# The Resignification of the Garden Suburb as International Heritage

Ren, Xiaogeng, Le, Thi Hoa Ly, Doan, Thu Trang

Vietnam National University

### Abstract

Urban green spaces have gained increasing recognition due to industrialization, modernization, and the negative impacts of climate change. This article examines the history of urban green space system planning in Vietnam's capital city, Hanoi, focusing on its theoretical prototype and practical planning situations from an international perspective. Aiming to alleviate the crowded and residential conditions caused by the high construction density of the central urban area in Hanoi, the Vietnamese policymakers, planners and investors proposed and formulated planning versions of urban green space to improve its urban congestion and environmental issues. Using the case of urban green space system planning of Hanoi during the French modern planning influence period (1886 - 1954), the Soviet Union planning influence period (1954 - 1991), and the globalization period (1991 - 2011), this article examines urban green space system planning which authorities developed for the capital city of Hanoi in three different periods. By analyzing planning concepts, planning policy, and implementation situations of planning, this article argues that urban green space system planning aims to improve the urban environment quality and create green and leisure spaces for residents. Throughout this trajectory, urban green space planning in Vietnam has undergone continuous transformations. However, in terms of the actual construction and implementation, green space projects in Hanoi city are difficult to succeed due to the issues of urban land using policies, misconceptions arising from diverse perceptions, and the absence of long-term vision.

#### Keywords

urban green space system, Hanoi, planning history, capital city, regional planning

### How to cite

Ren, Xiaogeng, Le, Thi Hoa Ly, Doan, Thu Trang, "The history of urban green space system planning in the capital city of Hanoi, Vietnam (1886 - 2011)". In Ian Morley and Hendrik Tieben (eds.), *International Planning History Society Proceedings*, 20<sup>th</sup> IPHS Conference, "The (High Density) Metropolis and Region in Planning History," Hong Kong, 2 - 5 July, 2024, TU Delft Open, 2024.

DOI: 10.7480/iphs.2024.1.7658

# INTRODUCTION

Hanoi, the capital city of Vietnam, has a rich and fascinating history that spans over a thousand years. During its long history, Hanoi's urban green space system has been shaped by a variety of influences. This article analyzes the theoretical concept of the urban green space system from the perspective of international ideas and the practical planning situation in the capital city of Hanoi, with a focus on the historical planning aspect.

In different planning systems, there are various names and different professional approaches. In socialist countries and territories, similar areas/spaces are referred to as "urban green space system" in land use planning and "urban green space" in general construction planning. In the following section of this article, these related contents are collectively referred to as the urban green space system. According to the international definition, urban green spaces are spaces within urban and peri-urban areas, in the form of patches, corridors, or clusters of geographical areas, where the land use is primarily dedicated to the development of artificial or natural greenery, as well as other wetland ecosystems and natural water bodies<sup>1</sup>. Urban green spaces include not only existing spaces with greenery, but also areas that will be developed with greenery in the future based on established urban spatial planning.

In general, domestic research in Vietnam has not yet approached the core scientific issues of the urban green space system. From the perspective of landscape architecture. Tran Van Chu and Dang Van Ha stated that green spaces and water bodies are one of the important factors in urban landscape architecture.<sup>2</sup> However, most of the research contents have not yet been synthesized into a theoretical foundation and have not yet yielded effective results in practice. From the perspective of urban development management, has given opinions on the existing problems in calculating the norms for parks, greenery, and flower gardens in the urban green space system, as well as the existing issues for the development of the urban park and greenery system in Vietnam to ensure standards for the development of sustainable cities. Regarding the urban green space system in Hanoi, the scientific foundations for research have not been fully surveyed and consolidated. The theories and international experiences seem to be limited to strategic proposals without finding an effective pathway to practical implementation and addressing the issues specific to the circumstances and realities in Hanoi.

Through an analysis of planning concepts, planning policies, and planning implementation scenarios, this article explores the urban green space system planning undertaken by authorities for the capital city of Hanoi across three distinct periods. The first stage began in 1886 with the concept of "public parks". However, the urban green space system planning only remained at the conceptual level during this period due to strong French influence. The next stage from 1955 to 1986 focused on overall land use, space, and physical objects, following planning techniques from the Soviet Union. In the globalization period between 1990 and 2011, a focus was placed on increasing the amount of green public spaces available for the local people.

The urban green space system is a topic directly related to the trend of sustainable development, making an important contribution to the cause of building and developing cities in the new era. This paper will provide theoretical foundations for the planning of the capital region, urban management oriented towards smart and sustainable development. At the same time, it will help raise awareness and open up international ideas for the green space system of the capital city of Hanoi in the future.

