar as it introduced a number of design methodologies based on a scientific analysis of urban realities. Yet the problem was that the colonial government failed to secure the financial resources needed to carry out its plans, mainly because it excluded the private sector and subsidies from the national coffers could not meet expectations. Thus, few projects were implemented properly during the period of Japanese occupation. The only exception was the urban districts developed according to a land readjustment system. Since this did not require significant financial outlays, sixty-one districts were planned nationwide, of which thirty-seven were completed.

Land Readjustment Projects

After the planning of forty-three cities, the colonial government set forth a comprehensive urban development scheme, designating nationwide sixty-one districts as land readjustment areas. Land readjustment, which has been used as an important tool to design urban space in Korea since the 1930s, produces a particular urban pattern. Unlike the city ward improvements that were linear urban designs focusing on the renovation of roads, land readjustment was a planar development method.

In fact, this system had been used for agricultural land consolidation in Japan during the Tokugawa era and was widespread since the 1880s. In 1899, the Agricultural Land Consolidation Law (Koshi Seiri Ho), modeled after the German land consolidation system, was passed to facilitate agricultural land improvement through the grouping of scattered landholdings into larger plots and the building of irrigation systems.[60] But unlike Germany, where most of the agricultural land consisted of dry fields, Japan had many wet fields. Hence, the initial law underwent a sweeping modification that provided the basis of the land readjustment system that was introduced as an essential provision of the City Planning Act of 1919.[61] In this revised system, allowance had to be made for two specific provisions deriving from Japan's own history: first, all landowners contributed a portion of their land—usually about 30 percent—for public use; second, all landowners were required to participate in the project when at least two-thirds of the landowners agreed.

Also known as land consolidation or land pooling, land readjustment became an important tool for urban development in Japan, South Korea, Taiwan, and other countries. The process basically worked as follows. After an area was selected for a land readjustment project, a development plan was prepared based on the current and projected market conditions and taking into consideration environmental and aesthetic factors. The plan disregarded existing lot ownership, however. An area's parcels of land were pooled into a single entity, and the parcels were then replotted to fit the development plan. An individual, a private corporation, a landowners' association, a public corporation, an administrative agency, or another public entity could all implement the development plan. Land for public facilities and land that would be sold to help cover some of the project's start-up costs were captured through a technique called "land reduction." This system became popular because it was an effective method to develop urban fringe areas, converting them from agricultural or rural to urban or industrial. In sum, the main approach was to pool the ownership of neighboring lands, build an urban infrastructure, and divide the land into urban plots.

The Government-General of Joseon inserted the land readjustment system into its Urban District Plan Decree and detailed the regulations governing land readjustments. According to Article 42, "land readjustment is defined as the transformation of land partitioning through an exchange, division, or annexation of plots and a change in the category of land, or as the creation, transformation, or abolishment of roads, squares, rivers, and parks in a bid to improve the use of land as plots." This system was seen to have many advantages in comparison to other methods of development or expropriation; principally, it provided for planned development of land and infrastructure without straining existing financial resources. For this reason, since its initial enactment in Japan, about 30 percent of the urban land supply was developed through its use, and in some places, such as the city of Nagoya, as much as 77 percent of all habitable land was developed through

this method.[62] It also became very popular in Korea, as reflected in the 23.4 percent of newly urbanized areas it accounted for until the 1970s. Yet the system also had obvious limitations. The most serious defect was that it was a development method that relied on land division to improve the efficiency of land use. This underlying purpose caused side effects because it could not yield a comprehensive, long-term plan. Moreover, it was incapable of dealing with the vertical changes that accompanied the increasing density of urban space. Nowadays, the major problems besetting the urban areas that were developed in the 1930s are said to have originated because of the limitations of the land readjustment system. Finally, since this system was totally dependent on satisfying the landowners' interests during the planning stage—the rate of land reduction, for example, was critical to landowners—it was very difficult to secure sufficient public space. To make up for these shortcomings, Japanese planners introduced the neighborhood-unit theory in 1941.[63] However, the land readjustment projects that commenced in 1937 were already completed in Korea by 1940.

Aside from preexisting city centers and urban spaces developed since the 1960s, the major part of the urban space in Korea's large cities was planned using the land readjustment method. However, since those plans were made without seriously considering the concept of a neighborhood or an overall regional plan, it can be argued that they have been the major cause of today's urban problems. Viewed from a contemporary perspective, that planning posed thorny problems. Since sites were subdivided to accommodate single-family dwelling units, either detached or attached, the resulting urban space has proved incompatible with today's high-density needs. Moreover, the street systems it provided are inappropriate for large-scale use of automobiles. Parking has remained the most troublesome issue for residents because it was not considered a chief factor at the design stage. Finally, each district was planned without reference to regional planning guidelines, so the entire urban space lacks consistency.

The Block Parcellation Standard Drawing

The Explanatory Reports on City Planning Decisions of every city feature the following statement: "The convenience of traffic must be considered as a top priority in the planning of arterial roads, and the secondary roads must be arranged to fit the land use plan, with consideration for the areas demanded for buildings. However, since the size of buildings varies with the passage of time, it is difficult to predetermine these areas in a monolithic way. Therefore, while the arrangement of arterial roads must be suggested in the report, the arrangement of other secondary roads follows the situation at the moment of execution. The partitioning of plots must be done in accordance with the Block Parcellation Standard Drawing attached to the report" (figure 1.19).[64] Judging from this statement, it is evident that the standard drawing played a pivotal role in the partitioning of urban space, and an analysis of the areas developed by land readjustment offers confirmation. Let's take a close look at the drawing.

The Block Parcellation Standard Drawing illustrates three particulars. The first consists of eight kinds of residential blocks *(kaikaku)*. Each block is oblong shaped, with the long side measuring 100 m and the short side varying from 16 m, 19 m, 23 m, 30 m, 37 m, 44 m, and 52 m up to 66 m. The second is two kinds of roads, either 6 m or 8 m wide. The final particular is a table displaying the rates for the residential and street areas delineated from the gross area in the eight blocks. This table seems to have been intended to facilitate the calculation of the reduced land rate in the land readjustment. So where did the numbers come from? According to several studies, it is believed that Japanese

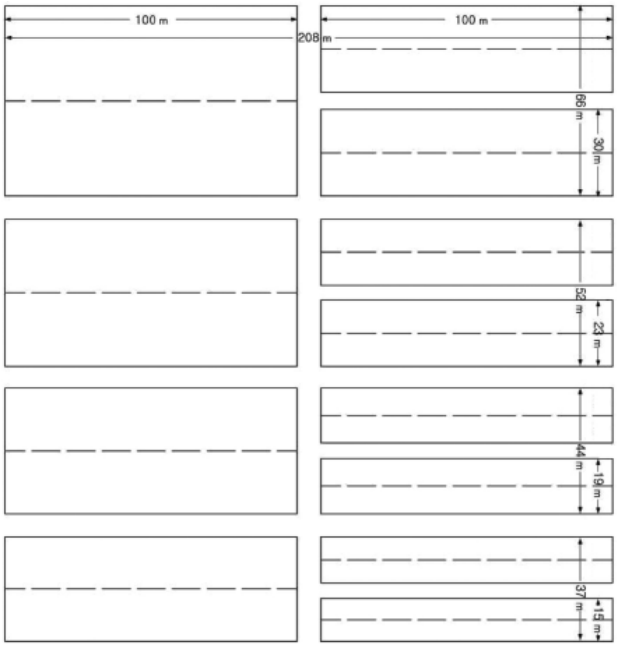


Fig. 1.19 Block Parcellation Standard Drawing, 1937 (Joseonchongdokbu 1937b, 53)

technocrats made use of eight guidelines to establish the city planning and land readjustment system.[65] Out of the eight, we can identify two guidelines, drawn up prior to 1937, that deeply influenced the standard drawing. They are the Decision Standards and Survey Data for City Planning (Toshi keikaku tyousa siryou kettei hyouzyun) and the Design Standards for Land Readjustment (Tochi kukaku seiri sekkei hyouzyun), written out by the Ministry of the Interior in July 1933. The Block Parcellation Standard Drawing is believed to be based on these two guidelines.[66]

How was the standard drawing applied to actual land readjustment projects? Land readjustment was planned on a nationwide scale and commenced in 1937. In some districts where the projects made rapid progress, the process was completed by 1941, but in many other districts the plan was not even executed until 1945. Above all, several wartime control ordinances promulgated after the outbreak of the Second Sino-Japanese War in 1937 critically slowed their implementation. In particular, the Price Control Ordinance concerning residential sites and buildings announced in 1940 was a serious blow to the execution.[67] After liberation, the original plans were considerably modified after the Japanese technocrats who had established them fled back to their country.[68] In Seoul, ten districts were planned as of 1937, but only three were completed before liberation. The rest were destroyed during the reconstruction of Seoul following the Korean War. Therefore, to analyze how the standard drawing was applied, we need to select districts according to the following two criteria: first, districts where the development process was wrapped up before liberation; and second, districts where the drawings identifying at least the planned block size have remained intact. Five out of the sixty-one districts meet these requirements: Yeongdeungpo, Donam, and Daehyeon in Seoul, and the Najin and Cheongjin districts in the region. In addition, the Sangdo district in Seoul can be added to the list because, even though it was developed as a residential complex, its method of development was similar to the land readjustment system in many ways.

