

DEVELOPMENT OF URBANIZATION OF THE KOREAN PENINSULA DURING THE JAPANESE COLONIAL RULE (1910-1945)

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ABSTRACT: *The urban approach to urban planning during Japanese colonization (1910-1945) boils down to the dimension of colonial rule and exploitation of the Korean Peninsula. Japanese imperialism has left positive and negative aspects on cities on the Korean Peninsula. Positive aspects are the introduction of modern urban planning and the development of industrialization. In addition to the modernization and growth of the Korean economy, the development of urbanization also took place by establishing the so-called "North Korean city routes". Focusing on officials from the Japanese Ministry of Construction and the financial potential of Korea, ways have been devised to establish an urban plan for the peninsula. The Japanese regulation on urban planning introduces a zoning system (1934). From 1910-1945 the growth of the urbanization of the capital Seoul was influenced by the Japanese colonial administration, becoming the first Korean city of millions.*

Keywords: *Korean Peninsula, colonization, urban planning, urban development, Seoul*

DEVELOPMENT OF URBANIZATION UNTIL THE BEGINNING OF THE FIRST WORLD WAR

A more detailed monitoring of the development of Korean urbanization is related to the beginning of the twentieth century. The period of the rule of the Yi dynasty (1637-1876) was called the period of self-isolation, where foreign trade was reduced to an absolute minimum. Suppression of external business activities has led to the destruction of the growth of economic activity, the main driver of urbanization (Kim, 2011).

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The transition period (1876-1910) is a period of opening to external influences. The most important commercial agreement is the Japan-Korea Friendship Agreement, concluded between the representatives of the Empire of Japan and the Joseon Kingdom of Korea. Negotiations were concluded in February 1876. European countries have already made several unsuccessful attempts to start trade with the Joseon dynasty. Although there was great political instability in Korea, the Japanese Empire successfully developed plans to open Korean cities and exert influence on Korea until complete annexation in 1910 (Bertrand, 1973). During the transition period, Japan made efforts to establish a monopoly over the Korean Peninsula, as a result of which Korea's foreign trade increased (Chung, 2006).

The Japanese government's estimate of the size of cities for 1915 is presented in Table 1. If we consider only places with more than 20,000 inhabitants as urbanized, with a total estimated population of the Korean Peninsula of 16,278,389 (1915), the urbanization rate is 3.11%, Korea was then a purely agrarian society (Bertrand, 1973).

Table 1. Number of urban population of the Korean Peninsula by cities (1915)

City	Population
Seoul	241 085
Busan	60 804
Pyongyang	45 793
Daegu	37 240
Kaesong	36 668
Incheon	31 264
Wonsan	22 413
Nampo	22 331

Source: Bertrand, 1973.

Based on the presented Table 1, which shows the number of the urban population of the Korean Peninsula (1915), the conclusion is: a total of eight settlements are classified as a city (more than 20,000 inhabitants). The largest urban areas are Seoul (241,085) and Busan (60,804) in the south and Pyongyang (45,793) in the north of the Korean Peninsula.

The greatest initial Japanese influence was in Seoul, where it was the center of Japanese colonial rule. At the beginning of the 20th century, Seoul went through a period of enlightenment to Japanese external influences and a short period of liberalization. Despite major internal changes in the areas of politics, economics, and society in general, these changes have not affected the external structures of the city (Kim, 2012). The area of the city during this period remained approximately the same as it was during the Joseon dynasty. This time, however, it was an opportunity for Seoul to take its first steps toward becoming a modern city with the reception of Japanese influences, the establishment of railroads and cars, the arrival of Japanese residents, and the expansion of the road network (Lee, 1997).

Of particular importance for the development of Seoul during this period was the beginning of population growth. By the end of the 19th century, the population of Seoul's five main counties was approximately 200,000. Foreigners played an important role in increasing the number of inhabitants, which is confirmed by the fact that at the beginning of the Japanese colonial administration, 34,000 inhabitants of Chinese and Japanese nationality lived in Seoul. The increase in the Japanese population within the city walls has gradually changed the appearance of the city from a traditional to a city with Japanese influences (Lee, 1997).