# ORIGINS OF URBAN GREEN SPACE SYSTEM IDEA DURING THE FRENCH MODERN PLANNING INFLUENCE PERIOD (1890-1954)

Before becoming a French colony, Hanoi was the capital of Vietnam during the Nguyen dynasty, built in accordance with traditional East Asian architecture, reflecting the cultural identity of Vietnam. The city was planned as a closed system, with a developed network of streets and canals, divided into various areas based on profession and population. In 1883, the Patenotre Treaty officially placed Vietnam under French protectorate. Afterwards, France intensified the construction and development of Hanoi as the capital of French Indochina. The French arrival in Hanoi and their establishment of influence in Vietnam led to significant changes in the political, economic, and cultural spheres of Vietnam throughout the colonial period until Vietnam gained independence.

### THE PAUL BERT PARK AXIS - THE FIRST PUBLIC PARK OF HANOI (1886)

For Vietnam, the concept of "public parks" truly began to emerge during the French colonial period. In 1886, Auguste Henri Vildieu, a French engineer, was tasked by the French colonial administration to plan and design this park axis, followed the prevailing urban planning principles of the time in France<sup>3</sup>. This was the principle of symmetry in planning. Architects such as Ernest Hébrard and Henri de Montalembert were brought in to design and oversee the construction<sup>4</sup>. When opening new roads, they built wide sidewalks and planted shade trees along both sides. This new French style with rows of trees and planned parks created a major change in the appearance of the city.<sup>5</sup>

The initial area of the Paul Bert Garden was approximately 12,153.5m<sup>2</sup>. The main axis of Paul Bert Park is perpendicular to Hoan Kiem Lake. This arrangement facilitated ventilation through the green system and also connected the center with the open space system including vegetation and walkways in the Hoan Kiem Lake area. This park was connected to the surrounding buildings such as the City Hall, the Residence of the Governor-General, the Treasury Building, the Post Office, and the Bank of Indochina, forming an overall structure for the central area. This area was designed and built entirely in the architectural and planning style of the French. The Paul Bert Axis was completed in 1888<sup>6</sup>.

The introduction of the concept of "public parks" by the French into Vietnam during the colonial period was a significant contribution. The urban green space planning was an important component in the overall plan to transform Hanoi into a modern colonial city modeled after European cities. This plan laid the foundation for the transformation of Hanoi into a modern colonial city under French rule. It would have a significant impact on the urban development of Hanoi in the decades that followed.

# ERNEST HESBRARD'S PLAN (1924)

In 1923, architect Ernest Hébrard was appointed Director of the Indochina Architectural Planning Department. In 1924, Hébrard's plan was published. Hanoi was divided into two distinct areas: the old quarter was maintained to serve the native population, while the new quarter was the residential area for officials and the French. In the plan, Hébrard allocated a significant amount of land for important structures such as the mansions of colonial officials and military headquarters, surrounding them with green areas. This reflected the prioritization of serving the French and the colonial elite. While the planning focused on parks and street trees, the areas designated for the native population, such as the Old Quarter, lacked adequate green space.

Rejecting the simplicity of the chessboard layout, the Master Plan was filled with pedestrian spaces, greenery, and spacious squares. Applying the Beaux-Arts school of thought prevalent in France, Ernest Hébrard planned the road system based on a geometric network, harmoniously combining it with public spaces where symbolic buildings could be located.

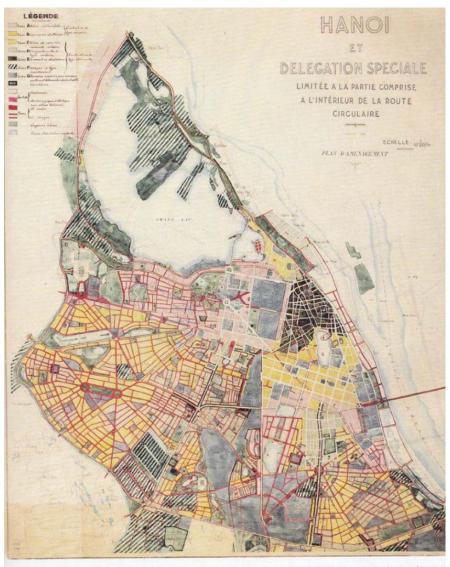
Hébrard's plan included several major ideas, such as building a green park and recreation area around West Lake, transforming West Lake into two interconnected lakes with a system of roads and green spaces surrounding them, creating an ecological infrastructure with a range of recreational activities. He also envisioned a refined Hanoi with wide central avenues planted with trees on both sides, combined with green spaces and historic buildings related to the French colonial period.