Analysis of these six districts reveals that the standard drawing was not mechanically applied to the plan for each district but was modified according to three

Fig. 1.20 Initial land readjustment plan for Yeongdeungpo district, Seoul, 1937 (Tomii 1996, 497)

Fig. 1.21 Yeongdeungpo district, 2010 (Courtesy of Naver)

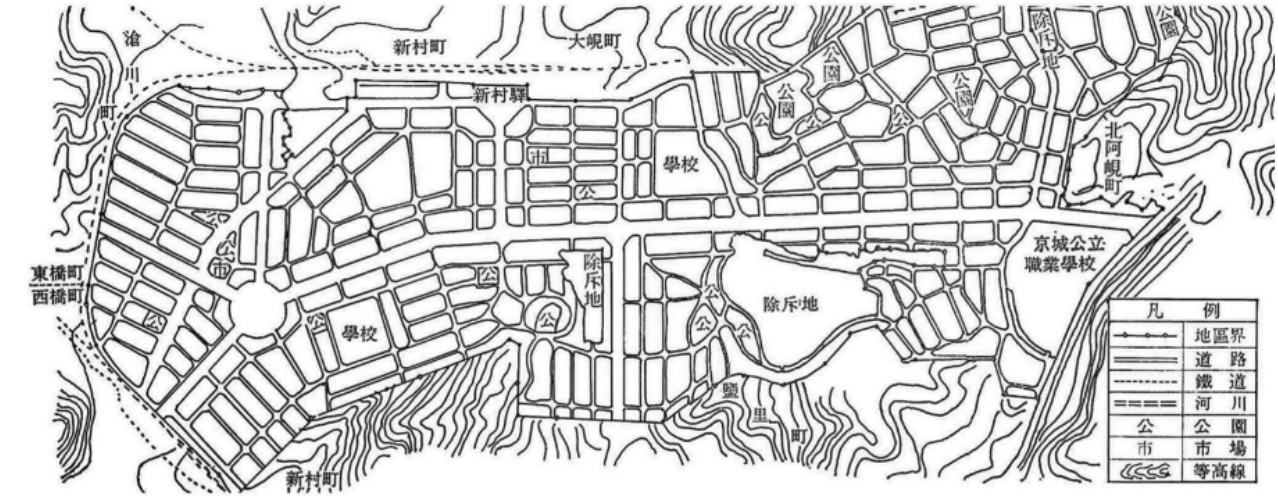


Fig. 1.22 Initial land readjustment plan for Daehyun district, Seoul, 1937 (Jung-Mok Sohn 1996a, 289)

Fig. 1.23 Daehyun district, 2010 (Courtesy of Naver)

factors: district size, natural conditions, and the pattern of arterial roads. With the size of the sixty-one districts ranging from approximately 1.5 ha to 512 ha, the average size was approximately 100 ha. Larger districts were usually laid out in a grid whereas medium-size districts placed arterial roads at the center of the plan. Consequently, the six districts under analysis break down into three types: grid, arterial road, and mixed. An example of a large district is Yeongdeungpo, where the land readjustment project ran from March 1937 to March 1940. The plan for this district subdivided it into diverse blocks and plots. Large plots allocated to industrial facilities were concentrated near the Yeongdeungpo station, an arrangement made possible because the district had been designated as an industrial zone in the planning of Seoul. Other blocks, however, were subdivided in a regular manner following the standard drawing. A block surrounded by arterial roads was 400 m x 240 m in size, and twenty-four residential blocks *(kaikaku)* were located within it (figures 1.20, 1.21).

Donam, Daehyeon, Sangdo, and Cheongjin districts all reflect a planning method used for medium-size districts. First, district boundaries were determined by the topography. In addition, major arteries penetrated to the center of the district, and secondary road networks were planned accordingly. The width of the arteries was approximately 30 m, and their routing was based on topographical flow and the need for access to other districts. Stemming from the major arteries, secondary roads 3 m, 6 m, and 8 m in width were planned, subdividing several residential areas (figures 1.22, 1.23).

Najin district can be classified as a mixed type. This was the first city to implement the Urban District Plan Decree following its announcement in 1934. Although its size of approximately 300 ha was similar to that of Yeongdeungpo, Najin was not laid out in a perfect grid

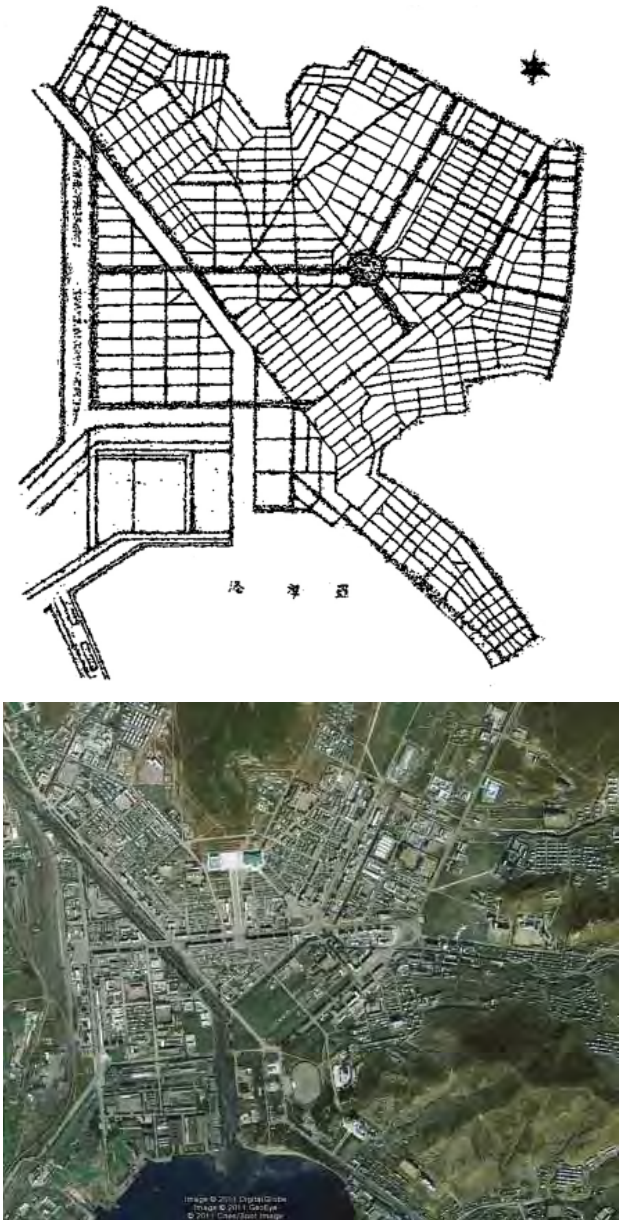


Fig. 1.24 Initial land readjustment for Najin district, 1934. (Kukaku Seiri, 1935, 41)

Fig. 1.25 Najin district, 2010 (Courtesy of Google)

because of the river's penetration to the center of the district. Thus, while entire blocks were designed to correspond with arterial roads, the residential blocks suggested in the standard drawing were repeated in them in a regular manner (figures 1.24, 1.25).

From this we can see that the Block Parcellation Standard Drawing was applied in three different ways, but the size of the residential blocks tended to remain roughly similar. As a central element of urban design, the size of the residential blocks was an important factor in the land readjustment system. Residential blocks derived from Japanese warrior group residences in the Edo period had a distinctive size and spatial arrangement that clearly distinguished them from blocks based on an American template, and these differences stood out in the Japanese open ports, which often had two divided settlements. The residential blocks of Donam, Daehyeon, Sangdo, and Cheongjin districts were very irregular, however, so it is difficult to calculate their average size. But if we narrow our focus to the Yeongdeungpo and Najin districts, the average size of a residential block was approximately 100 m x 40 m in Yeongdeungpo and 104.7 m x 41.6 m in Najin, both closely approximating the illustrated size in the Block Parcellation Standard Drawing.

Appendix

Profiles of Korean Architects and Planners

Bae, Ki-Hyung 배기형 (1917–1979)

Born in Gimhae, Gyeongsangnamdo, Ki-Hyung Bae studied at a vocational school in Busan and learned architecture through short courses provided by an institute at Kyushu University. Until the 1945 liberation, he worked for the Nishijima Architectural Office in Fukuoka, Japan. During that time, he acquired considerable experience working with steel structures, enabling him to become Korea's foremost authority on structural design.

In 1946, Bae founded his own office, Gujosa, together with five architects and structural engineers, and achieved fame as the designer of a number of factories and offices. In particular, his expertise in large-span structures was displayed in his designs for the Paramount Cinema and Piccadilly Cinema in Seoul. He also designed the Jungang building (1965) and the UNESCO building (1966), both still standing in downtown Seoul.

Chung, Guyon 정기용 (1943–2011)

Guyon Chung graduated from the Crafts Department at Seoul National University and studied interior design at the École Nationale Supérieur des Arts Décoratifs before changing his major to architecture at the École d'Architecture de Paris La Villette. His academic trajectory was not completed, however, until he studied urbanism at the Université de Paris VIII in 1982 in search of a total human environment embracing small-scale crafts as well as modern urban life. He ran his own office in Paris until 1985, when he returned to Korea to open Guyon Architects.

Experiencing the military dictatorship of the 1980s, Chung became interested in the social role of architects and how they could deepen their engagement in society. He put this idea into practice through a series of projects in Muju county, consisting of thirty works in total, between 1996 and 2005. His initiative in Muju caused a nationwide stir, attracting the attention of the reform-minded Moo-Hyun Roh administration. Through his relationship with officials in the new administration, Chung made efforts to improve the nation's architectural and urban planning. He also designed a residence for Roh in the president's hometown of Bongha, where Roh retired when he left office.