DEVELOPMENT OF URBANIZATION SINCE THE END OF THE FIRST WORLD WAR

Japanese colonists cited intensive forest exploitation as one of the causes of Korea's decline, which caused constant floods. The pre-colonial economic decline also caused a rapid increase in population from the 18th to the 19th century. The Japanese colonial government pursued a strict forestry policy through the enactment of logging laws (Lee, 2003).

Since the late 1920s, economic growth of 3.7% has followed, which is largely due to industrialization (Lee, 1996). In the first decade of the colonial rule (1918), agriculture covered about 80% of total economic production, while before the end of the colonial period (1943) it covered 43%. The share of mining to 15% (1918) and increased to 41% (1943). Number of factories in the colonial period from 110 (1910) to 6,590 (1939) (Lee, 1996). The number of workers in industry also increased from 86 thousand (1931) to 360 thousand (1943). This growth of economic activities is related to Japanese influences on the organization of Korean economy (Kim, 2007).

In addition to the modernization of the economy and the great exodus of Korean farmers in Manchuria and Japan, the development of urbanization took place in parallel. The focus is on the officials of the Japanese Ministry of Construction and the financial potential of Korea, and ways have been devised to establish an urban plan for the peninsula. In Japan, the law on modern urban planning was adopted on January 1, 1920. On the other hand, on the Korean Peninsula, the same law began to be applied in early 1921 (Son, 1985). In the field of urban planning in the 1920s, the era of modernism in architecture manifested itself. By realizing the concept of modernism, cars, steel and elevators were implemented (Benevolo, 1982).

With the development of industrialization, social problems and lack of housing appeared. In order to solve the problem pointed out, a modern distribution of space was performed, the use of cars with a carefully planned radius of roads (Kim, 1999). The city center was filled with tall buildings of the Japanese colonial administration, while residential areas were divided by zoning. Residential areas of the city were filled with family houses (Kim, 2007).

By 1925, the status of an urban area was given to the settlements: Makpo, Daegu, Busan, Incheon, Gunsan (Kunsan), Wonsan, Nampo, Uiju, Pyongyang (Kim, 2007). By the end of the colonization period, four more cities had achieved the status of a city: Gwangju, Daejeon, Kaesong, Haeju, Hamhung (Kim, 2007).

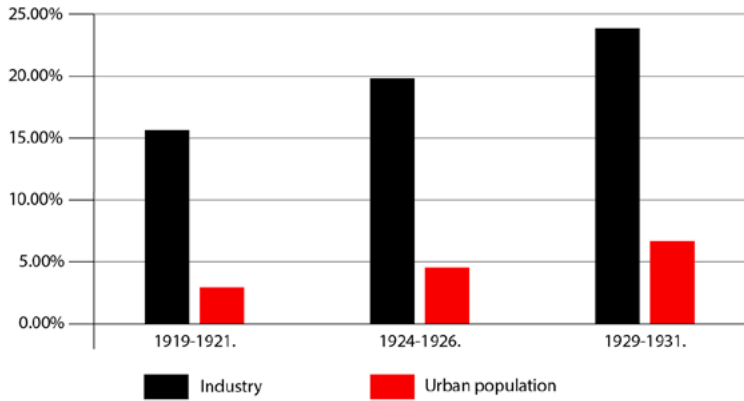


Figure 1. Comparative overview of the development of industry and the total urban population of the Korean Peninsula (1919-1931) in percent (%)

Source: Chang (1966)

Based on figure 1 showing the comparative development of industry and the urban population of the Korean Peninsula (1919-1931), the following is concluded: at the end of the First World War, industry accounted for 15.7% of the total economy of the peninsula, while the urban population accounted for 3.2 % of the population in the two-year period (1919-1921). There is a noticeable increase in industrialization (19.9%) and the number of urban population (4.8%) on the Korean Peninsula in the next observed two-year period (1924-1926). At the end of the observed two-year period (1929-1931), the largest increase in industrialization was recorded (24.5%), and the number of urban population also recorded an increase (6.9%).

