

## HISTORIC LAYERING OF URBAN HERITAGE CARVED ON HANYANGDOSEONG, SEOUL CITY WALL

**Song, In-Ho**

*Professor, School of Architecture and Architectural Engineering, University of Seoul,  
Korea,*

*Director, Institute of Seoul Studies,*

*Member of ICOMOS Korea*

[inos@uos.ac.kr](mailto:inos@uos.ac.kr)

### **Abstract**

*UNESCO Recommendation on Historic Urban Landscape was adapted at the 36th Unesco General Assembly in 2011. This recommendation notes that historic city is understood as the result of historic layering of cultural and natural values and attributes, extending beyond the notion of 'historic centre' or 'ensembles' to include the broader urban context and its geographical settings. It also includes social and cultural practices and values, economic processes and the intangible dimensions of heritage as related to diversity and identity. Moreover the terminology 'Urban heritage' was suggested as a category of cultural properties at "annex III of Operational Guidelines for the Implementation of the World Heritage Convention" at The International World Heritage Expert Meeting on the Mainstreaming of the methodological approach related to the Recommendation on the Historic Urban Landscape in the Operational Guidelines.*

*Hanyangdoseong, the Seoul City Wall is the capital wall that was constructed for Hanyang, the longstanding capital of the Joseon Dynasty (1392-1910). Seoul City Wall is the urban artifact that could be defined as representative urban heritage of capital wall in East Asia. Seoul City Wall was constructed in the end of 14th century. It was the model of city wall that was evolved through the centuries with the combination of flatland-wall and mountain-wall on the basis of topography inside and outside of Korean Peninsula. Moreover Seoul City Wall is the architectural and technological ensembles, which were constructed with stone and earth on the ridges of four mountains. Therefore it makes an integrated entity of topography and artifact. During over five hundred years the form and function had been sustained as capital wall through restoration, reconstructions and repairs. Although Seoul had experienced the colonial period, Korean War, and rapid urbanization in 20th century, the remains and memories of Seoul City Wall are well conserved to corroborate the historic layering of continuance through five hundred years.*

*Recently the multi layered relics were excavated on the site of Namsan-Hoehyun, where we could specifically corroborate the historic layering of fluctuations through the Japanese colonial period and the urbanized process in 20th century. While the dark memories on 'Joseon Jingu (朝鮮神宮)', remain beneath the modern public park, the Wall*

*relics of the earliest stage were excavated vividly on the site. The historic layering of Namsan-Hoehyun site should be an exceptional in-situ preservation museum that shows with strong evidence of continuance and fluctuation as urban heritage.*

**Key words:** *Hanyangdoseong, the Seoul City Wall, Historic Layering, Urban artifact, Urban Heritage, Original Form, Earlier Form, Protection, Conservation.*

## **1. Seoul City Wall as Urban Heritage**

Hanyangdoseong, the Seoul City Wall is the wall that had enclosed the city of Hanyang (漢陽, today's center of Seoul), the longstanding capital of the Joseon Dynasty (1392-1910). Hanyang was surrounded by four mountains - Baegaksan(the northern), Nagsan(the Eastern), Mokmyeoksan(Namsan, the Southern), and Inwangsan(the western) - and the city wall was built along the ridges of these mountains. Constructed in 1396 as the wall delineating and protecting the capital city of the newly established dynasty of Joseon, the wall became the symbolic feature representing the city and practical boundaries. As a testimony to the rising power of Joseon and its administrative capacity, Hanyangdoseong was built in a short period of time as a result of large-scale public mobilization across the country. The wall and its structural facilities were fundamental urban elements constituting the capital wall, and were managed with the highest priority by the state.

Hanyangdoseong, the Seoul City Wall maintained its form and function as the defining boundary of the capital for over 500 years, and survived through the turbulent periods of the early 20<sup>th</sup> century and the rapid urbanization and modernization processes of the contemporary times.<sup>1</sup> A total length of 12.5km of the original 18.6km of the wall remains standing today and displays its prestige and historicity in the city of Seoul, which has extended into a metropolitan city housing more than 10 million citizens.