Joh, Sung-Yong 조성룡 (1944–)

Sung-Yong Joh was born in Tokyo and educated at Inha University. He is the current principal of Joh Sung-Yong Architects and president of the Seoul School of Architecture. As a member of the 4.3 Group, he has played a leading role in the articulation of Korean architectural discourse since the 1990s.

His designs have won first prize in several notable competitions, including the Athletes' Village for the Asian Games (1983), the Uijae Museum (1999), Seonyudo Park (2000), and the Seoul Olympic Museum (2000). These buildings were recognized for clearly conveying his major idea: a thorough communication with the surrounding environment. Joh has been invited to a number of national and international exhibitions, including *Notions of Madang: Three Contemporary Korean Architects* at Gallery MA in Tokyo in 1989, *Metropolis in Transition* at Gallery Inspiration in Tokyo in 1991, *4.3 Group Architecture* in 1992, and *The 53 Origins* at Gallery Ma in 1995.

Kim, Chung-Up 김중업 (1922–1988)

Born in Pyongyang as the second eldest son of a country magistrate, Chung-Up Kim spent most of his early childhood in several counties of the northeastern region. The mountainous landscapes of this area instilled a romantic sensibility in the artistic child. He was fond of composing poems and drawn to Fauvist paintings in high school in Pyongyang, and was persuaded by his painting teacher to enroll at Yokohama National University. There he received a rigorous Beaux-Arts training under the guidance of Professor Junpei Nakamura, who had studied at the École des Beaux-Arts in Paris. After working at the Matsuda-Hirada architectural firm for three years, Kim returned to Korea and became an assistant professor at Seoul National University.

In 1952, Kim traveled to Venice as one of five Korean delegates to the First International Conference of Artists sponsored by UNESCO. On this trip, an encounter with Le Corbusier on a coastal passenger ferry proved fateful. After the conference, Kim headed for Paris to ask for a job in Le Corbusier's office, where he remained for three and a half years. Upon his return to Korea, he opened a studio of his own in Seoul. Initially emulating Le Corbusier, Kim opened a new path with the design of the French embassy in Seoul (1960), a cluster of three buildings set on a hill exemplifying the unity that can be achieved through a harmonious arrangement of forms in a natural setting. Subsequent works such as the headquarters building of Jeju University (1964) , Seo Obstetrics and Gynecology Clinic (1965), the main gate of the UN memorial cemetery (1966), and the Lee residence (1967) displayed his ability to transform the traditional vocabularies of Korean architecture into a modern poetry of shadows and light.

During this period, Kim continued to criticize the urban policies of the military regime, and in 1971 he was forced to leave for Paris without his family. He attempted to carry on his architectural practice in Europe but was unable to produce meaningful outcomes. He moved to the United States in 1975, where he continued his private practice and served as a design critic at the University of Rhode Island. In 1978, he returned to Korea permanently and conceived several projects such as a new building for the Korean Educational Development Institute (1979), the Korea Military Academy museum (1981), and the World Peace Gate (1987). These later works show a changed attitude toward architectural design with a new emphasis on transparency and simplicity.

Kim, In-Cheurl 김인철 (1947–)

Born in Jinhae in South Gyeongsang province, In-Cheurl Kim graduated from Hongik University and began his architectural career as an apprentice in the studio of Duck-Moon Um, where he worked from 1971 to 1985. In 1986, he opened his own practice, renaming it Archium in 1995. As a member of the 4.3 Group that strongly influenced the Korean architectural community, Kim's career flourished. He subsequently joined the faculty of the Seoul School of Architecture and currently holds a professorship at Joongang University.

Kim believes that architecture is not a matter of addition but a process that removes unnecessary clutter. This tenet is well reflected in major works such as the Kim Ok-Gil Memorial Hall (1998), Woongjin Thinkbig office (2007), and Urban Hive (2008). His book *Shall We Talk about Architecture* (2002) was compiled from talks with students in the webzine *Archinude.*

Kim, Jong-Soo 김정수 (1919–1985)

A native of Pyongyang, Jong-Soo Kim moved to Seoul to study architecture at Gyeongseong Engineering College and, upon graduation, took a position in the building and repairs department of the Government-General of Joseon. In 1953, he established Jonghap Architectural Institute with Cheon-Seung Yi, Korea's first large-scale architectural firm. During the postwar period, this partnership contributed significantly to the introduction of advanced Western technologies through projects such as Gukje Cinema (1957), Saint Mary's Hospital in Seoul (1959), Jongro YMCA (1960), and Jangchung Gymnasium (1960). In 1957, a year-long stay at the University of Minnesota exposed Kim to the work of Mies van der Rohe,

which became an enormous influence on his own designs. He cultivated a mechanical and functionalist approach to architecture in order to express a candid relationship between structure and appearance.

The metal curtain wall he designed for Saint Mary's Hospital in Seoul was the first in Korea, and he subsequently experimented with a precast concrete curtain wall at his own office. After becoming a professor of architecture at Yonsei University, he became fascinated with the Gothic style and the possibility of using a modern approach to transform it. For the Students' Hall at Yonsei University (1963), he put pointed Gothic arches in a precast concrete curtain wall to complete the façade of the building. Even though Jong-Soo Kim found it difficult to realize some of his high-tech aspirations for architecture in Korea, he was able for the most part to overcome the technological limitations of his era.

Kim, Seok-Chul 김석철 (1943–)

Seok-Chul Kim studied architecture at Seoul National University before working in the offices of two leading architects, Chung-Up Kim and Swoo-Geun Kim, between 1964 and 1969. In 1972, he established Archiban Seok Chul Kim & Associates. In 1983, his firm won an international competition for the design of the Seoul Arts Center, Korea's premier arts complex, comprising an opera house, concert hall, art museum and archives, calligraphy museum, and performance theater. More recent works include the Jeju Cinema Museum (1991), the Korean Pavilion at the Venice Biennale (1995), and the DBEW Design Center (2003), in addition to the master plan for the World Ceramic Expo of 2001.

An organizer of the Anywise conferences and Aquapolis series of conferences, Kim has also authored *Millennium Architecture: Millennium City* and *Seoul: City of Ethics, City of Nature*. He is currently involved in a number of collaborative projects in Europe and China.

Kim, Swoo-Geun 김수근 (1931–1986)

Swoo-Geun Kim was a prominent Korean architect, educator, publisher, and patron of the arts. He was born into a family that ran a fishery business in Cheongjin, North Korea, but soon moved to Seoul, because of his mother's enthusiasm for education. His interest in architecture was kindled through an accidental contact with an American soldier when he was a high school student. In 1950, Kim entered Seoul National University to major in architecture, but the outbreak of the Korean War forced him to withdraw from the school. He entered Japan surreptitiously and studied modern architecture at Tokyo's National University of Fine Arts and Music. In 1960, he received a master's degree in architecture from Tokyo University with a research project on the planning of Olympic stadiums. During his stay in Tokyo, he was greatly influenced by Le Corbusier, Kenzo Tange, and Japanese Metabolism.

In 1959, Kim won the design competition for the National Assembly Building of South Korea, but his proposal was not realized, due to the political situation at the time. After opening his own office in Seoul, Kim designed more than two hundred projects both within and outside South Korea. Representative works include the Space Group building (1978), Arko Art Center (1979), the Masan Yangdeok Catholic church (1979), Jinju National Museum (1986), and the Olympic Stadium in Seoul (completed in 1987), all featuring his characteristic style as well as reflecting the ideals of traditional Korean architecture.

In 1966, Kim began publishing the monthly *Space Magazine*, South Korea's first general arts journal and a successful proponent of Korean culture. Kim also built the SPACE Gallery in 1972 and founded Gonggan Sarang in 1978, a small theater inside the Space Group building; both have played an important role in numerous South Korean cultural campaigns. With his influence extending over many genres, Swoo-Geun Kim is regarded as a seminal cultural activist, one who integrated architecture with other modes of artistic expression.

Kim, Tai Soo 김태수 (1937–)

Born in Seoul, Tai Soo Kim chose architecture for his profession as a young man. His father, a professor at a medical college, had spent his sabbatical year in the United States and sent him architectural magazines. Inspired by the depiction of Louis Kahn's works in these magazines, Kim decided to go to the

United States in 1961 after obtaining his bachelor and master's degrees from Seoul National University. He studied at the Yale School of Architecture under its dean, Paul Rudolph, and took a job in Philip Johnson's office. In 1970, he cofounded the Hartford Design Group.

Tai Soo Kim's work has brought him ever-increasing recognition. Designs such as the National Museum of Contemporary Art in Seoul (1986), the Kyobo Life Insurance training facility (1988), the Gray Cultural Center at the University of Hartford (1990), and the LG Research and Development Park (1997) have earned local and national awards and praise in international architectural journals. In these works, Kim crystallized the core values of critical regionalism—namely, a sense of place, geometric clarity, and respect for clients' needs. In 1986, Kim was honored by the American Institute of Architects for his contributions to architecture and elected to the College of Fellows, FAIA. In 1994, Kim won the Korean Broadcasting Systems' Overseas Compatriots Prize for his achievements in his field.

Kimm, Jong-Soung 김종성 (1935–)

Born in Seoul, Jong-Soung Kimm began his architectural education at Seoul National University in 1954 and completed his undergraduate and graduate studies at the Illinois Institute of Technology (IIT) in Chicago. After graduation, Kimm worked in the office of Mies van der Rohe until 1972, participating in iconic projects such as the Brown Wing of the Museum of Fine Arts in Houston and the Dominique Center in Toronto. Concurrent with this work, Kimm taught design studios at IIT and joined its faculty in 1972. He became the interim dean during his last year at IIT's College of Architecture, Planning & Design.

