Modern Housing Complexes in South Korea. An Educational Analysis to Evaluate the Typological Evolution and Urban Adaptations

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[Abstract]
The contemporary South Korean landscape is characterised by a massive display of modern apartment buildings. They are omnipresent in their monotonous manifestation and represent the dream of the Korean population. Serial mass housing is a typology that has had a great diffusion all over the world, but how has modern housing developed in South Korea? To this end, what are the resulting local adaptations? This paper retraces these key evolitional aspects. Methodologically, it draws on a scholarly literature review as well as on-site photographic surveys, developed in connection with an educational program at the Korea Tech University. The result is the analysis of both the urban and architectural transformation from the early modernisation period to the present condition of contemporary housing. A historical background introduces Korean traditional urban houses, to be used as a context to describe the contemporary modern city that has developed since the 1960s. The main emphasis is then placed on the urbanisation process that fully matured during the 1980s together with a focus on the mass housing typology as the main pivot in the urban transformation. Finally, the paper will draw a parallel between modern Western theories and Korean applications.

Key Words: Modern Housing, Apartment, Urban Morphology, Korea, Seoul

I. EARLY MODERNISATION

The first great modernisation impact on the Korean peninsula occurred during the Japanese colonisation period (1910-45). Japan exerted huge pressure on Korea even before its annexation. The first urbanisation wave dates back to 1876 when Korea was forced to drop its long-held policy of isolation. Ten port cities and five inland cities opened to trade, generating new needs in modern urban planning [1]. Starting from the 1930s, Japan designated the Korean colony to be an engine of the Japanese military complex for its imperialistic expansion plan. Consequently, a great deal of new infrastructure was developed around the country.

Seoul did not register any large spatial transformation from its foundation year (1394) to the colonisation period. Starting from 1910, the “ordering of streets” urban policy altered the original street network, widening existing thoroughfares and building new roads. The main purpose was to merely introduce economic and military principles in the organisation of the urban space, completely altering...
South Korea was ruled by a military dictatorship from 1961-87, and during the leadership of President Park Chung-Hee (1961-79) the modernisation process was especially key to the political agenda. This period was characterised by massive economic growth coupled with severe repression. President Park had a clear intention to use the urban transformation as a tool for social reform, introducing large scale population control in Seoul. Thus, the construction of vast mass housing projects (called apia’tu tanji) was seen as “a very powerful tool for guiding and managing the social groups that have been at the core of South Korea’s economic development” [8].

To accommodate an increasing number of new urban dwellers, Seoul adopted an urban growth management strategy based on ring-radial roadway circulation, multiple centres, and green belts. The proposed urban model was inspired by the Western New-Town Planning and Garden City ideas. The resulting 1966 Comprehensive Development Plan was put into place to facilitate the expansion of the city, proposing four ring roads at varying distances from the city centre and thirteen radial arterials [9]. The junctions of these roads were to become subcentres.

This plan was followed by the 1972 National Development Plan, which introduced a new greenbelt system, easily leapfrogged by unplanned development. The plan also pushed new development toward the south side of the Han River and, by the mid 1980s, the expanse of urbanisation on both the north and south banks of the river was equal [10].

A further decentralisation process occurred in 1989, with the construction of five new large towns – Ilsan, Jungdong, Sanbon, Pyeongchon and Bundang – with a planned variety of population density. Recent ambitious new town projects include Sejong Metropolitan Autonomous City and Songdo Smart City.

II. FAST URBAN TRANSFORMATION

After the Korean War (1950-53) Seoul experienced one of the largest single country-to-city migrations ever recorded. Korea’s economic “miracle of the Hangang river” exploded and starting from the early 1960s, this area experienced exponential demographic growth [6]. Urban development in Seoul was impossible to control and thus the urban organisation introduced by the Japanese was kept. New large-scale public works projects were planned, and spontaneous development was expropriated and destroyed [7].