The terminology and concept of Seoul City Wall could be defined on the basis of "Suseong-yuneum (守城綸音)", that had been proclaimed in 1751 by King Young-jo (英祖, 1724-1776). On the basis of People oriented philosophy King Young-jo proceeded with urban regeneration policy, that were the serial policies of 'keumsong (禁松) – juncheon (濟川) – suseong (守城). Until then the capital had been recognized as the urban area for the king and the royal regime. The declaration Suseong-yuneum" gave prominence to the

---

<sup>1</sup> The northern part of wall besides Sungrye-mun (崇禮門) had been started to be demolished in 1907, the last years of Joseon dynasty. Throughout the 20<sup>th</sup> centuries Seoul experienced the string of historic upheavals that characterize modern Korea, from Japanese colonial rule (1910-1945), to the Korean War (1950-1953) and on to the rapid urbanization. Portions of the earlier form at urbanized area disappeared during these tumultuous events,

fact that Seoul City Wall was recognized as a city wall that protect the people and manage the capital.<sup>2</sup>

Meanwhile, UNESCO Recommendation on Historic Urban Landscape was adapted at the 36th UNESCO General Assembly in 2011. This recommendation notes that historic city is understood as the result of historic layering of cultural and natural values and attributes, extending beyond the notion of ‘historic center’ or ‘ensembles’ to include the broader urban context and its geographical settings. It also includes social and cultural practices and values, economic processes and the intangible dimensions of heritage as related to diversity and identity. Moreover the terminology “urban heritage” was suggested as a category of cultural properties at “annex 3 of Operational Guidelines for the Implementation of the World Heritage Convention” at The International World Heritage Expert Meeting on the Mainstreaming of the methodological approach related to the Recommendation on the Historic Urban Landscape in the Operational Guidelines.<sup>3</sup>

I focus the concept of historic layering from the perspective of the Historic Urban Landscape approach. The historic layering of Seoul City Wall could be defined as following. The first is the multi-layered testimonies that was been accumulated through the continuance of construction, reconstruction, restoration, and repair through over five hundred years of Joseon dynasty. The second is the discontinuous testimonies that was been overlapped through the fluctuation in 20th century.

## **2. Historic Layering of Continuance through Five Hundred years**

Hanyangdoseong, the Seoul City Wall had been protected and managed through the five hundred years of Joseon dynasty. The earlier form had been completed in 1396 (King Taejo, 1392-1398) and in 1422 (King Sejong, 1418-1450). The former was constructed by ‘Doseong-Jochuk-Dogam (都城造築都監)’ soon after King Taejo had moved the seat of government in 1394 from Gaeseong, the capital of Goryo dynasty. The latter was constructed by ‘Doseong-Suchuk-Dogam (都城修築都監)’ after King Taejong (1400-1418) had transferred the capital again in 1405 from Gaeseong after the political upheaval. Moreover Hanyangdoseong had been repaired and restored in 18th century after the two wars in 1592 as well as in 1636. The wall is recognized by the tradition of continuous

---

<sup>2</sup> BAE, Usoeng, “Seoul City Wall and the Hoehyeon Section of Namsan Mountain during Late Joseon Period”, p61, <The Heritage Value of Hanyang-doseong in Hoehyeon Section of Namsan Mountain>, 2015

<sup>3</sup> However it was felt that a reference to special types of heritage such as “urban heritage” within the text of the Operational Guidelines was premature and merited further reflection. (WHC-15/39.COM/11,p.3) Thus the World Heritage Centre and Advisory bodies suggest to continue the work undertaken and further reflect on a new structure of Annex 3, accordingly continue the revision of the Operational Guidelines.(WHC-15/39.COM/11,p.4) (World Heritage 39 COM, item 11 of the Provisional Agenda: Revision of the Operational Guidelines)

management consistently carried out by the state government of Joseon. The physical evidence of construction, repair and reconstruction implemented by collective skills and labor over time are preserved in the fabric of the heritage, especially within the inscribed stones of the city wall.

Three major forms of wall were constructed differently in three separate periods: the late 14th century form, comprising natural undressed stones of irregular shape piled up in no regular pattern with gaps between large stones filled with small stones; the early 15th century form, comprising dressed rectangular stone blocks, large at the bottom of the wall and growing gradually smaller toward the top, aligned along horizontal joints; and the early 18th century form, comprising square stone blocks solidly and tightly piled up. The variations in form according to period are the outcome of efforts to standardize building materials, make the wall as solid as possible, and achieve efficiency in construction processes. The differing forms make it possible to confirm construction traditions and changes in techniques over the whole Joseon Dynasty. These changes according to period evidence the stages of development in stone wall construction through the Joseon Dynasty. (Fig1. Three major forms of wall constructed in three separate periods)