In 1978, Kimm returned to Seoul to open an architectural design consultancy, SAC International. He pursued the development of his own concept of space based on a deep understanding of technology and its role in architecture, and used the play of light to explore directionality and centrality in space. The fruition of these experiments was the emergence of his own architectural vision, a significant departure from the precedents of his teachers Mies van der Rohe and Louis Kahn.

Kimm's architectural activities reached their summit in the 1990s. His masterpieces the Seoul Hilton Hotel (1983), the Korea Military Academy library (1982), the Seoul National University museum (1991), Art Sonje Museum in Gyeongju (1991), and the SK Corporation's headquarters building (1999) were regarded as heralding the new spirit of the time. His precept that an architect can only explore his spatial imagination after establishing a tectonic concept of design has had far-reaching implications for Korean architects.

Lee, Hee-Tai 이희태 (1925–1981)

Hee-Tai Lee was born into a poor family in Jecheon in North Chungcheong province. Although the family did move to Seoul to seek a more comfortable life, this did little to improve their situation. Unable to attend a secondary school, Lee chose a training course at a vocational school and met a Japanese teacher there who taught architecture. Unlike other Korean architects of the same age, who had studied at Korean or Japanese universities, Lee was self-taught. He opened his office in 1946, a year after liberation, and began to participate in architectural competitions. With the help of Professor Bal Jang, dean of the College of Fine Arts at Seoul National University, Lee won commissions to design several religious buildings, including the Hyehwadong Catholic church (1960), Jesuit Hall at Sogang University (1963), and the Church of the Martyrs on Mt. Jeoldusan (1967). These projects enabled him to hone his unique talent.

Lee focused on the transformation of traditional Korean architecture and the development of an elaborate proportional system in the façade. Adhering to these principles, he went on to design several cultural centers, including the National Theater (1967), Gyeongju National Museum (1972), Gongju National Museum (1974), and Busan Municipal Museum (1976). But even with this activity, he found it difficult to obtain commissions in the late 1970s. To alleviate these difficulties, he formed a joint office with architect Duck-Moon Um, but this partnership did not succeed in producing any significant projects. Lee died of cancer in 1981.

Min, Hyun-Sik 민현식 (1946–)

Hyun-Sik Min was born in the small town of Gyeongnam in South Gyeongsang province and received his bachelor's degree from Seoul National University in 1970. After serving as an officer in the Korean navy, he worked in the office of Swoo-Geun Kim and then for the Archiban Architect's Group, becoming a partner in 1980. Since 1992, he has run his own firm, H. Min Architect & Associates.

In 1989, feeling a need to revitalize his practice, Min attended the Architectural Association School of Architecture in London for a year. In 1992, Min participated in the collaborative exhibition of the 4.3 Group formed by young Korean architects to discover new possibilities for Korean architecture; he also exhibited his work at the Venice Biennale of 1996 and 2002. He has been a guest lecturer at Seoul City University and Seoul National University and is currently a professor at the Korea National University of Arts.

Representative works include the Sungyak Presbyterian Church in Uijeougbu (1996), the headquarters and Seoul factory of Sindo Ricoh (1997), and the Korea National University of Cultural Heritage (2002).

Park, Byung-Joo 박병주 (1925–)

Born in Busan in 1925, Byung-Joo Park studied civil engineering in night school at Kobe Engineering College between 1941 and 1944 while working for a land surveying company during the day. Returning to Busan in 1948, he taught engineering in high schools for nearly ten years before moving to Seoul in 1958 to assume a position as vice-chief of the Housing Technology Office of the International Cooperation Agency (ICA). This gave him the opportunity to learn site planning from American experts. Four years later, he joined the Site Planning Bureau of the Korean National Housing Corporation, where he participated in projects including the urban planning of Ulsan (1962) and Masan (1967) and the site planning of Ichondong (1965).

In 1968, Park became an urban planning professor at Hongik University. From that time on, he took charge of the planning for Yeouido Island (1971) and the Jamsil district (1974), which marked the beginning of large-scale urban development in Seoul. One of his major contributions was the introduction of the neighborhood unit as an important principle of urban design. He also helped to consolidate the legal foundation for urban planning and participated in the planning of several industrial cities in Korea. His ideas emphasized the communality of urban space, opening the way to the creation of large open spaces.

Park, Dong-Jin 박동진 (1899–1980)

Born in Jeongju, Pyeonganbukdo, Dong-Jin Park graduated from Osan high school and enrolled at Gyeongseong Engineering College to major in architecture. But he was forced to abandon his studies when he was charged with involvement in the 1919 independence movement. Following his release from prison, Park reentered the college. Upon completion of his studies, he was hired as a construction engineer working for the Government-General of Joseon.

In 1937, Park designed the headquarters building and library of Korea University and the main building of Jungang high school with the strong support of Seong-Su Kim, the founder of both institutions. These buildings confirmed Park's ability to deal with stone and classical motifs. In 1938, he began to build a practice of his own, and in 1951 he became a professor of architecture at Cheonggu University in Daegu. Among his major works after liberation were Yeongnak Church (1948) and Namdaemun Church (1954).

Park, Gil-Ryong 박길룡 (1898–1943)

Gil-Ryong Park was the son of a poor rice dealer in Seoul. Despite the hardships he faced during the colonial period, he became the first Korean graduate of Gyeongseong Engineering College in 1919, and began his career as a building engineer with the Government-General of Joseon in 1920. Over the next decade, his investigation of vernacular houses in Korea sensitized him to housing issues and led to his

participation in the housing improvement movement of the 1930s. In 1932, he resigned from his government position and opened his own office in Seoul, registering as the first Korean architect. Among the projects he designed were the headquarters of Gyeongseong University (1928), Joseon Life Insurance (1930), the Namdaemun branch office of Dongil Bank (1931), Hwasin Department Store (1937), and Daedong Engineering College in Pyongyang (1940). In addition to his professional activities, he played a central role in organizing the Korean Invention Society and published an architectural newspaper, *Geonchuk Joseon,* in 1940. He also taught housing theory at Ehwa Women's University.

Seung, Hyo-Sang 승효상 (1952–)

Born in Busan, Hyo-Sang Seung received his bachelor's and master's degrees from Seoul National University and continued his studies at the Technische Universität Wien. After working for Swoo-Geun Kim from 1974 to 1989, he established his own office, Iroje Architects & Planners, in 1989. In the early 1990s, he was a core member of the 4.3 Group and became the managing director of the Seoul School of Architecture. He has won a number of prizes for works such as Sujoldang (1993), Subaekdang (1998), and Welcomm City (1999).

A recent large-scale project involves the master plan and coordination for Paju Book City near Seoul. In 2002, the American Institute of Architects made him an honorary fellow. In the same year, he was the first architect to be named Artist of the Year by the National Museum of Contemporary Art in Gwacheon, the occasion for a grand exhibition. Seung's writings include *The Beauty of Poverty* (1996), *City of Wisdom, Architecture of Wisdom* (1999), *Signs of Thought* (2004), and *Works: 10X2*, coauthored with Yung Ho Chang (2004).

Woo, Kyu Sung 우규승 (1941–)

Born in Gaeseong, Kyu Sung Woo is a Korean-American architect who received his bachelor of science and master of science degrees at Seoul National University before moving to the United States in 1967 to study architecture at Columbia University. He obtained a master of architecture in urban design degree at Harvard University in 1970 and worked for Jose Luis Sert at Sert, Jackson & Associates from 1970 to 1974. In 1975, he became a senior urban designer in the mayor's office in New York City and began his private practice in 1978. He served as principal of Woo and Williams from 1979 to 1990, when he formed Kyu Sung Woo Architects, Inc.

Woo's numerous projects in both Korea and the United States include the Athletes' Village for the Seoul Olympics (1988), the Whanki Museum (1993), and the Asian Culture Complex in Gwangju (2005). He has taught at MIT's School of Architecture and Planning, as well as Harvard's Graduate School of Design, and is a fellow of the American Institute of Architects. Recent works in the United States include the Arts of Korea Gallery at the Metropolitan Museum of Art (1997), Harvard's Observatory Commons, combining faculty housing and a city library (2008), and the Nerman Museum of Contemporary Art in Overland Park, Kansas (2008).

Woo, Kyung-Kook 우경국 (1946–)

Born in Gwangju in Gyeonggi province, Kyung-Kook Woo graduated from Hanyang University with a bachelor's degree in architecture in 1973. A partner in several firms through the 1970s and 1980s, he has worked on his own under the name of Yekong Architects and Planners since 1989. Woo's interest in architectural education led him to assume the role of design director at Kyonggi University's School of Architecture in 1992. He is currently an adjunct professor at Hanyang University. His writings have explored the question of modern identity in Korean architecture, developing a relational theory of architecture in which a building is seen as a constitutive element in a total network of human, natural, architectural, and cosmic order.

His representative works include Nam Myung Memorial Hall (1996), Pyeongsimjung House (1999), Voidium in Heyri (2004), and Baik Soon Shil Museum (2005). His monograph, *Aesthetics of*

the Relational Phenomenon: Building and Projects 1995–2006, effectively illustrates the mature designs accomplished in his career.

Yi, Sang 이상 (1910–1937)

Born in Seoul, Hae-Gyeong Kim 김해경, better known by his pen name Sang Yi, was trained as an architect at Gyeongseong Engineering College. Although he worked for the Government-General of Joseon as an engineer for a few years, he resigned from this position in 1933 to devote himself to literature full time. Yi is considered one of the most innovative writers in modern Korean literature. Reflecting his training in architecture, his writings, particularly his poetry, frequently employed numbers and diagrams to extend the boundaries of linguistic expression. In his masterpieces *Samchagak seolgyedo* (Design drawing of a cubic corner, 1931), *Ogamdo* (Crow's-eye view, 1934), and *Nalgae* (Wings, 1936), he explored the urban sensibility of Korean intellectuals during the colonial period. In spite of increasing fame, he ended his later life in tragedy. He had been suffering from tuberculosis for a long time, and died young in Tokyo.