With industrialization, which has caused the constant growth of most existing and the emergence of new cities, there is a breakthrough acceleration of the process of urbanization. Cities represented the natural framework in which industrialization took place, and the existing urban population was not sufficient for the needs of the volume of production, which led to an increase in the number of workers, and migration to the city. Based on the presented data, the conclusion is that the process of urbanization directly affected the growth of the urban population in the period after the First World War on the Korean Peninsula.

NORTH KOREAN CITY ROUTE

As already mentioned, Japan promotes the policy of industrialization, which led to the construction of an industrial city. Korea experienced economic growth and the resulting urbanization in the 1930s (Lee, 2004). The Japanese government's plan was to establish a so-called "North Korean route of cities" that connects Japan, the northern part of the Korean Peninsula and Manchuria (Figure 2). The goal was to build a series of cities connected by good roads along the east coast of the northern part of the Korean Peninsula and thus enable an easier land invasion of Chinese Manchuria. The starting point

for the “North Korean route of cities” was the province of North Hamgyong. On the territory of the mentioned province, cities flourished. For the sake of comparison, in Najin, once a village, at the end of September 1933, only 4,520 inhabitants were recorded, that number increased 3.4 times and amounted to 15,260 inhabitants until the liberation of the city in 1945. After the liberation of the city from Japanese occupation, the settlement changed its name to Rason and became one of the largest cities in the DPRK (Lee, 1994). Today, Rason has a population of 196,954 (2008) and bases its economic success on a rail network, a bridge over the Tumen River, and a seaport built during the Japanese administration of the city.



Figure 2. Three routes of the Japanese land invasion of Manchuria (1. North Korean city route; 2. South Korean city route; 3. Chinese route)

Source: Lee Myung-Gyu, 1994.

The city of Chongjin is today’s center of the province of North Hamgyong, before the Japanese colonization it was a small fishing village (Demick, 2010). Japanese influence in the area of Northern Hamgyong was achieved at the beginning of the twentieth century, during the Russo-Japanese War (1904-1905). During the mentioned war period, the settlement of Chongjin was a Japanese military base. After the end of the war, Chongjin became a significant traffic hub on the newly built Japanese railway, from Chongjin to Hoeryong. The Japanese opened an international trading port in Chongjin, two years before the colonization of Korea. The reason for that is the favorable geographi-

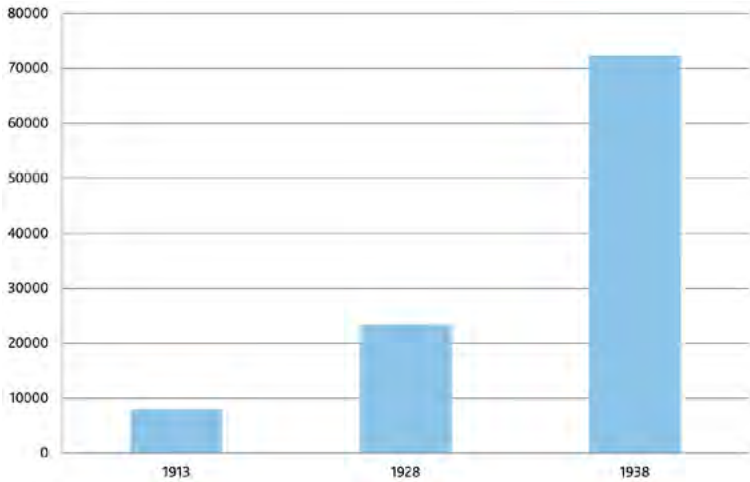


Figure 3. Population in Chongjin in the period from the beginning (1913) and towards the end of the Japanese colonial rule (1938)

Source: Lautensach, 1945.

cal position of the settlement, which is the center of timber exports from the mountainous areas of the northern part and fish from the southern part of the Korean Peninsula. Further development of the city occurred by joining the Korean railway network (1928) (Dormels, 2014).