However, the 1929 economic crisis slowed down the budget for public works and caused Hébrard to definitively abandon Hanoi, leaving many of his projects and the public space program in their infancy. Overall, Hébrard's plan set forth an ambitious vision to develop Hanoi into a capital city worthy of the French Indochina Federation, harmoniously blending French architecture and tropical landscapes.

# LOUIS-GEORGES PINEAU'S PLAN (1943)

In this project, in addition to combining the ideas of Hébrard, the star-shaped squares (square configurations that lead to characteristic areas) along the French style that have been added will contribute to the development of Hanoi's urban architectural foundation. In the 1943 Master Plan, Hanoi had many such star-shaped squares. The diagram was made by architect Luis Pineau - Deputy Director of the Indochina Planning Department (Figure 1). The Master Plan emphasized the idea and architectural style in harmony with the surrounding environment. In L.G. Pineau's planning scheme, the city boundary was limited from the west bank of West Lake, running along the To Lich River (Lang Belt Road), expanding to the Southwest and South to Khuong Trung village. The land area was thoroughly exploited within the city boundary, interspersed with green trees and housing: green trees in low-lying areas, housing utilizing the higher land areas. Villas and apartment-style housing with the characteristics of the Vietnamese capital developed in the expanded areas to the Southwest, Southeast, and interspersed with urban green areas.

### Ren, Xiaogeng, Le, Thi Hoa Ly, Doan, Thu Trang The Resignification of the Garden Suburb as International Heritage



XIII. Hà Nội, Sơ đố quy hoạch lập tháng 1/1943 dưới sự chỉ đạo của Louis-Georges Pineau (phó giảm đốc Sở kiến trúc và đô thị). Bằn gốc có tỉ lệ 1/10.00 (có thước do tỉ lệ), bằng giấy, in màu, không có hướng [bắc], có đế: "Hà nội, giới hạn ở phia trong đường vành đai, tháng 1/1943. Sơ đố quy hoạch". Phần chủ gi chia thành bảy khu quy hoạch khác biệt nhau: hai khu đầu là biệt thự dành cho một gia đinh và cửa hàng, xảy kiếu Pháp: bốn khu sau là biệt thự kiếu Việt Na ở thành phố, nhà ống ở thành phố, cửa hàng, nhà nông thôn truyền thống; phẩn sau cũng là đất dùnh cho công trình công cộng và cơ quan hành chỉnh. Sơ c cũng nêu rõ ác lịch vụ, đường cán mở hoặc mở rộng, khu vực công cộng, ao hồ hiện hữu, kích thước 90 x 59 cm. Phông Louis-Georges Pineau, Trung tàm lụ trừ, Viện kiến trúc Pháp, Paris (pinge 33/02).

0 05 1 1.5km

Fig. 1. Hanoi Master Plan Map (1943) Under the direction of Louis-Georges Pineau

Unfortunately, those projects were not implemented due to financial reasons and the war. However, the buildings constructed by the French in the late 19th and early 20th centuries had a strong influence on the planning and urban architecture of Hanoi. Through these planning and construction activities, an open space system was designed based on modern Western planning principles. Lakes remain a special open space element, and furthermore, formal parks and Western-style squares have been introduced as new types of open spaces<sup>7</sup>. Overall, this master plan is highly regarded for prioritizing green spaces and public spaces. The distribution of green areas interspersed with residential and public buildings is a very positive aspect, as it creates living spaces in harmony with nature.

During the French colonial period, the planning and development of public green spaces in Hanoi gradually received more attention and improvement. From the late 19th century to 1954, Hanoi had 1 park and 16 gardens. However, in general, the plans and policies on public green space planning during the French colonial period, and the implementation and deployment of these plans, still faced many difficulties and did not achieve the set goals. Although the master plans prioritized the integration of green elements and nature, they did not specify any concrete standards (m<sup>2</sup>/person). At that time, the concept of green space standards per capita was not yet standardized and widely popularized in urban planning as it is today. The focus was on the overall spatial vision and the integration of green infrastructure, creating a harmony between French architecture and the tropical landscape, rather than rigidly defining green space ratios.