Yoo, Kerl 유걸 (1940–)

Kerl Yoo was born in Seoul, the son of a sculpture teacher. This heritage appears to have affected his attitude toward design, which stresses a "will to form" in architecture. Upon graduation from Seoul National University in 1963, he began his architectural career with Muae Architects and also worked for Swoo-Geun Kim's Space Group. He emigrated to the United States in 1971 and was hired as a project architect at R.N.L. Architects & Engineers in Denver. During this sojourn, he continually revised his approach. Most notably, he became acutely aware that architecture is not an end but a tool, and its purpose is to serve human needs.

In 1986, he resumed his work in Korea as a coordinator for the construction of the Athletes' Village for the Seoul Olympics (1988). His subsequent creations include masterworks such as the Miral School (1997), Kangbyun Church (1998), Millennium Community Center (2005), Paichai University's International Center (2006), and the new Seoul City Hall (2008). These works illustrate Yoo's conviction that a well-devised envelope can provide a comfortable environment for humans to live in. Internationally recognized, he has received numerous awards, including the AIA Honor award, the Swoo-Geun Kim Award, and the Korean Institute of Architects Award. He is the founding partner of iARC.

Notes

1 The First Urbanization

1. Rabinow 1984, 20.
2. Yang 2004, 2.
3. Shin and Robinson 1999, 5.
4. Lefebvre 1991, 10–11.
5. Levy 1999, 30.
6. Kwon 1990, 266–267.
7. Hashiya 2004, 58.
8. Kwon 1990, 266–267.
9. Jung-Mok Sohn 1994, 67.
10. The eleven documents showing the planning process for Incheon are as follows (Sang-Ho Yang 1993, 69–75):
    1. Map of Chemulpo (Jemulpo) just before the port opening.
    2. Incheon Harbor and plan for the settlement reclamation (Sugimura Tanan, December 1880).
    3. Map of Chemulpo, scale 1/500.
    4. Partitioning map of the settlement.
    5. Locations of the harbor, the reclaimed land, and the breakwater.
    6. Drawing attached to the report of Kobayashi Tadakazu, Japanese consul at Incheon, sent to Takezoe Sinichi, Japanese minister to Korea, September 8, 1883.
    7. Drawing attached to the Incheon Concession Treaty, signed September 30, 1883.
    8. Drawing attached to the report of Yoshida Kiyonari, assistant deputy minister of foreign affairs, sent to the Japanese consul at Incheon, October 30, 1883.
    9. Drawing attached to the report of the assistant deputy minister of foreign affairs, sent to the Japanese consul at Incheon, December 21, 1883.
    10. Drawing attached to the report of the assistant deputy minister of foreign affairs, sent to the Japanese consul at Incheon, April 8, 1884.
    11. Drawing attached to the Land Regulation of Incheon Chemulpo, concluded October 1884.
11. Jinnai 1995, 50–51.
12. William George Ashton (1841–1911), a British consular official in Japan and Korea, worked under the famous British diplomat Harry Parkes (1828–1885) and made a major contribution to the establishment of diplomatic order in East Asia.
13. Jung-Mok Sohn 1994, 153.
14. The four categories were (a) the lots situated on the south side of the Chinese settlement; (b) the lots situated on the north side of the Chinese settlement; (c) the lots east of the Japanese settlement; and (d) hill lots.

    The upset prices were ninety dollars per 100 sq m for Class A lots, six dollars per 100 sq m for Class B and C lots, and three dollars per 100 sq m for Class D lots.

    Yearly rentals were twenty dollars per 100 sq m for A lots, six dollars per 100 sq m for B and C lots, and two dollars per 100 sq m for D lots, of which the Korean government retained thirty cents per 100 sq m for rental costs. The remainder belonged to the municipal fund. (Land Regulation for the General Foreign Settlement at Chemulpo, preserved in the files of the Government-General of Joseon in the National Archives of Korea, Gakguk Georyuji Gwangye Chigeukseo, no. CJA0002274)

15. Regulations for the Foreign Settlement at Chinnampo and Mokpo (signed October 16, 1897) and Regulations for the Foreign Settlement at Kunsan, Masampo, and Songjin (signed June 2, 1899), preserved in the files of the Government-General of Joseon in the National Archives of Korea, Gakguk Georyuji Gwangye Chigeukseo, no. CJA0002274.
16. Kue-Jin Song 2002, 204.
17. Il-Su Kim 2003, 110.
18. The number of the fortress walls varied from 122 to 146. Heon-Kyu Kim 2006.
19. Hwangbo and Han 2004, 842.
20. Jung Mok Sohn 1994, 334.
21. The South Manchuria Railway Company (Minami Manshū Tetsudō Kabushiki-gaisha, or Mantetsu) was a company founded in 1906 and operated within China in the Japanese-controlled South Manchuria railway zone. The railway itself ran from Lüshun Port at the southern tip of the Liaodong peninsula to Harbin, where it connected to the Chinese Eastern Railway.
22. Koshizawa 2005, 197.
23. Ibid., 185.
24. Ishida 1987, 81.
25. Goto Shimpei, who became the head of civilian affairs in the Government-General of Taiwan after the Sino-Japanese war, created the City Ward Improvement Committee in 1898, announcing city ward improvement planning for the 115.5 ha area inside the fortress of Taipei. Afterwards, city ward improvement planning was subsequently implemented in Taiwan's major cities, including Hsinchu, Changhua, Keelung, Kaohsiung, and Tainan, from 1905 to 1911. Huang and Lee 1994, 299.
26. Miake 1908, 37.
27. Watanabe 1993, 81.
28. In August 1910, Japan formally annexed Korea and established the Government-General of Joseon, headed by the governor-general. This official commanded the army and navy of Korea and had the right to appoint and remove other officials and control the courts. Subject only to the Japanese emperor, he exerted administrative, legislative, judicial, and military power in Korea without the overt control of the Japanese government.
29. Gragert 1994, 3.
30. Chousen soutokuhu 1910–1945, no. 186, April 17, 1911.
31. Ibid., no. 56, October 7, 1912.
32. Ibid., no. 169, February 25, 1913.
33. Song-Soon Lee 2006a, 228.
34. Chousen soutokuhu 1910–1945, no. 369, October 12, 1914.
35. Chousen soutokuhu 1928.
36. Jung-Mok Sohn 1996a, 112.
37. Ki-Ho Kim 1995, 50.
38. Startng with twenty-nine in 1912, the number of renovated roads in Seoul increased by two in 1917. In 1919, three roads were annulled and fifteen were created. One road was added in 1925, which finally led to the planning of forty-four roads.
39. Yum 2004, 198.
40. Myeong-Gyoo Lee 1994, 127.
41. Graafland 2012, 5.
42. Hashiya 2004, 82.
43. Baek-Yung Kim 2005, 106.
44. See Kawano 1922, Nakamura 1922, Hagiwara 1922, and Iwai 1923.
45. Jung-Mok Sohn 1996a, 150.
46. Koshizawa 2001, 19.
47. Jin-Song Kim 1999, 254.
48. The term "minor literature" was proposed by the French philosophers Deleuze and Guattari to describe: (1) the deterritorializations of a major language through a minor literature written in the major language from a marginalized

or minoritarian position; (2) the thoroughly political nature of a minor literature; and (3) its collective, enunciative value. Parr 2005, 136.

49. Benjamin 1969, 211.
50. Translation by Jung-Yul Yu and James Kimbrell, in Yi, Hahm, and Choi 2002, 5–6.

    Crow's-Eye View, Poem No. 1

    13 children rush down a street.
    (A dead-end alley will suffice.)

    The 1st child says it is terrifying.
    The 2nd child also says it is terrifying.
    The 3rd child also says it is terrifying.
    The 4th child also says it is terrifying.
    The 5th child also says it is terrifying.
    The 6th child also says it is terrifying.
    The 7th child also says it is terrifying.
    The 8th child also says it is terrifying.
    The 9th child also says it is terrifying.
    The 10th child also says it is terrifying.

    The 11th child says it is terrifying.
    The 12th child also says it is terrifying.
    The 13th child also says it is terrifying.
    13 children have come together and are terrifying or terrified.
    (The absence of any other condition would have been preferred.)

    If one child amongst them is a terrifying child it's all right.
    If two children amongst them are terrifying children it's all right.
    If two children amongst them are terrified children it's all right.
    If one child amongst them is a terrified child it's all right.

    (An open alley will suffice.)
    Though 13 children do not rush down the street everything is all right.
51. Jung-Mok Sohn 1996a, 205.
52. Seong-Jin Park 2007, 237.
53. Song-Soon Lee 2006a, 248.
54. Explanatory Reports on City Planning Decisions were not published for all the cities that conducted city planning. The reports for eight cities—Seoul, Busan, Daegu, Incheon, Hamheung, Seongjin, Mokpo, and Sinuiju—have been found so far. This study is based on these reports.
55. Berghauser Pont and Haupt 2010, 48–49.
56. Chousen soutokuhu 1937d, 16–20.
57. Chousen soutokuhu 1937a, 62–65.
58. Jung-Mok Sohn 1996b, 358.
59. According to the annual of Japanese cities surveyed in 1931 and printed in 1932, the median number of cars in Japanese cities was as follows: Tokyo, 4.60 cars per one thousand persons; Osaka, 2.53; Kyoto, 2.78; Nagoya, 2.17; Kobe, 2.47. Chousen soutokuhu 1937d, 34–35.
60. Sorensen 2002, 123.
61. Ishida 1987, 125–127.
62. Economic and Social Commission for Asia and the Pacific 1995, 92.