Based on Figure 3, which shows the movement of the population in Chongjin, it can be concluded that at the beginning of the Japanese colonial period (1913) the population was about 8,000. Urban parts of the settlement began construction in 1915, while the oldest parts of the settlement are located in the east. Urban areas, such as Pohang Gujok, were built in the west of the settlement along the railway. Japanese economic investments, primarily in the transport and processing of ores from the Manson region, led to an increase in the city's population to 23,407 (1928). In the middle of the fourth decade, fish processing companies were successfully developed in the settlement (Lautensach, 1945). At the end of the observed period (1938), the largest increase in the city's population of 72,353 was recorded. The Japanese company NipponSteel built a steel plant, a shipyard and a port in the settlement. Chongjin received the status of an urban settlement in 1940. Since then, an extremely large influx of inhabitants has begun (Kim, 2007).

JAPANESE REGULATION ON URBAN PLANNING

Urban planning implies the creation of an urban area and the conditions necessary to improve life. The Japanese Regulation on Urban Planning introduces the planning of facilities related to transport, economy, sanitation and safety (Jeon, 2018).

The characteristics of the Japanese model are expressed by the introduction of scientific rationality in planning. Until the beginning of the twentieth century, traditional Korean urban development was based on the Eastern philosophy of feng shui (Lee,

2008). The new model is envisaged by planning based on natural and climatic factors of environment, topography, population, traffic (Lee, 1990).

The Japanese regulation introduces an urban zoning system. At the time of the establishment of the zoning system (1934), three areas were introduced: the residential zone, the commercial zone and the industrial area, but the revision added urban mixed areas and green areas and ports (1940). Industry is an important feature of urban planning and one of the items of the zoning system emphasizes the separation of industrial and residential areas. This took into account the effects of pollution. Urban green areas are formed along the industrial structure and have the role of a protection zone. Facilities designated as hazardous are slaughterhouse population facilities, crematoria, waste processing facilities, and the risk of damage to residential areas (Lee, 1994).

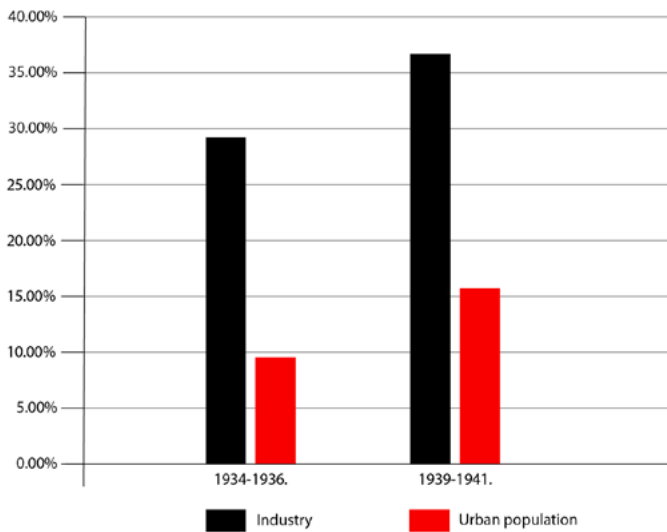


Figure 4. Comparative overview of the development of industry and the total urban population of the Korean Peninsula (1934-1941) in percent (%)

Source: Chang, 1966.

Based on figure 4, which shows the comparative development of industry and the urban population of the Korean Peninsula (1934-1941), the following is concluded: industry accounted for 28.9% of the economy, while the urban population accounted for 9.3% of the population in the two-year period (1934-1936). There is a noticeable increase in industrialization (36.9%) and the number of urban population (16%) on the Korean Peninsula in the two-year period (1939-1941).