# APPEARANCE AND DEVELOPMENT OF URBAN GREEN SPACE SYSTEM PLANNING UNDER THE INFLUENCE OF SOVIET PLANNING MODEL (1954-1984)

Ten years after the end of the resistance war against the French in 1954 marked a period of recovery, recovery and gradual economic development. Hanoi was heavily devastated by the war and faced many severe difficulties due to the damage of the war as well as the "Cold War" political situation. At that time, Vietnam had close relations and received significant help from the former Soviet Union and countries in the Soviet bloc. Due to the prolonged war, many parks and gardens in the city were damaged and destroyed.

# THE EARLY STEPS OF THE GREEN SPACE SYSTEM PLANNING (1955)

This period saw a significant increase in the area of green spaces and parks in Hanoi, from 38 ha during the French period to 130 ha<sup>8</sup>. The parks were still relatively simple, with their main purpose being to provide resting, playing, and entertainment spaces for residents.

In the years 1955, when Hanoi established its urban planning map, the term "Green space system" first appeared (Figure 2). The term includes planting trees along streets and developing parks. This was a very important step, showing that Hanoi paid attention to allocating land for green spaces and parks in the process of developing the city. It demonstrated the vision and concern for the environment, landscape and quality of life of residents from the early stages of urban planning work in Vietnam. The planning map showed a large green space surrounding West Lake, as well as another sizable green space in the southwest, connected by a long road, ensuring greenery coverage for all residents.

In 1960, a more detailed master plan for developing the capital city was drawn up with the assistance of Soviet experts to determine the development direction for this important urban area. It marked the launch of long-term plans for Hanoi (Figure 2). Here, the Soviet approach in Hanoi partly inherited and further strengthened the colonial urban planning experiences of the French in the past. The map clearly demonstrated functional zoning, with green spaces and parks being better defined and linked together. Parks and public buildings had all been determined based on this plan.

The two representative projects of this period were Youth Park and Thong Nhat Park. The Thanh Nien Parkway (formerly Co Ngu Road) was the first parkway in Hanoi. Prior to this, it was just a small dirt road crossing West Lake and Truc Bach Lake, built by local fishermen for trade and transportation<sup>9</sup>. After 1957, it became a place for recreation, exchange, and enjoying the beauty of West Lake. During this time, parkway were understood as green- lined roads that improved the quality of life for the people and represented the cultural and historical symbols of the city.

Meanwhile, Thong Nhat Park covering 50 hectares was considered the first park in Vietnam, modeled after the "cultural, recreational" parks of the Soviet Union. From a vast garbage dump and swampy lakes where water would accumulate, the area has become a wonderful space for the capital's residents to relax and recreate. The shift from providing "resting, playing, and entertainment spaces for residents" to more ambitious goals like improving quality of life and cultural/recreational functions. The motivations and user needs driving the creation of green spaces likely evolved over time, reflecting changes in Hanoi's socioeconomic conditions and demographics.

Specifically, Youth Park played an important role in developing Hanoi's first linear park concept by transforming a small dirt road. Meanwhile, Thong Nhat Park demonstrated how large degraded areas could be repurposed into major green spaces mimicking models from the Soviet Union, providing venues for culture, recreation and improvement of living standards. These projects reflected an evolving vision of urban green space planning and management in Hanoi during this period.

### LENINGRAD PLAN (1974)

After national reunification, the development of Hanoi capital city was implemented at a faster pace. In the period of 1966-1984, urban planning and construction of Hanoi's green space system made significant progress. The land area for greenery reached 140 hectares, an increase of 20 hectares compared to the previous period.

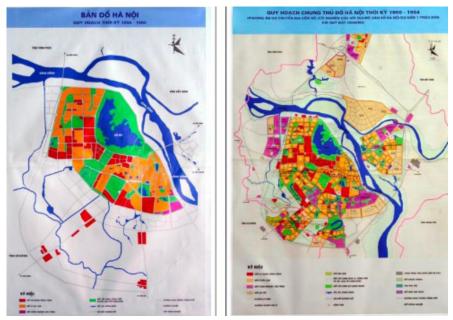


Fig. 2. Master plan of Hanoi in 1955 (right) and Master plan of Hanoi in 1960 (left)

Parks were also expanded and upgraded during this period, notably Thu Le Park (1976) constructed with an area of 29 hectares. This park took advantage of diverse terrain, with a harmonious combination of greenery and water to create a beautiful landscape. However, the architectural and landscape designs of parks were still relatively simple and unable to demonstrate artistic diversity.