63. This theory was first introduced in a report on commoners' housing published by the Architectural Institute of Japan. Nihon kenchiku kakkai 1941, 93.
64. Chousen soutokuhu 1937c, 24.
65. Tomii 1996. The eight guidelines are as follows: Toshi keikaku kenkyuukai 1928; Nihon naimushou 1933; Nihon naimushou 1937; Nihon koseishou sikaikyoku 1940; Nihon koseishou sikaikyoku 1941a; Nihon koseishou sikaikyoku 1941b; Nihon kenchiku kakkai 1941; and Shou juutaku chousa iinkai 1941.
66. There are evident similarities between the standard drawing and the two guidelines. Representative instructions in the guidelines are as follows:
    1. Instructions for the partitioning of residential blocks
        a. The plots in a standard residential block are arranged in two rows.
        b. The standard residential block is rectangular.
        c. The long side of the standard residential block runs east-west.
        d. The size of residential blocks varies according to the guidelines.

Table 1.2 Size of residential blocks (Decision Standards and Survey Data for City Planning)

Grade	Residential area		Commercial area		Industrial area	
	Short side	Long side	Short side	Long side	Short side	Long side
Super Grade 1	60–80 m	160–200 m				
Grade 1	50–60 m	140–160 m	45–55 m	130–140 m	80–120 m	160–200 m
Grade 2	40–50 m	120–140 m	35–45 m	120–130 m	40–80 m	100–160 m
Grade 3	30–40 m	100–120 m	25–35 m	100–120 m		
Grade 4	20–30 m	80–100 m	20–25 m	80–100 m		

Table 1.3 Size of residential blocks, long side (Design Standards for Land Readjustment)

Grade	Residential area	Commercial area	Industrial area
Super Grade 1	160–200 m		
Grade 1	140–160 m	130–140 m	120–200 m
Grade 2	120–140 m	120–130 m	80–120 m
Grade 3	100–120 m	100–120 m	
Grade 4	80–100 m	80–100 m	

    2. Instructions for the planning of street systems, as given in the two guidelines
        a. Decision Standards and Survey Data for City Planning
            i. The creation of roads within a residential site must be allowed except in special cases.
            ii. Road widths must be over 6 m.
            iii. The arrangement of roads must obey the following rules: roads more than 8 m wide must be arranged at intervals under 250 m; the roads intersecting arterial roads must be straight.
        b. Design Standards for Land Readjustment
            i. Residential areas
                – Interior roads must not allow through traffic and must be systematic, taking into consideration traffic points (stations, bus stops), elementary schools (including children's parks), and connecting roads to shops.
                – Road widths must be over 6 m.
                – Dead ends must be restricted to the site securing sufficiently large open space.
            ii. Outside residential areas
                – In an industrial area, shortcuts to arterial roads, arterial canals, and railway stations must be created, taking into consideration the convenience of through traffic.
                    • Shortcuts must be arranged at intervals of more than 200 m.

67. Jung-Mok Sohn 1996b, 294.
68. The document frequently cited by Korean scholars with regard to land readjustment is the eighth chapter in the Korea section of the Historical Survey of Japanese Overseas Activities (Nihon okurashou 1947). Even though the document has some problems with numbers, it gives us a relatively accurate picture of the situation because the land readjustment process is marked in percentile bands. According to this document, thirty-seven land readjustment projects were 100 percent complete, but it is not clear what "complete" means.

2 The Genesis of Urban Housing

1. Schwarzer 1995, 88.
2. Se-Kwan Sohn 2000, 245.
3. Wang 1989, 6.
4. Hur 2001, 21.
5. Ko, Dong-Hwan 1994, 389
6. Hangukhak jungang yeonguwon Jangseogak 2009b, 231. Jangseogak was established by Wang-jik Yi in 1918 as a library for Korean studies. Since its opening, the library has housed archives of Korean classics and modern works, as well as the Jangseogak documents that were transferred from the Cultural Heritage Administration of Korea in 1971.
7. Joo 1994, 87.
8. Jung-Mok Sohn 1996b, 232.
9. Yoshida 2009, 128, and Young-Bae Kim 1991. The numbers come from the Gwangmu register (yangan) drawn up by the Korean government between 1898 and 1903.
10. Fujimori 1993, 1:16.
11. Seong-Yeon Choe 1959, 163.
12. The number of Westerners inhabiting Incheon over a fourteen-year period fluctuated as follows: 1897 (57), 1898 (65), 1899 (67), 1900 (63), 1901 (73), 1902 (75), 1903 (109), 1904 (91), 1905 (88), 1906 (86), 1907 (63), 1908 (60), 1909 (71), 1910 (70). Sang-Ho Yang 1993.
13. The number of schools established by the different denominations was as follows: Presbyterians, 501; Methodists, 158; other Protestants, 91; and Catholics, 46. Eun-Kyung Cho 1999.
14. Seung-Tae Kim 1994.
15. Ryu 2001, 96.
16. Chang-Won Chung 2004, 70.
17. Apart from Vories, C. A. Gunn, in Manila, also assisted in Korea. Rhodes 1934, 416.
18. Seo 2005, 20.
19. Rhodes 1934, 179.
20. Yong-Hwan Park 2010, 181–184.
21. The term tsuzukima literally refers to a "continuous space" or "successive rooms." The tsuzukima of samurai or wealthy urbanite homes consisted of a series of rooms of similar width whose fusuma walls could be opened up to create one large space for ceremonies and festive occasions. The tsuzukima style was adopted in middle-class homes after the abolition of class restrictions on architecture in the Meiji period.
22. Genkan are traditional Japanese entryways into a house, apartment, or building—a combination of porch and doormat. Hiroma were large rooms occupying the full-cross section of a building in Edo-period farmhouses.
23. Yong-Hwan Park 1996, 46.
24. Taut 1958.
25. Tingey 1981, 83.
26. Suzuki 1999, 57.
27. Funo et al. 2010, 230–231.
28. Jun Kim 2007.
29. Of the 1,495 houses built in Seoul in 1921, there were 875 Japanese-style houses, half of them official residences. Donga Ilbo, October 25, 1922.
30. Myung-Suk Kim 2003, 24.

31. Yoon and Lee 1997.
32. Ogura 1927, Komada 1927, Kotaka 1927, and Akagi 1927 describe the official residences in several sectors of the colonial regime and were all published in the May 1927 issue of Chousen to Kenchiku.
33. Aoki, Oka, and Suzuki 2009, 28.
34. Kashiwagi et al. 2001, 27.
35. Kim and Lee 2002.
36. Shou juutaku chousa iinkai 1941.
37. Tomii 1996, 415.
38. Seok Jeong 2006, 14.
39. Ranky Kim and Yoon 1989, 232.
40. Se-Gwon Jeong 1935.
41. Ranky Kim 1992, 110.
42. Cheol-Jin Park and Jeon 2002, 100.
43. Among the sixty-five urban *hanok* in Pungnamdong, Jeonju, twenty were I-shaped, thirty-four were L-shaped, and nine were U-shaped. Se-Kwan Sohn et al. 1996, 31.
44. Seoul teukbyeolsi 2001, 28.
45. In-Ho Song 1990, 121.
46. Sang-Hae Lee 1991, 68.
47. The lifestyle improvement movement (seikatsu kaizen undo) that is usually dated to the second decade of the twentieth century carried echoes from a long-running thread of discourse in Japanese society. The growing influence of home economics as a science, the effects of the postwar recession in 1919–1920 (including the 1918 rice riots), and the urging of influential women educators convinced bureaucrats in both the home and education ministries that the application of scientific "rationality" to the sphere of daily life could improve lives without increasing expenses, while also offering a new role for women as leaders within that limited sphere. Partner 2001.
48. Yu-Bang Kim 1923c.
49. Fujimori 1993, 2:77.
50. Sand 2003, 168.
51. Kashiwagi et al. 2001, 46.
52. Uchida 1992, 118.
53. "Joseon Housing Design Competition," *Chosun Daily Newspaper*, March 21, 1929.
54. Kim and Park 2008, 38.
55. Maki 2008, 153.
56. Tomii 1996, 504–507.
57. Ibid., 514.

3 Architecture and the Introduction of New Materials

1. A number of young Japanese architects spent time in Europe, including Iwao Yamawaki, Bunzo Yamaguchi (1902–1978), and Chikatada Kurata (1895–1966), who studied in Germany with Bauhaus founder Walter Gropius; and Kunio Maekawa (1901–1986), Junzo Sakakura (1901–1969), and Takamasa Yoshizaka (1917–1980), who worked in the office of Le Corbusier in France. Steward 2002.
2. Kawabata and Tomii 1985, 231–234.
3. Ryul Song 1993, 51.
4. Nishizawa 2009, 96.
5. Cody 2001, 18–19.
6. Rowe and Kuan 2002, 65.
7. Il-Joo Yoon 1985.
8. Lyon 2003, 46.
9. Yamagata 2002, 13.
10. Fujimori 1993, 1:30.