The Great Depression of 1929 also brought the Japanese economy into a major crisis. To provide funds for the invasion of Manchuria (1931) and the Pacific War (1941), Japan created a logistical base from Korea to provide the military supplies necessary for the war. Metal and chemical industry factories connected with the military industry were built. The policy of industrialization was intended for the northern regions of the pen-

insula, due to the physical proximity of Manchuria, which resulted in a deep economic regional imbalance and uneven development of cities (Kim, 1992).

Before imperialist Japan started the war with China, the goal was to eliminate the national consciousness of the Koreans, in order to facilitate the mobilization of the population. The elimination of national consciousness was carried out through a ban on the use of the Korean language, newspapers, magazines. Japanese was the official language of the peninsula and was mastered in a modest number of educational facilities (Kim D., 2007). The Japanese colonial administration carried out the literacy of Koreans through a large number of newly built schools in urban areas (Kim, 1992).

SEOUL AS A COLONIAL CITY (1910-1945)

From 1910 to 1945, the rise of urbanization in Seoul was influenced by the Japanese colonial administration. The administrative boundaries of the city have been increased and the influx of Japanese residents has begun (Lee, 2020). The Japanese population inhabited the Jong District and the area around Namsan (262 m) (Jeong, 2005). Until the beginning of the 20th century, there were only one-story traditional buildings in Seoul. As the Japanese began to inhabit the city, they introduced multi-storey red brick buildings in the Japanese style. At the beginning of such buildings there were only a few, at the end of the colonial period the construction of foreign residences changed the city landscape (Lee, 2015).

Modern, diverse industrial opportunities were located inside and outside the city. In addition, various institutions of colonial administration were located in the city center, and modern education was promoted through the establishment of primary schools throughout the city (Chang, Lee, 2017). Also, colonial urban planning was applied to the expansion of the road system and modern housing construction through the implementation of projects for the adaptation of free construction land. As a result, Seoul no long-

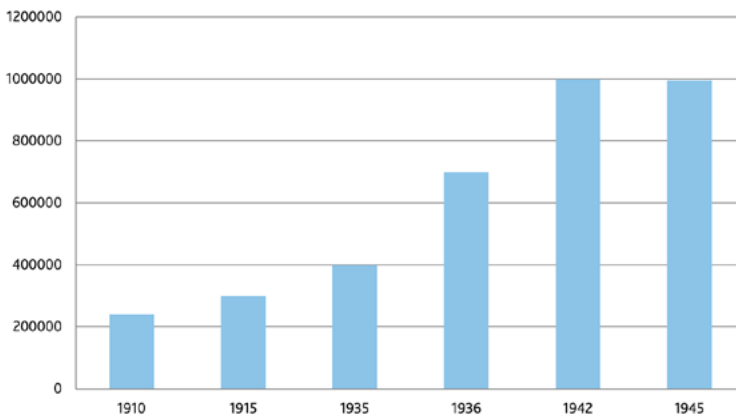


Figure 5. Population trends in Seoul at the beginning (1910) and towards the end of Japanese colonial rule (1945).

Source: Lee, 1997.

er played the unique role of a traditional capital. Factories and heavy industrial facilities were built in areas outside Seoul, and commercial activities were concentrated in the city, signaling the beginning of a new Seoul as a modern industrial city (Yang, Yi, 1995).

Based on the presented figure 5, it can be concluded that at the time of the annexation in 1910, the population of Seoul numbered 240,000 people, but the reorganization of the city's administrative borders in 1914 reduced the number of inhabitants and increased the number of those living outside the city. In 1935, the population was already at 400,000 inhabitants. With the new reorganization of the borders of Seoul in 1936, the population exceeded 700,000 people. The population continued to grow, and in 1942, under colonial rule, the city's population reached a figure of one million for the first time in its history (Lee, 1997). However, between the beginning of World War II and the liberation in 1945, the population fell by about 150,900 people (Lee, 1997).