The wall comprises historical layers that exemplify prevailing construction techniques and processes over time and also attest to the exemplary method of constant management used for more than 500 years. Hundreds of stone blocks forming the wall are inscribed with the names of supervisors and people from all over the country who took part in the project as well as their regions of origin, and the names of the sections of the wall they built. It has outstanding value as material evidence of the record-keeping tradition of Joseon. The contents of the inscribed stones comply with the contents of written records including Joseon wangjo sillok (朝鮮王朝實錄, The Annals of the Joseon Dynasty), Ilseongnok (日省錄, Records of Daily Reflections) which are included on the UNESCO Memory of the World Register and many others. The inscribed stones also provide evidence that Hanyangdoseong was the outcome of the collective skills and labor of ordinary people and craftsmen from all over the country.

Hanyangdoseong, the Seoul City Wall is an outstanding example of a city wall, as an urban artifact fully utilizing the natural circumstances of the terrain. The wall conforms to the specific geological conditions of each section of the land by employing different building techniques, which results in the formation of a unique organic structure forming an integral ensemble with the topography. (Fig2. Hanyangdoseong, the Seoul City Wall and Geomorphology)

The location and shape of Hanyangdoseong was determined with respect to the natural topography and morphology to ensure harmony with the surrounding environment. It was built to sit naturally in its setting in compliance with the topographic changes of the land, from mountain ridges to rolling hills and down to flat land, and the foundations were built with various methods according to the varying hardness of the ground, from bedrock to soft stratum. Therefore, according to the topography and state of the ground, varied construction techniques were used; construction methods of foundation, piling up stones

to form the ramparts, and buttressing the wall with rammed earth to smoothly integrate the wall with the ground. It is hence an outstanding achievement of the wall using construction techniques where the ramparts and rammed earth layers are adroitly integrated with the topography forming one organic structure.

In consideration of the various geological conditions such as solid bedrocks, sloped terrain, and weak stratum that Hanyangdoseong is sitting on, the ground base and the wall itself was consolidated and constructed with granite and gneiss utilizing dry masonry and rammed earth techniques. In the case of solid granite bedrock, the rock was cut and processed into a stair-like terrace, and the stone blocks were piled up on top, integrating the wall with the bedrock. On sloped terrain, the ground was reinforced with rammed earth after digging out, and the base stones and stone blocks were piled up on the outside while the inside was buttressed with rammed earth. In areas where the ground was weak, wooden piles were driven into the ground and covered with rubble before laying the base stones, and stone blocks were piled up on the outside while the inside was buttressed with rammed earth to build steep hills to complement the flatness of the land. Hanyangdoseong is an exceptional example displaying the whole range of construction techniques which were used to build the wall that are smoothly integrated with the terrain, ranging over mountainous sections, urban sections, bedrock sections and lowland sections with streams running through them.

Thus Hanyangdoseong became a unique organic structure employing diverse types and methods of construction in a single edifice. The city wall was not unilaterally built with the same construction technique but utilized all existing techniques and knowledge that accumulated from wall construction traditions from before, resulting in the formation of a unique organic structure forming an integral part of the topography.

Among the four mountains we can see the morphological patterns of historic layering of continuance through five hundred years on the section of Baegaksan (白岳, north mountain, fig. 3) and on the section of Naksan (駝酪, west mountain, fig. 4).

In Baegaksan we can witness the natural shape wall-stones, which show the typical pattern of the construction in 1396 and the patterns of the construction on natural rock. (Fig3. Topography and Elevation of Seoul City Wall at Baegaksan) In Naksan we can see the properly faced wall-stones, which show the typical patterns of the construction in 1422 and the patterns of the construction on hillside (Fig4. Historic layering of Continuance through Five hundred years at Naksan). These were constructed by 'Doseong-Jochuk-Dogam (都城造築都監) in 1396 and 'Doseong-Suchuk-Dogam (都城修築都監) in 1422. Also we can see the square shape wall-stone, that show the patterns of repair in 18th century and in 19th century. The size of the former is about 40 x 40m, and the size of the latter is about 60 x 60m. Each parts were constructed by 'Hunryon -Dogam (訓練都監)'. Wall-stones of 1396 and 1422 were quarried at four mountains, while those of 18th and 19th centuries were quarried at Nokbeon area and Nowon area, the outskirt surrounding mountains.