During this time, the development of large-scale housing projects in Hanoi in the "microrayon" model, taking inspiration from the Soviet principles of urban planning . These apartment blocks completely replaced traditional residential areas and natural open green spaces. In 1974, a research group from the Leningrad Institute for Urban Planning and Research, led by SI Sokolov, proposed a new plan called the "Leningrad Plan". The Soviet planners took inspiration from the 19th century approach of Haussmann to redevelop and expand cities, delineating avenues and streets to create parks and squares, and establishing urban focal points and perspectives.<sup>10</sup> The new urban center would be built on the south and southwest shores of West Lake, with avenues radiating out from that center, public spaces, high-rise public buildings and pedestrian crossroads. In addition, in the "Leningrad Plan", planners emphasized allocating land for greenery, including green belts organized to surround new construction areas and nature reserves across the Red River (Figure 4). This reflected the idea of a "socialist city" with a balance between urban development and natural spaces.

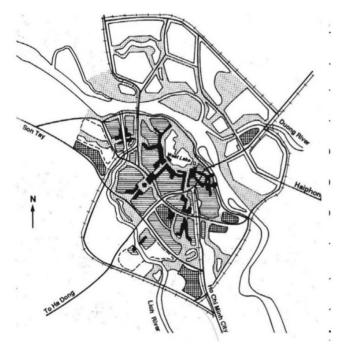


Fig. 3. The plan of the Leningrad

Socialist ideology and French colonial influence shaped the design and layout of green spaces, with a focus on large public areas. Limitations in resources also affected the development of smaller, neighborhood-level green spaces. However, the government prioritized infrastructure development and public institutions before green spaces.<sup>11</sup> Overall, the historical and ideological context influenced the design and focus of green spaces in Vietnam during this period.

Today, in hindsight, it is clear the optimism placed in the plan was not realized: Hanoi did not become the bustling metropolis predicted by planners, at least not within that timeframe.

# CREATING MORE GREEN OPEN SPACE FOR THE LOCAL PEOPLE DURING THE GLOBALIZATION PERIOD (1990- 2011)

Vietnam's transition to a market-oriented economy, driving rapid urbanization in Hanoi. This brought socioeconomic benefits but also exacerbated environmental pressures. As the population grew, demand rose for urban green spaces. Several new parks were developed to serve recreation needs. However, the pace of urban development concurrently reduced forests and natural areas around the city. The period marked both socioeconomic progress and environmental challenges that demonstrated the importance of planning cautiously to properly address development pressures on Hanoi's natural resources and liveability.

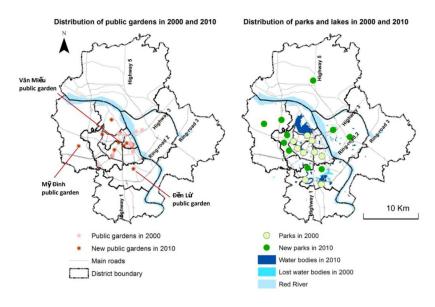


Fig. 4. Evolution of public spaces between 2000 and 2010.

# MASTER PLAN FOR THE CAPITAL CITY OF HANOI UNTIL 2010 (1992)

In the overall planning for the development of the capital city of Hanoi until 2010, the development of the green tree system and open spaces was identified as one of the important objectives. The planning set a target of increasing the public green space area to 6-8m<sup>2</sup> per capita, including various types of spaces such as parks, gardens, playgrounds, and sports fields. In terms of the ratio, the planning envisaged allocating around 15-20% of the total urban area for public green spaces. For the first time since the Soviet teams, several large international architecture and engineering firms have been invited to participate. Bechtel, a major American engineering company, is preparing a feasibility study for this area and the Vietnamese government has invited three renowned international research companies to develop this area. OMA will be responsible for designing the Dong Anh district, SOM the Van Tri lake area, and Nikken Sekkei the Tu Liem area on the left side of West Lake. OMA and SOM are competing in the same area. The two projects have clear similarities due to the mandatory program, but the design approach and functional allocation are very different. SOM, following a logic of steel zoning, divides and reorganizes the landscape according to a clear and well-defined scheme, using water as the urban anesthetic for a new miniature Chicago. While OMA shapes the territory according to the scenarios they propose, balancing the inevitable artificiality and creating favorable conditions for new ecological possibilities. The landscape becomes an integral and inseparable part of the design. The economic crisis that hit the South Asian countries in 1997 dealt a heavy blow to the experimental/glorious revival approach. The American engineering company Bechtel and Daewoo International have implemented a different plan, which turns out to be the merger of the two previous projects, OMA and SOM. The whole thing looks like a 1930s garden city, with a miniature Chicago surrounded by a wedge-shaped, dropshaped island. Despite everything, the plan was approved and incorporated into the future urban development of the city. <sup>12</sup>