A significant share of the population of Seoul was made up of the Japanese. The number of Japanese after the First Sino-Japanese War (1894-1895) was 1% of the total population of Seoul. The next increase followed the Russo-Japanese War (1904-1905) to 5% (Kim, 2003).

Based on figure 6, the increase in the number of Japanese in Seoul was followed by colonization from 1910 to 19%, industrial development during the second and third decades of the twentieth century to 26% (1915, 1920, 1925). The largest share in the total population was made by the Japanese in 1930 (27%) and 1935 (28%). The number of Japanese declined during the fifth decade of the twentieth century and the defeat of Japanese imperialism from 17% (1940) to 16% (1944) (Seoul Historiography Institute, 2005).

As in typical colonial cities, the rapid increase in Japanese population that accompanied the increase in the total population of the city led to a social and physical separation between the ruling class and the population. During this period, the housing

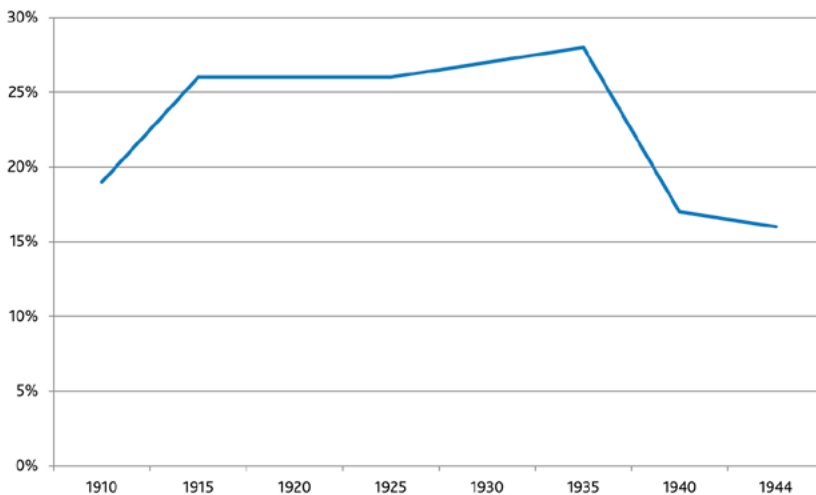


Figure 6. Movement of the Japanese population in Seoul in the period of the beginning (1910) and towards the end of the Japanese colonial rule (1945) in percent (%)

Source: Seoul Historiography Institute, 2005.

phenomenon that arose was the appearance and growth of the covered areas known as Tosokchon. These slums formed when state or private land were occupied without a permit and either caves were excavated or foundations laid of any material available (Yang, Yi, 1995).

Until the forced colonization of Japan, Seoul was called Haseong-bu. The old name is associated with the Joseon dynasty. After colonization, the Japanese changed its name to Keijo-fu and granted it the status of an administrative unit (Seoul Historiography Institute, 1981).

The Japanese Empire reorganized the Keijo-fu districts in early 1914, bringing the city's area to 33 km². The city expanded south to Chongsan, where military bases and railway facilities were set up. After the First Sino-Japanese War, Japan asked permission from the Korean Empire to build a railway from Seoul to Busan - Gyeongju. Construction of the Gyeongju railway began in the summer of 1901, despite local Korean protests. Japan sought to gain control of the Gyeongju project, recognizing the railroad as a means of keeping Korea under its influence. The construction of Gyeongju progressed to the north of the peninsula due to military reasons and the expected conflict with Russia, known as the Russo-Japanese War (1904-1905). The construction of the Gyeongju was completed in January 1905. The Gyeongju line formed the backbone of transportation between Korean cities under Japanese rule (Nakano, 2007).