In terms of architectural developments, new colonial Western Style buildings were introduced in the cities – mainly public buildings and transportation facilities – intended to be used as tools to consolidate colonial rule. The buildings adopted neo-classical eclectic styles mainly deriving their influence from Britain, due to the well-established relationship between Japan and the UK.

III. CHARACTERS OF MASS HOUSING COMPLEXES

In this context, modern apartment blocks became the prevailing housing typology and consequently the dominant image of the South Korean landscape, spreading through
both the city and countryside (Fig. 1). As Florian Urban pointed out, “serial construction methods became the prevalent technology of mass housing around the world, and simultaneously a stylistic principle of modern city design” [11]. In the 1970s, the prefab high-rises comprised less than 4 percent of the housing stock in South Korea, while that number rose to 50 percent in 2000. Accordingly, in the same period the percentage of individual houses decreased from 90 percent to approximately 25 percent [12].

Korea’s first apartment building, the Mikuni Apartment in Hoehyun-dong, was constructed in 1930 by a Japanese company to provide accommodation for its employees. It was followed by a second apartment built in 1935 in Naega-dong. In the same year, records show the construction of the Yurim apartment, the first to be built for rental purposes [13]. None of these buildings survive today.

We have to wait until 1958 to see the first apartment buildings built after Korea’s liberation from Japan. The two examples worth mentioning are: the Jongam apartments, comprised of three buildings, four to five stories high, the first to be equipped with flush toilets; and the Mapo Apartments – ten six-floor apartment buildings – constructed between 1962 and 1964 by the Korean National Housing Corporation (KNHC), equipped with individual hot-water heating systems. Although the formal policies that applied to the apartment buildings were defined later on, the Mapo apartments established a set of planning principles for the
IV. HYBRID MODERNIST THEORIES FOR KOREAN SERIAL APARTMENTS

To trace the architectural references of the Korean modern apartment building we should analyse the theories of the modern movement and the experiments developed by the architects that rallied around the CIAM. After the previous two CIAM congresses on «The Minimum Dwelling» (Frankfurt/Main, 1929) and «Rational Land Development» (Brussels, 1930), «The Functional City» (1933) represented an ambitious project to apply modern methods of architectural analysis and planning to the city as a whole [16].

In particular, Le Corbusier’s Athens Charter publication of 1943 foreshadowed Korean urban planning by codifying the paradigm of strict urban functional division.

Modern Korean development was inspired by the most visionary unbuilt projects that have influenced many urban planners around the world. Specifically, the ones developed by the great modern masters at the beginning of the twentieth century. Ludwig Hilberseimer with the projects of High Rise City in 1924 and Berlin’s Gendarmenmarkt Square in 1927, envisioned a repetition of identical residential buildings, disposed in a logical geometrical layout, completely disconnected from the existing context. In a similar fashion, Walter Gropius’s housing diagrams from 1929 show a clear scientific approach to the problem of large housing complexes. Ultimately, Le Corbusier’s three main urban proposals – Contemporary City for Three Million People, 1922; Plan Voisin, 1925; The Radiant City, 1933 – were the main source of inspiration for the Korean architectural vision, in particular, his adherence to height, light, and geometrical order, were seen as a salvation from inefficient and unhealthy urban sprawl.

Another very important theory that influenced the definition of modern apartment complex planning in Korea is Clarence Perry’s Neighbourhood Unit. The American urbanist developed the Neighbourhood Unit theory in 1929, which essentially defined a residential block delimited by transportation arteries. The block is designed to be self-sufficient, containing all the facilities needed to support the residences therein, such as shops and services. These features allowed the maximum land use and the minimum construction cost, but at the same time created a completely new environment that disintegrated the traditional landscape and social relationships. Nevertheless, the apartments became a symbol of higher social status and a highly desired product that is still very popular nowadays.

In terms of interior design, the typical apartment floorplan is a combination of different influences. As analysed earlier, the traditional floorplan developed from the transformation of the urban hanok into the spec house, where the madang became an interior space and started to function as a living room. The Western influences travelled through Japan, adopting new building technologies and new spatial configurations. The typical LDK floorplan system (Living, Dining, Kitchen) was already developing in Japan staring from the 1940s and then employed in Korea, becoming the standard layout in modern Korean apartments. Nevertheless, these influences were combined with the traditional floorplan, creating a hybrid arrangement together with these foreign systems, which blended the continuity and consistency of the traditional plan into the contemporary design.