Moreover we can see the structural patterns of historic layerings, which shows us the construction technology of each period, on the basis of section types. The structural patterns of historic layering are defined as followings. The first structural pattern of historic layering is composed of the wall sections in 1396/1422 and the parapet in 18th century. The Second structural pattern of historic layering is composed of the wall and parapet section in 18th century. Meanwhile the construction process of each part can be proved on the inscription stones. Especially we should pay attention to the joints where the repair or restoration were differentiated.

Dr. Tamás Fejérdy defined City walls as a significant component in the resilience of historic cities, as they are able to sustain a network of physical systems and human communities. From the point of view of the resilience of cultural heritage and historic cities, he took note of the Seoul City Wall as urban heritage representing the identity of a community and took note of the “embodied creativity” evident in its rich and multi-layered history deriving from the accumulation of consecutive “creative solutions” applied to subsequently emerging challenges.<sup>4</sup>

### **3. Historic Layering of Fluctuation through the 20th Century**

A recent excavation of Seoul City Wall reveals a wall structure comprised of rammed earth and stonework, all evidencing the construction technology applied to the city wall. They bear testimony to over five hundred years of the multiple historic layers of the Seoul City Wall, and also demonstrate the wall’s superiority manifest in its distinctive architectural forms and styles as an urban artifact.

Especially the multi-layered relics were excavated dramatically on the hilly and mountainous section of Namsan-Hoehyun, where we could specifically corroborate the fluctuations through the Japanese colonial period and the urbanized process in 20th century. While the dark memories on ‘Joseon Jingu(朝鮮神宮)’ remain beneath the modern public park, the Wall relics of the earliest stage were excavated vividly on the site. (Fig5. Historic Layering of Fluctuation through the 20th century at Namsan-Hoehyun)

In this regard, the newly excavated sites should be preserved in the condition in which they were discovered and suggests pursuing measured scientific methods, including waterproofing and hardening treatment, for preservation purposes. The archaeological

---

<sup>4</sup> Dr. Tamás Fejérdy discussed the overall conservation philosophy and management principles for World Heritage, which are articulated in the Venice Charter, in order to emphasize the importance of the conservation of urban heritage in the original state encountered at the time of excavation. He also cited the Krakow Charter, explaining the principles presented therein for identifying the level of intervention applicable to the restoration or reconstruction practices for heritage remains. (Tamás Fejérdy , Seoul Metropolitan Government (2015), “How the built cultural heritage properties are supporting resilient capacities of historic settlements”, p25, <SCIENTIFIC CONSERVATION and CREATIVE INTERVENTION of CITY WALLS>, Hanyangdoseong the Seoul City Wall Studies Series vol.5, 2015)

remains of wall should be protected as in-situ preservation in order to conserve the authenticity and impression of original form as it was excavated. Moreover the special care be extended to the reinforced concrete basement of a prayer hall of Joseon Singung (朝鮮神宮), a Shinto shrine, built by Imperial Japan in 1925, in order to remember and bear in mind the tumultuous history experienced by Seoul City Wall throughout the 20th century. Now the appropriate conservation philosophy and scientific principles are essential for the in-situ preservation of the excavated wall sections and outlines of stonework and rammed earth. Simultaneously, creative design is required for building a shelter for in-situ preservation with revealing the historical layers of the city wall firmly rooted and unified in the earth.

#### **4. Epilogue: Meaning of Original Form and Historic Layering**

As outlined by the four surrounding mountains, Hanyang-doseong, the Seoul City Wall follows the natural encirclement of the ridges adapting to the existing geomorphology and land relief. Methods of adaptation accumulated over the long history of living in mountainous terrain provided the basis of creating a unique combination of the wall attaining maximum unity with the natural environment. Various different techniques suited for the geological condition of each section produced an organic structure adroitly integrated with the topography.

On the basis of the geomorphology, Hanyangdoseong, the Seoul City Wall maintained its form and function as the defining boundary of the capital for over 500 years, and survived through the turbulent periods of the early 20th century and the rapid urbanization and modernization processes of the contemporary times. Therefore the wall, remains and memories are well conserved in the fabric of the heritage to corroborate the historic layering of continuance through five hundred years as well as of fluctuation in 20<sup>th</sup> century.