11. Il-Joo Yoon 1978, 25.
12. Young and Young 2004, 110.
13. Takjibu was one of seven ministries at the end of the Joseon dynasty; it was responsible for managing the government's finances, including accounts, taxation, national bonds, currency, and banking.
14. Munhwajaecheong 2002a, 289.
15. Hanguk bangsong tongsin daehak 2005, 57.
16. Il-Joo Yoon 1978, 16.
17. Jung-Shin Kim 1994, 42.
18. Many problems were faced during construction of the cathedral, particularly the supply of bricks. Domestic industries were incapable of producing the consistent quality needed to raise a large religious building, and although bricks had been imported from China, their use was confined to the foreign concessions. The French priests tried to solve this problem by erecting their own brick factories near the Hangang River (Hong-Seok Cho 2005, 81). Another challenge was to find skilled bricklayers able to carry out the complicated construction. At first, they employed Chinese workers, but the work was often interrupted by the frequent need to replace workers and by their lack of technical ability (Mutel 1986). In the process, they experienced several collapses of the structure. Finally, with the help of Seredin Sabatin, a Russian architect and engineer who had come to Seoul to design the Russian legation, the French priests were able to realize their wish, and a new style of church building was established in Korea.
19. Nishizawa 2009, 138.
20. Tai-Young Kim 2003, 29–30.
21. Munhwajaecheong 2002c, 297.
22. Murphy's design approach changed according to the location of the site. With commissions for college campuses in Tokyo, Beijing, Changsa, and Seoul, he faced the difficult problem of determining the most appropriate style for these East Asian countries. For St. Paul's College in Tokyo, he used a modified Gothic style, partially imitating American universities (Cody 2001, 30). For the plan of Yale-in-China, he blended progressive American campus planning with Chinese courtyard configurations (Ibid., 37). The buildings on this campus were also designed with similar features, as can be seen in the Chinese-influenced roof hovering over Western structures. In the case of Seoul, his buildings were based on his research into the functional uses of the buildings and are generally characterized as Gothic revival. In this project, he also placed more emphasis on how best to use the hilly and wooded landscape.
23. Vories was a self-taught American architect who started in Japan as an English teacher but pursued an architectural career when he was commissioned to design the YMCA building in Kyoto.
24. Munhwajaecheong 2004, 33.
25. Samoo Architects and Engineers et al. 2009.
26. Soung-Won Kang 2008, 46–48.
27. When the Busan Customs Building, completed in 1910, was demolished in December 1973, it was confirmed that the foundation slab of the internal retaining wall was made of reinforced concrete. It was 64 cm in depth, and reinforcing rods were placed in the concrete every 9.7 cm. Hanguk concrete hakhoe 2002, 32.
28. Fujimoto 2001, 924.
29. Iwai 1926, 5.
30. Soung-Won Kang 2008, 159.
31. The National Archives of Korea maintains a collection of 26,483 drawings and building documents that were produced from 1900 to 1945 by the Takjibu Architectural Bureau and the architecture department of the Government-General of Joseon. The United States Army Military Government in Korea (USAMGIK), the official ruling body of the southern half of the Korean Peninsula from September 8, 1945, to August 15, 1948, took control of these documents in 1945 and transferred them to the Korean government in 1948.
32. Gukga girokwon 2008, 21–22.
33. Ibid., 59.
34. Isozaki 2006, 17.

4 Urban Expansion and the Construction Boom

1. Ki-Jung Park 1971, 171.
2. Park gained familiarity with town planning concepts from his contact with American consultants. His initial success came about through a plan for Ulsan, the first industrial city in Korea, which he submitted in 1963. The plan introduced the concept of the neighborhood unit, and he was invited to participate in the actual planning of Ulsan. He then joined the Korea Housing Agency as a section leader for site planning and designed the Suyuri, Hwagogdong, Yuchondong, and Gurodong areas of Seoul. His plan for the Jamsil district in Seoul was a rigorous application of the neighborhood-unit theory.
3. Rowe 2005, 82.
4. Sang-Chul Choe 2003, 531.
5. Gu Yi, who had worked in I. M. Pei's office after graduating from MIT, Jang-Sup Yoon, and Hong Seong-cheol were the first three researchers hired at Nagler's institute. The next to join were Han Kyu-dong, Yu Han, and Woo Kyu-sung. A year after it opened, the institute moved to permanent quarters in Euljiro, and the number of researchers increased to 30–40, including Hong-Bin Kang, Jin-Kyoon Kim, and Sin-Kyu Moon.
6. Among the works exhibited were studies by Geumhwa Park of the informal public spaces that had spontaneously appeared in the shantytowns of Hyeonjeo Dong, Seodaemun Gu, and Seoul.
7. Sang-Chul Choe 2003, 522. The major principles of the plan for Seoul were used in the planning of other cities as well. For example, the plan for Daejeon, established in 1972, sought balanced development by establishing 1.5 km, 5 km, and 10 km concentric zones with Daejeon rail station and Eunhaengdong at the center (Daejeonsi 1990, 2213). In Daegu, city officials worried that the irregular city boundaries left by the expansion of 1957 would make further expansion more difficult, so they returned the city to its circular form with the expansion of 1963, allowing concentric expansion to continue and implementation of a ring and radial urban planning system (Daegusi 1995, 23).
8. Seoul teukbyeolsi 1966, 165.
9. Jung-Sub Yoon 1970, 20.
10. Horwitz 1967, 25-26.
11. Doxiadis 1968, 15.
12. Tai-Soo Kim 1969,1.
13. Seoul teukbyeolsi 1969, 10.
14. Doxiadis, op.cit.
15. Harvey 2008, 24.
16. Koolhaas 1994, 19.
17. Seoul teukbyeolsi 2010, 222.
18. Interview with Byung-Joo Park, November 7, 2006.
19. Two plans had been suggested for the Gangnam area. In 1962, a Korean businessman, Heing-Sik Park, inspired by the new town of Tama in Japan, proposed a new town in Gangnam to house more than 300,000 people. In 1966, the Seoul municipal government suggested a schematic design to rationalize the construction of the Hannam Bridge. Youn 2009.
20. Hanguk gosokdoro gongsa 2000, 35.
21. Seoul yeoksa bakmulgwan 2006, 124.
22. http://en.wikipedia.org/wiki/City_block.
23. Siksna 1997, 20.
24. Ibid., 25.
25. Jung and Kang 2012, 192.
26. The neighborhood-unit theory was applied to the Gangnam area after 1976 when part of the area was designated as an apartment-house district. Seoul teukbyeolsi 1990.
27. Hall 1974, 56.
28. Schubert 2000, 118.
29. Jung-Mok Sohn 2003, 3:207.
30. Daehan jutaek gongsa 1992, 224.

31. Seoul teukbyeolsi 1976, 15.
32. Article 13 of the enforcement ordinance of the Promotion of Housing Construction Act (October 1979) delegated to every mayor and county governor the authority for establishing the basic development planning of apartment-house districts. In accordance with this legal foundation, the Seoul Metropolitan Government enacted a municipal ordinance for the Basic Development Planning of Apartment-House Districts. Article 3 of the municipal ordinance includes the cited regulation.
33. Provision for Amenities in Urban Planning, City Planning Act, section 85, subsections 10–11 (May 21, 1979).
34. Frey 1999.
35. Tafuri 1979, 18.
36. Kitayama, Tsukumoto, and Nishizawa 2010, 34.
37. Rowe and Koetter 2001, 62.
38. Similar phenomena can be found in Tokyo. Kitayama, Tsukukmoto, and Nishizawa 2010.
39. Gongdong jutaek yeonguhoe 1999, 127.
40. The living-zone theory corresponds to a tree structure that Christopher Alexander has identified as a nonoverlapping structure. Alexander 1965, 58–62.
41. In-Ho Kang 2000, 12.
42. Paik et al. 2006, 3.
43. Lim 1997, 87.
44. Ibid.
45. Paik et al. 2006, 141.
46. Daehan jutaek gongsa 1984, 121.
47. Seoul teukbyeolsi 1984a, 35.
48. Daehan jutaek gongsa 1988, 45.
49. Daehan jutaek gongsa 1997, 65; Hanguk toji gongsa 1997a, 113; Ibid. 1997b, 10.
50. Paik et al. 2006, 179–182.
51. Hanguk toji gongsa 1997a, 307–309.

5 New Urban Housing

1. Gelézeau 2004, 26.
2. The statistics on construction of spec houses in Seoul come from a report issued by the Housing Statistics and Data Office (Jutaek tonggye jaryosil) in 1983. Choon-Sik Park 1986, 10.
3. Yim 1989, 40.
4. The legal difference between multihousehold and multifamily dwellings must be stated precisely because the two terms are likely to cause confusion. In spite of very similar regulations on size, height, and number of households, the essential difference lies in whether the right of ownership is given to each household or not. In a multihousehold dwelling, each dwelling unit can be separately bought and sold, whereas only renting is possible in a multifamily dwelling. This means that multihousehold dwellings are treated as collective housing, like apartment houses, whereas a multifamily dwelling is treated as a single house. For obvious reasons, Koreans prefer multihousehold dwellings on the real estate market, so we focus on that form of collective housing in this book.
5. The ratio varied between 300 percent and 400 percent, and finally was divided into three levels, at 200, 250, and 300 percent (150, 200, and 250 percent in Seoul), according to the type of residential area. The Enforcement Ordinance of the current City Planning Act stipulates that the ratio of building area to site area in a Type 1 residential area must be below 100–200 percent; for Type 2, the limit is 150–250 percent; and for Type 3, it is 200–300 percent.
6. Park and Choi 2003, 76.
7. Gukto haeyangbu 2008, 72–74.
8. Jun 2009, 24.
9. Joon-Mann Kang 2005.
10. Jang and Park 2009, 104.
11. Zchang 1994, 117.