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a population that ranges from 3,000 to 9,000 residents - which corresponds to a primary school capacity of 1,000 to 1,600 students. It should be noted, however, that the residential buildings were intended to be low-rise individual houses. This urban scheme is clearly influenced by the Garden City, but the interesting fact is that the Garden City movement predicated urban dispersal as a reaction against the congested urban centre, whereas the Korean tanji were intended to be located in the very heart of the city and in the new expansion areas.

Eventually the urban layout adopted by Korean urban planners was a hybrid interpretation of Clarence Perry’s Neighbourhood Unit, combined with the modernist’s proposition of collective high-rise residential towers and slabs. In reality, the tanji were not completely self-sufficient and the contemporary city is characterised by a collage of high-rise and low-rise buildings, with strict functional division.

When comparing the 1950s and 1960s European applications with the Korean tanji, we note a distinctive political approach. While the European projects were developed as ‘social housing’ for the poor and located at the periphery of the city, the Korean high-rise apartments were built within the existing city, and oriented toward the growing middle class and upper-middle class. Similarly, while European social housing was intended to be rented, Korean housing was based on a policy of home ownership [17].

Other, more direct influences, should be credited to Japan and to the USA. Japan developed its post-war modernisation process earlier than Korea, also being the only Asian country to have developed an architectural avant-garde – the Metabolism – which has had an international impact. In contrast, South Korea had advanced a very unique corporation system, defined by the country’s large construction conglomerates (chaebol). These large companies played – and still play – a key role in the urban and regional transformation, where large housing projects are the instrument used to dominate the real estate market, leaving only the small and middle-scale projects to more independent and progressive architectural firms.

FINAL REMARKS

South Korea has experienced one of the fastest urban transformations in human history. Retracing the evolution of different housing types that emerged through the modernisation process allows us to comprehend the resulting urban morphology and the altered social relationships in the contemporary city. After the initial adaptation of the traditional urban house and the early modern developments, the apartment building became the prevailing housing typology in South Korea. Its success has been determined by three main factors. First, the tanji were located in the city and not at the periphery as in the European cases. Second, the apartment buildings were constructed with high-quality standards and oriented toward the rising middle-class and not the society’s lower strata. Third, the remaining low-rise residential areas suffered from a lack of urban and architectural quality, becoming unattractive to the majority of the population, while in Europe the vernacular city was seen as a privileged place. In Korea, apartments buildings became the image of modern life and a highly desired product. Still nowadays the apartments blocks are considered the best and most convenient preference for Koreans, and this trend is far from over. Thus, a global architectural typology has been locally conditioned in both its spatial adaptation and in its political application, determining the success of a housing type that has been disparaged elsewhere.

REFERENCES

[4] Ibid., 11


[10] Ibid., 82


[15] Ibid., 176


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Darío Pedrabissi is a practicing architect, researcher and educator. He is an Assistant Professor at Korea Tech, specializing in Design and Practice, teaching design studios at the intersection of architecture, spatial design and contemporary urbanism. His research is based on both historical-theoretical studies and contemporary design analysis, which focus on technical and cultural phenomenon within the permanent renewal of ‘modernity’. The objectives of this research are the study of the interactions between people and space, both in the private and in the public realm, as this topic relates to the issue of social relationships and sustainability.

He received his Bachelor of Architecture from Florence University in Italy and his Master of Science in Architecture and Urbanism from the University of Technology, Delft, The Netherlands. He worked for several local practices in Italy – both in design and construction – and was involved in public and private projects on different scales. Since 2013 Pedrabissi has been the principal at Pedrabissi Studio, an emerging design and research practice based in Italy and South Korea. The studio’s interest lies in diverse fields ranging from architecture and interior design to urban research and the creation of public artworks.