Kyeongui is a railway line that connected Seoul with the northern part of the peninsula, the cities of Pyongyang and Dandong in today's People's Republic of China. The line was opened in 1921, making Seoul the railway junction of the Korean Peninsula (Cho, 2007).

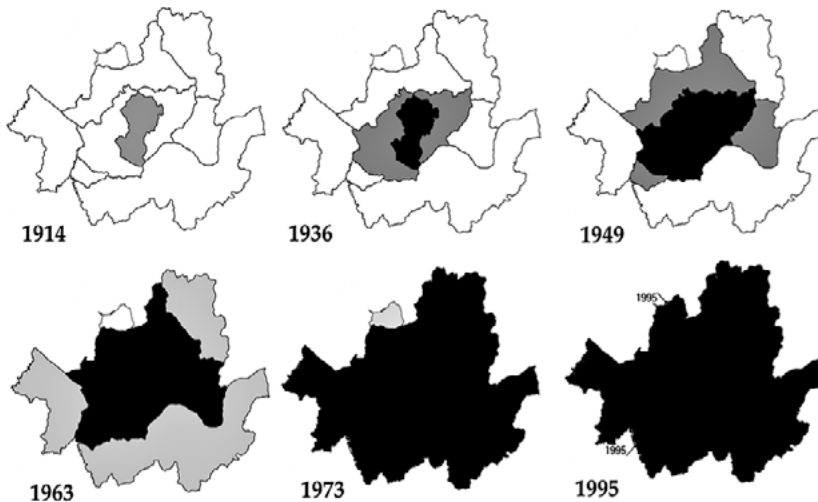


Figure 7. Territorial expansions of Seoul in the 20th century

*Source: author according to Seoul's urban plans
[\(http://english.seoul.go.kr/policy/urban-planning/\)](http://english.seoul.go.kr/policy/urban-planning/)*

The Japanese Empire reorganized the city's administrative units again in 1936, increasing the city's area to 132 km² (Figure 7) (Seoul Historiography Institute, 1997).

A significant number of facilities were built around colonial government agencies that promoted the migration of Japanese to Korea. The Japanese Empire divided the settlements around Seoul into *dongs* (settlements inhabited by Koreans) and *mashia* (settlements inhabited by Japanese) (Kim J., 2003).

One of the things that promotes rapid changes from a traditional urban structure to a modern one, are the already mentioned educational facilities (Ha, 1997). First, primary schools were established, which began with the Gjodong primary school in 1894, and in 1910 there were a total of 10 primary schools. Then, with the arrival of the Gyeongsong government, that number increased to 70. Also, the establishment of about 100 educational institutes, including high schools and colleges and universities, has led to progressive changes in the structure of the city and from this point on, Seoul has also become the center of education in Korea (Lee, 1997).

CONCLUSION

Based on all that has been shown, Japanese imperialism has left positive and negative aspects on the cities on the Korean Peninsula (Soh, 2009). The Korean economy was transformed from the opening of the kingdom at the end of the nineteenth century to the end of Japanese rule in 1945. On the Korean Peninsula under colonial rule, Japan focuses on capital formation, economic growth, and structural change. At the beginning of the colonization period (1915), settlements with more than 20,000 inhabitants were taken as urbanized. The percentage of urban population was only 3.11%. Japan promoted the policy of urbanization because the cities represented the natural framework in which the process of industrialization took place. With the industrialization that has caused the constant growth of most of the existing and the emergence of smaller cities, there is a breakthrough acceleration of the process of urbanization. At the end of the colonization period (1941), the urban population made up 16% of the population. The so-called miraculous economic development on the Korean Peninsula transformed the region from an agrarian to an industrial power economy in a very short period of time.

Despite the oppression of Japanese colonial rule, it cannot be denied that the Japanese colonial administration introduced modern urban planning in Korea (Lee, 1962). Industrial complexes, new cities and built communications still influence the characteristic functions of individual cities.

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CONFLICTS OF INTEREST

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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