#### **References**

- Seoul Metropolitan Government (2013), HISTORIC CITY and CITY WALL, Hanyangdoseong the Seoul City Wall Studies Series vol.1.
- Seoul Metropolitan Government (2014), TRADITIONAL URBAN PLANNING PRINCIPLES and CITY WALLS in ASIAN CAPITAL, Hanyangdoseong the Seoul City Wall Studies Series vol. 2.
- Seoul Metropolitan Government (2014), THE VALUES and AUTHENTICITY of SEOUL CITY WALL, Hanyangdoseong the Seoul City Wall Studies Series vol. 3
- Seoul Metropolitan Government (2015), THE HERITAGE VALUE of HANYANGDOSEONG in HOEHYEON SECTION of NAMSAN MOUNTAIN, Hanyangdoseong the Seoul City Wall Studies Series vol.4.

- Seoul Metropolitan Government (2015), SCIENTIFIC CONSERVATION and CREATIVE INTERVENTION of CITY WALLS, Hanyangdoseong the Seoul City Wall Studies Series vol.5.

Fig1. Three major forms of wall constructed in three separate periods, Seoul Metropolitan Government



Fig2. Hanyangdoseong, the Seoul City Wall and Geomorphology, Institute of Seoul Studies

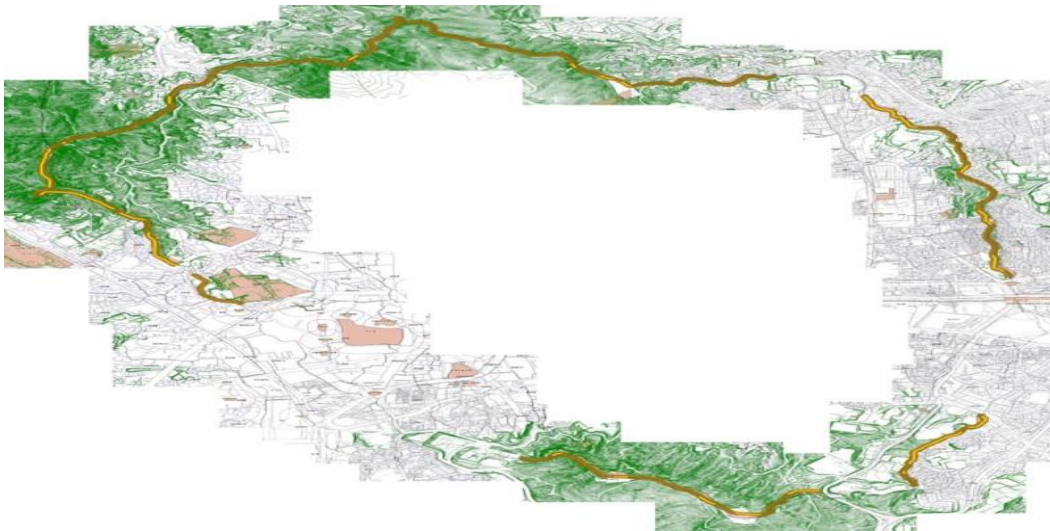




Fig3. Topography and Elevation of Seoul City Wall at Baegaksan, Institute of Seoul Studies



Fig4. Historic layering of Continuance through Five hundred years at Naksan, Institute of Seoul Studies

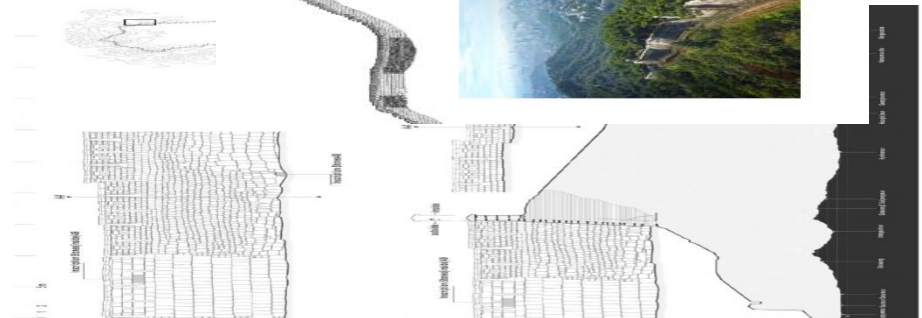


Fig5. Historic Layering of Fluctuation through the 20th century at Namsan-Hoehyun, Institute of Seoul Studies