### MASTER PLAN FOR THE CAPITAL CITY OF HANOI UNTIL 2010 (1998)

The plan sets out the goal of increasing the area and quality of urban green spaces, while building an interconnected green network from the city center to the peripheral areas. In terms of planning standards and targets, the master plan sets a target of achieving a standard of 10m<sup>2</sup> of urban green space per resident, along with a green canopy coverage target of up to 30% of the urban area. The plan also outlines the distribution and structure of greenery across the city. Specifically, the urban green space system will be evenly distributed, with a greater concentration in the city center and residential areas. In terms of structure, there will be a combination of broadleaf trees, shrubs, flowering plants, and climbing plants, in order to create a diverse and harmonious landscape. In the Hanoi Master Plan 1998, the task of increasing the area of parks, green spaces, and improving the water quality of rivers and lakes was set out. The Red River is considered an important feature of the city's landscape, and the lakes and rivers are preserved to become recreational and leisure areas. Importantly, the West Lake area, first mentioned in the Hébrard Plan in 1926, has once again been identified as a tourism and leisure center. West Lake is an open space of great value in Hanoi with an area of 500 hectares and a perimeter of 16 km. The green space system will be improved by including existing parks, flower gardens, green areas connected to parks in new urban areas, and green lines along the city's rivers. However, this Plan has addressed the uneven distribution of vegetation and open spaces in different parts of the city, particularly the lack of green areas in the inner city districts.

### MASTER PLAN FOR THE CAPITAL CITY OF HANOI UNTIL 2030, WITH A VISION TO 2050 (2011)

Although the 1998 master plan was issued by the government, but during the 2000-2010 period, the number and area of parks and public gardens increased significantly, but mostly in the suburbs, not meeting the needs of the Hanoi inner city. This indicates a significant gap between the provision of public spaces in the suburbs and the inner city, requiring comprehensive solutions to improve the situation (Fig 14). The area of green space system in Hanoi at this time was 320 ha<sup>13</sup>. The green space per person ratio within Hanoi's inner urban districts remains below the benchmark of 2 square meters.

Given the current insufficient green coverage, action is needed. This plan outlines the clearest objectives and implementation strategies for developing the green space system compared to any plans since the 1955s. That is plan in 2011 Prime Minister approving the Master Plan for the Construction of the Capital Hanoi until 2030 and a Vision to 2050 is an important legal document related to the master planning of Hanoi was approved (Fig 15). This is a major effort to address the shortage of green spaces in the inner city, meeting the needs of the people. Hanoi

has set a target of 11-13 square meters of urban public green space per person. The city's green space system is envisioned to include green corridors, green belts along the Nhue River, green wedges, and urban parks, as well as rural areas, river and lake systems, mountains, natural forests, and agricultural lands. The master planning covers the public green space network, comprising parks, flower gardens, and streetside trees, as well as the broader system of parks, gardens, and water bodies like rivers and lakes.

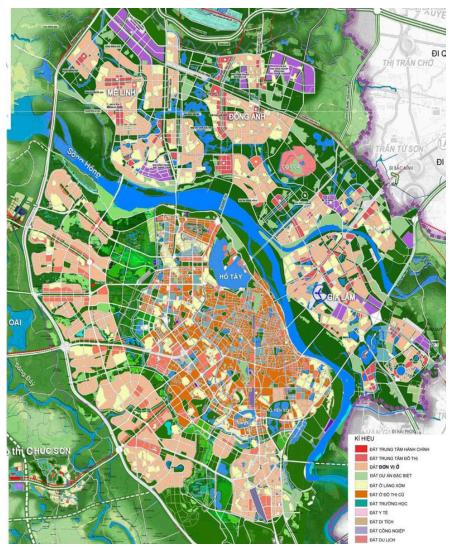


Fig. 5. The Master Plan for the Construction of the Capital Hanoi was approved in 2011.

The key objectives are to develop Hanoi into a green, clean city that addresses pollution in the inner urban areas by 2030, maintain and expand the existing green infrastructure by leveraging its advantages and potential, meet government requirements for the construction, management, and utilization of green and water systems, and provide a foundation for new green investment projects as well as the upgrading and preservation of the current green and aquatic resources. This comprehensive plan aims to concretely implement the green space planning vision outlined in Hanoi's overall 2030 Master Plan, with the goal of enhancing the living environment and quality of life for the city's residents.