12. Daehan jutaek gongsa 2003.
13. Zchang 1994, 180.
14. Sherwood 1978, 17.
15. Daehan jutaek gongsa 2003.

6 The Quest for Architectural Identity

1. Ozhan 2007, 103.
2. Canizaro 2007, 20.
3. Robertson 1995, 30.
4. Speck 2007, 75.
5. Habermas 2000, 5.
6. Fujimori 1999, 191–193.
7. Tange 1970, 120.
8. Tange 1960, 44.
9. Kim was attentive to Tange's ideas about tradition, as is attested in his newspaper articles, including "Jeontongui Changjo" (Creation of a tradition) and "Jeontonggwa Minjung grigo Jakgaui Samgakgwangye" (A three-cornered relationship among architects, people, and tradition). Swoo-Geun Kim 1989, 127–131.
10. Swoo-Geun Kim's opposition was clearly expressed in a round-table talk with Chung-Up Kim and Gu Yi held on December 22, 1966. Swoo-Geun Kim 1967, 7.
11. Jong-Soo Kim 1967, 4–27.
12. Chung-Up Kim 1967, 4–27.
13. Anderson 1991, 6.
14. Muryangsujeon was constructed as the main hall of Buseoksa Temple during the reign of King Munmu (661–681) of the Silla dynasty. The present building was erected in 1373. With its graceful jusimpo (brackets on columns) style, this hall is regarded as the foremost example of the formality of ancient Buddhist shrines in Korea.
15. Chung-Up Kim 1984, 244.
16. Guo 1999, 23.
17. Win-Hur Lee 2000, 240.
18. Curtis 1987, 192.
19. Guo 1999, 84.
20. Ibid., 40.
21. Joo 1997, 107.
22. Wittkower 1971, 45.
23. Kepes 1995, 47.
24. Kim saw it as a practical alternative to the school of Modern Functionalism, which has continued to ignore environmental issues. Swoo-Geun Kim 1989, 24.
25. A similar idea can be found in Japanese landscape, according to Augustin Berque, whose analysis was greatly influenced by the Japanese philosopher Nishida Kitaro (1870–1945). Berque 2010.
26. Mansilla and Tunon 2003, 14–19.
27. Young-Joon Kim 2004.
28. Seung 2006, 32.

7 The Semantics of Technology

1. In September 1954, Seoul National University, while still suffering from the destruction of the Korean War, agreed to receive educational and technical support from the University of Minnesota with the support of the International Cooperation Administration under the State Department of the United States.
2. Jung-Sub Yoon 1995, 53–64.
3. Yu 1967, 61–62.
4. Interview with Jong Soung Kimm, 2001.

5. Daehan geonchuk hakhoe 2006, 98.
6. Kimm 1990, 86–91.
7. Kimm 1985, 90–128.
8. Kahn 2003, 252.
9. Jung 2009, 45.
10. Mainstone 1998, 307.
11. Won 1997, 224.
12. Inha Jung 2009, 97.
13. Jong Soung Kimm 1989, 131 .
14. Ishii 1999, 212–215.
15. Rastorfer 1988, 128–135.
16. Shin, Lim, and Han 2008, 15.

8 Discovering Reality

1. Modernization is generally defined as a bundle of cumulative processes that mutually reinforce the formation of capital through the mobilization of resources, development of production forces and labor productivity, establishment of centralized political power, proliferation of political rights and participation, and secularization of values and norms. Habermas 2000, 2.
2. Since modernity itself encompasses all political, economic, social, and cultural experience, it is virtually impossible to fully specify the consequences of the temporal lag between the modernization process of Korea and that of the West. Close to one hundred years separates the beginning of the periods of most rapid growth in the urban populations of London (1861–1941), Tokyo (1901–1961), and Seoul (1960–1990), and comparable gaps can be seen in the enactments of a building code (England, 1844; Japan, 1888; Korea, 1913), the mass production of public housing (England, 1850; Japan, 1923; Korea, 1941), and the planning of new towns (England, 1946; Japan, 1963; Korea, 1989).
3. The term developmental dictatorship came into use with reference to developments in East and Southeast Asia, as well as Latin America and Eastern Europe. According to Tokyo University scholar Akira Suehiro, it first appeared in the 1980s in the context of describing economic growth in East and Southeast Asia. The term presents a vivid image and quickly gained popularity in the Japanese press as a simple way to describe Ferdinand Marcos' Philippines, Lee Kuan Yew's Singapore, and Suharto's Indonesia—namely, by indicating two leading features of the state so described: it strives for economic development, and is a dictatorship. Suehiro 2008.
4. Rowe 2005, 68.
5. Hwang 1995, 59.
6. Gukrip jungang bakmulgwan (National Museum of Korea) 1995, 36.
7. Lefebvre 1991, 26.
8. Guyon Chung 2008a, 8.
9. Guyon Chung 1987, 37.
10. The best example is the rehabilitation of the ZUP Perseigne (1978–1982) in Alencon, where Kroll conceived a housing complex with the urban tissue of traditional villages. Lucan 2001.
11. Guyon Chung 2008b, 79.
12. Slessor 1999, 76.
13. Frampton 2007, 378.
14. Fisher 1999, 9.
15. Tai Soo Kim 1995, 51.
16. Brenner 1981, 72–79.
17. Gukrip hyeondae misulgwan 2006, 8.
18. Ibid., 9.
19. Ibid., 10.
20. Tai Soo Kim 1999, 104.
21. Slatin 1993, 71–77.

22. Kyu Sung Woo 1999a, 22.
23. Kyu Sung Woo 1999b, 9.
24. Ibid.
25. Ibid.
26. Ibid.
27. Kyu Sung Woo 1975, 60.
28. Kyu Sung Woo 1976, 51.
29. Kyu Sung Woo 1999a, 22.
30. The key ideas of Christ-Janer's teachings are well described in Christ-Janer 1980.
31. Kerl Yoo 1998, 28.
32. Ibid., 166.
33. Kerl Yoo 2008, 20–37.
34. Maxwell 1982, 5.
35. Kyong-Soo Kim 1989, 8.
36. Seok-Chul Kim 1997, 341–342.
37. Kyong-Soo Kim 1989, 8.
38. Young-Sub Kim 2003, 28.

9 New Paradigms for Urban Design

1. Rowe 2010, 15–16.
2. Sang-Kyung Lee 2004, 2–4.
3. Koolhaas 1995, 981.
4. OMA 1998.
5. Han 2008, 100–101.
6. Mortice 2008.
7. Ibid.
8. Geonseol gyotongbu 2006, 88.
9. Haeahn architects 2007, 92.
10. Augustin Berque, a French geographer, distinguishes between "a western conception of landscape, pivoted around the subject, and an eastern conception, which instead focuses on the logic of place" (Brighenti 2011). According to Berque, "this difference happened because the term and sense of landscape that first appeared in the 16th century deeply reflected Europeans' way of thinking at that time. From the beginning of modern time, Europeans made a clear distinction between the subject and the environment surrounding it, and tried to represent the environment through the subject's eyes. This effort led to the discovery of linear perspective by Renaissance artists, which had a great impact on the organization of the western conception of landscape" (Berque 1990, 54). In contrast, the Eastern sensibility allowed for the coexistence of the points of view of diverse subjects, contextualized in places. This way of representing landscape was not linear but planar.
11. The 4.3 Group was formed on April 3, 1990, and consisted of twelve members: Jay-Whan Kwak, Byung-Yoon Kim, Chang-Whan Do, Jung-Gun Dong, Moon-Ki Baek, Chul-Lin Bang, Hyo-Sang Seung, Kyung-kook Woo, Sung-Gwan Lee, Il-Hoon E, Jong-Sang Lee, and Sung-Yong Joh. Later that year, In-Cheurl Kim and Hyun-Sik Min joined the group, bringing the membership to fourteen.
12. The address 11, Gahoidong is located in the Bukchon area. When the regulations governing the Hanok Preservation District were lifted, Korean architects developed models to suggest how the property might be developed.
13. Sung-Yong Joh 1995, 146–149.
14. Beigel 1996, 119.
15. Beigel 1997, 40.
16. Hyo-Sang Seung 2007.
17. Beigel 1996, 121.
18. Beigel 1999, 58–60.

19. Ibid.
20. Seung 2005, 15.
21. Ibid., 11.
22. The Commune by the Great Wall consists of eleven villas designed by twelve famous Asian architects: Suitcase House by Gary Chang (Hong Kong); Furniture House by Shigeru Ban (Japan); "See" and "Seen" House by Cui Kai (China); Distorted Courtyard House by Rocco Yim (Hong Kong); Airport by Chien Hsueh-Yi (Taiwan); Cantilever House by Antonio Ochoa (China); Bamboo Wall by Kengo Kuma (Japan); Shared House by Kanika R-kul (Thailand); The Twins by Kay Ngee Tan (Singapore); Forest House by Nobuaki Furuya (Japan); Split House by Yung Ho Chang (China); and Clubhouse by Hyo-Sang Seung (South Korea).
23. Seung 2010b, 52–55.
24. In-Cheurl Kim 2002, 268.
25. In-Cheurl Kim 2007, 112–121.
26. Kim and Kim 2002.
27. Pinoki 2006.
28. Bru 1997, 6.
29. FOA 2004, 260.
30. Sung-Yong Joh 2002, 94.
31. Design Seoul Foundation 2010.
32. Hadid 2007, 118.

Epilogue

1. Habermas 2000, 2.
2. Latham 2000, 4.
3. Appadurai 1996, 32.
4. Robertson 1995, 27.
5. Nalbantoglu 1997, 8.
6. Bok-Kyu Yum 2005, 23.

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About the Author

Inha Jung is a critic, historian, and professor of architecture at Hanyang University, ERICA Campus.