# CONCLUSIONS

During the past 70 years, Hanoi has been subject to a series of innovative urban green space plans. Some of their key features have been carried forward to the present day in modified form. Others have been abandoned. Taken as a group, the plans lack intellectual rigour.

The history of urban green space system planning in Hanoi reveals a complex trajectory that has been shaped by various influences over time. During the French colonial period (1886-1954), the concept of "public parks" and symmetrical planning principles were introduced, leading to the development of iconic spaces like the Paul Bert Park and the Botanical Garden. This laid the foundation for a greener urban landscape in Hanoi.

The Soviet-influenced planning period (1954-1991) focused on overall land use, space, and physical objects, with a greater emphasis on the functional organization of green spaces. However, the actual implementation of these plans faced challenges due to the realities of population growth and land use conflicts.

The globalization period (1991-2011) saw a renewed emphasis on increasing the quantity and accessibility of public green spaces for the local population. However, challenges persisted regarding land use policies, diverse stakeholder perceptions, and the lack of a long-term strategic vision.

Throughout this trajectory, the key aims of urban green space system planning in Hanoi have been to improve the urban environment quality and create green and leisure spaces for residents. However, the realization of these goals has been hindered by issues such as urban land use policies, diverse perceptions, and the absence of a long- term vision.

The case of Hanoi highlights the importance of integrating international models and experiences with local realities and challenges. Effective urban green space planning requires a holistic approach that addresses land use regulations, public engagement, and the development of a shared vision for a sustainable and livable city. As Hanoi continues to evolve, the lessons from its planning history can inform future strategies to create a balanced and resilient urban green space system that meets the needs of its growing population.

#### REFERENCES

Anh, Tran. Looking at the urban planning map of Hanoi, I reflect on solutions to heal the 'wounds' of the city, 2021. Accessed 05 29, 2024. https://hanoi.land/nhin-ban-do-quy-hoach-ha-noi-nghi-ve-giai-phap-chua-lanh-vet- thuong-thanh-pho/.

Anh, Tran . "Consulting with international experts for the urban planning of Hanoi." Vietnamese Architecture Magazine, no.9, 2009, 20-22.

Anh, Nguyen. Landscape Architecture Theory. Hanoi : Construction Publishing House , 2018.

Anderle, Mariano. Innovations in Land, Water and Energy for Vietnam's Sustainable Development. UNIPA Springer Series, 2021, 169-195.

Bao, Tran Quoc. Architecture and Urban Planning of Hanoi during the French Colonial Period. Construction Publishing House, 2011.

Clément, Pierre and Nathalie Lancret. *Hanoi: The Cycle of Transformations in Architectural and Urban Forms*. Ha Noi: Science and Technology Publishing House , 2010.

Dam, Nguyen Khac. 1999. The Citadels, Wards, and People of Hanoi throughout History. Ha Noi: Culture and Information Publishing House.

Hung, Tran and Nguyen Quoc Thong. 1995. Thang Long - Hanoi: Ten Centuries of Urbanization. Ha Noi: Construction Publishing House.

Huy, Quynh Ngo. *History of Vietnamese Architecture*. Ha Noi: Culture and Information Publishing House, 1998. Khiem, Tran Duy. "Development of urban green spaces in Vietnam: from garden design to sustainable land-scape architecture." PhD diss., University of Western Australia, 2023.

Luu, Duc Hai. 60 Years Since the Liberation of the Capital - Achievements, Opportunities, and Challenges. Ho Chi Minh: National Political Publishing House – Truth, 2015.

Logan, William Stewart and Nguyen Thua Hy. Hanoi - A Biography of a City. Ha Noi: Hanoi Publishing House, 2023.

Nguyen, Thị Hoang Lien. "Influences of Cultures on Open Space Planning for Hanoi City of Vietnam." VNU Journal of Science: Earth and Environmental Sciences 30, no. 2 (2014),15-30

Minh, Vu. Revealing the Urban Plans of Hanoi over the Past 60 Years, 2014. Accessed 05 29, 2024. https:// cafef.vn/chinh-sach-quy-hoach/bat-mi-nhung-quy-hoach-ha-noi-60-nam-qua-2014091914110484010.chn. Pham, T. T. H., & Labbé, D. "Spatial Logic and the Distribution of Open and Green Public Spaces in Hanoi:." *Urban Policy and Research*, 2018,168-185.

Thuy, N.T.T and Ton Anh Hong. Vietnamese Landscape Architecture: Tradition and Modernity. Construction Publishing House, 2023.

Tien, Nguyen Ngoc. Little-known stories about Hanoi's parks and gardens, 2024, p6.

### ACKNOWLEDGEMENTS

First and foremost, we would like to express ourr deepest gratitude for the invaluable guidance and assistance of Dr. Dinh, The Anh and Dr. Vu, Hoai Duc. They have generously dedicated their time and passion to mentoring and encouraging us throughout the course of this research project. Their insightful feedback, direction, and extensive experience have been an incredibly valuable source of motivation that has enabled us to complete this work. We would also like to sincerely thank the libraries - the Library of the University of Architecture, the Library of the University of Construction, the Academy of Science, and the National Library - for providing us with access to and the opportunity to utilize the precious materials and information resources that have been essential for our research. Finally, we would like to extend our heartfelt appreciation to our university School of Interdisciplinary Sciences and Arts, Vietnam National University, Hanoi, Vietnam, the faculty, and all the staff members who have supported and facilitated our learning and research endeavors here.

#### DISCLOSURE STATEMENT

No potential conflict of interest was reported by the author.

#### NOTES ON CONTRIBUTOR(S)

**Dr. Ren, Xiaogeng,** female, born in 1985. Lecturer of School of Interdisciplinary Sciences and Arts, Vietnam National University, Hanoi, Vietnam. Her research area is Urban Planning History & Theory and Heritage Conversation **Le, Thi Hoa Ly**, female, born in 2004. Student of School of Interdisciplinary Sciences and Arts, Vietnam National University, Hanoi, Vietnam. Her major is Smart and Sustainable Urban Management.

**Doan, Thu Trang**, female, born in 2004. Student of School of Interdisciplinary Sciences and Arts, Vietnam National University, Hanoi, Vietnam. Her major is Smart and Sustainable Urban Management.

#### ENDNOTE

6. United Nations Development Programme (UNDP). Urban Green Spaces: A Brief for Action, 2021.

7. Scientific and Technical Solutions for the Protection and Renovation of the Green Space-Water System in Hanoi City

8. Tran Hung and Pham Quoc Thong. Thang Long - Hanoi: Ten Centuries of Urbanization, 1995.

9. Cleary, Paul. Hanoi: Between Two Empires. New York: Verso, 2003.

10. Nguyen Thi Thanh Thuy, Ton Anh Hong. Vietnamese Landscape Architecture: Tradition and Modernity, 2023

11. Nguyen Thi Hoang Lien. Influences of Cultures on Open Space Planning for Hanoi City of Vietnam, 2014, 15- 30.

12. Nguyen Thi Hoang Lien. Influences of Cultures on Open Space Planning for Hanoi City of Vietnam, 2014, 15- 30

13. Hanoi Single Member Co. Ltd of Parks and Trees (2014), Greenery development strategy for Hanoi until 2020

14. Tien, N. N. From ancient Co Ngu to current Thanh Nien street. 2018, August 4.

15. Aimini, M., Giang, N.D., Minh, D.B. The Last 150 Years of Urban Mutations in Hanoi: An Investigation About Form and Morphology of the Vietnam's Capital City, (2021), 184 – 185

16. Vann, Michael G. "Building Colonial Whiteness on the Red River: Race, Power, and Urbanism in Paul Doumer's Hanoi, 1897-1902." *Historical Reflections / Réflexions Historiques* 33, no. 2 (2007): 277–304.

17. Mariano Anderle. "Innovations in Land, Water and Energy for Vietnam's Sustainable Development", 2017, 188.

18. Hanoi Single Member Co. Ltd of Parks and Trees (2014), Greenery development strategy for Hanoi until 2020

### IMAGE SOURCES

Figure 1 Archives Center, French Architecture Institute, Paris

Figure 2 Vietnam Institute for Urban and Rural Planning

Figure 3 Vietnam Institute for Urban and Rural Planning

Figure 4 Aimini, M., Giang, N.D., Minh, D.B. (2021). The Last 150 Years of Urban Mutations in Hanoi: An Investigation About Form and Morphology of the Vietnam's Capital City. 185

Figure 5 Pham, T. T. H., & Labbé, D. (2018). Spatial Logic and the Distribution of Open and Green Public Spaces in Hanoi: Planning in a Dense and Rapidly Changing City. Urban Policy and Research, 36(2), 168–185.

Figure 6 Hanoi Institute of Urban Planning and Construction