A STUDY ON THE ARCHITECTURAL PLANNING OF THE EARLY NGUYEN DYNASTY IMPERIAL MAUSOLEUMS (1802-1848) IN HUE, VIETNAM

By
Mr. Hung Ngoc VO

A Thesis Submitted in Partial Fulfillment of the Requirements
for Doctor of Philosophy HISTORY OF ARCHITECTURE
Department of Architecture and Related Arts
Silpakorn University
Academic Year 2025
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โดย
Mr.Hung Ngoc Vo

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By	Mr. Hung Ngoc VO
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Advisor	Associate Professor Chotima Chaturawong, Ph.D.
Co advisor	Le Vinh An, Ph.D.

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Mr. Hung Ngoc VO : A Study on the Architectural Planning of the Early Nguyen Dynasty Imperial Mausoleums (1802-1848) in Hue, Vietnam Thesis advisor : Associate Professor Chotima Chaturawong, Ph.D.

This thesis examines the imperial mausoleums of the early Nguyen dynasty (1802–1848) in Hue, with a particular focus on the mausoleums of Emperors Gia Long, Minh Mang, and Thieu Tri. Constructed sequentially between 1814 and 1820, 1840 and 1843, and 1848, these monuments mark the formative stage in the consolidation of a distinctive typology of royal funerary architecture in nineteenth-century Vietnam. It argues that these mausoleums transcend the domains of technical virtuosity and courtly symbolism, instead constituting a coherent cultural system in which architectural form, spatial configuration, and landscape composition converge to embody cosmological, philosophical, and political ideals.

To substantiate this argument, the study integrates typological and spatial analysis with archival materials, historical cartography, and field surveys conducted in the measured environment. The analysis reveals a dual framework of design principles. At the macrocosmic level, orientation and spatial setting are governed by geomantic doctrines, Feng Shui prescriptions, and the sacralization of natural landscapes, situating each mausoleum within a cosmic order inscribed in its environment. At the microcosmic level, architectural organization reflects indigenous Vietnamese planning traditions, notably a rod-based measurement system, the axial arrangement of components, and the tripartite division into tomb, worship, and stele precincts. Together, these principles generate a dialectical balance between cosmic determinism and human agency, embedding the emperor's resting place simultaneously within the natural and metaphysical universes.

While unified by this conceptual framework, the mausoleums exhibit significant variations: Gia Long's mausoleum privileges organic harmony with the natural terrain; Minh Mang's mausoleum enacts Confucian ideals of hierarchy and axial order; and Thieu Tri's mausoleum represents a transitional phase of selective continuity and adaptation. The recurrent triad of tomb, temple, and stele emerges as both an architectural grammar and a symbolic schema, reinforcing the cyclical

relationship between body, soul, and memory.

The thesis advances theoretical discourse by situating the Nguyen mausoleums as cultural texts that function simultaneously as funerary monuments, philosophical exegeses, and political manifestos. In doing so, it contributes a rigorous typological framework for comparative inquiry across the East Asian cultural sphere, a model for integrating cosmological orientation with localized construction logic, and a foundation for conservation theory that emphasizes axial planning, spatial hierarchy, and landscape integration. Beyond architectural history, the findings hold interdisciplinary relevance for cultural studies, anthropology, and heritage management, offering insights for urban planning, tourism development, and policymaking. By positioning Nguyen funerary architecture within broader debates on cosmology, heritage, and identity, the study enriches both scholarly understanding and practical approaches to safeguarding Vietnam's cultural heritage.

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Chapter 1

Introduction

1.1 Research Background

UNESCO recognized the Complex of Hue Monuments as Vietnam's first World Cultural Heritage in December 1993 (Phan, 2005, p. 27). It includes the Imperial City of Hue and its related monuments, such as temples, pagodas, and the mausoleum of the seven Nguyen emperors (Figure 2) (Phan, 2005, p. 37). Hue is located in central Vietnam and was the capital of the Nguyen Dynasty, the last monarchy in Vietnamese history (Figure 1). The Dynasty was established when Emperor Gia Long ascended the throne in 1802 and ended when Emperor Bao Dai abdicated in 1945. The Nguyen Dynasty lasted for 143 years, consisted of thirteen emperors, and could be divided into two main periods: the first (1802–1858) and the second (1858–1945) (Tran, 2003, pp. 401–564).

The mausoleums of the Nguyen Emperors are located in the mountains southwest of Hue City, upstream of the Huong River, and were built and completed continuously during the Nguyen Dynasty from 1802 to 1945. Although the Nguyen Dynasty was the last feudal monarchy of Vietnam, the mausoleums were still used in the old way to bury their Emperors. The Nguyen Dynasty had thirteen emperors, but only seven mausoleums were built for economic and political reasons. Four mausoleums were built in the early period when Vietnam was independent, while the other three were built during the second period when Vietnam started under French domination. These seven mausoleums belonged to the first to the fifth, the ninth, and twelfth generations of the Nguyen emperors, namely Thien Tho Lang (1814-1820) of Emperor Gia Long, Hieu Lang (1840-1843) of Emperor Minh Mang; Xuong Lang (1848) by Emperor Thieu Tri; Khiem Lang (1864-1873) of Emperor Tu Duc; An Lang

(1899-1906) by Emperor Duc Duc; Tu Lang (1907-1917) by Emperor Dong Khanh; and Ung Lang (1920-1931) by Emperor Khai Dinh.



Figure 1: Locations of the ancient capital of Hue
Sources: https://bandovn.vn/vi/page/mau-ban-do-hanh-chinh-nuoc-cong-hoa-xa-hoi-chu-nghia-viet-nam-181?AspxAutoDetectCookieSupport=1. Accessed on February 22, 2025)

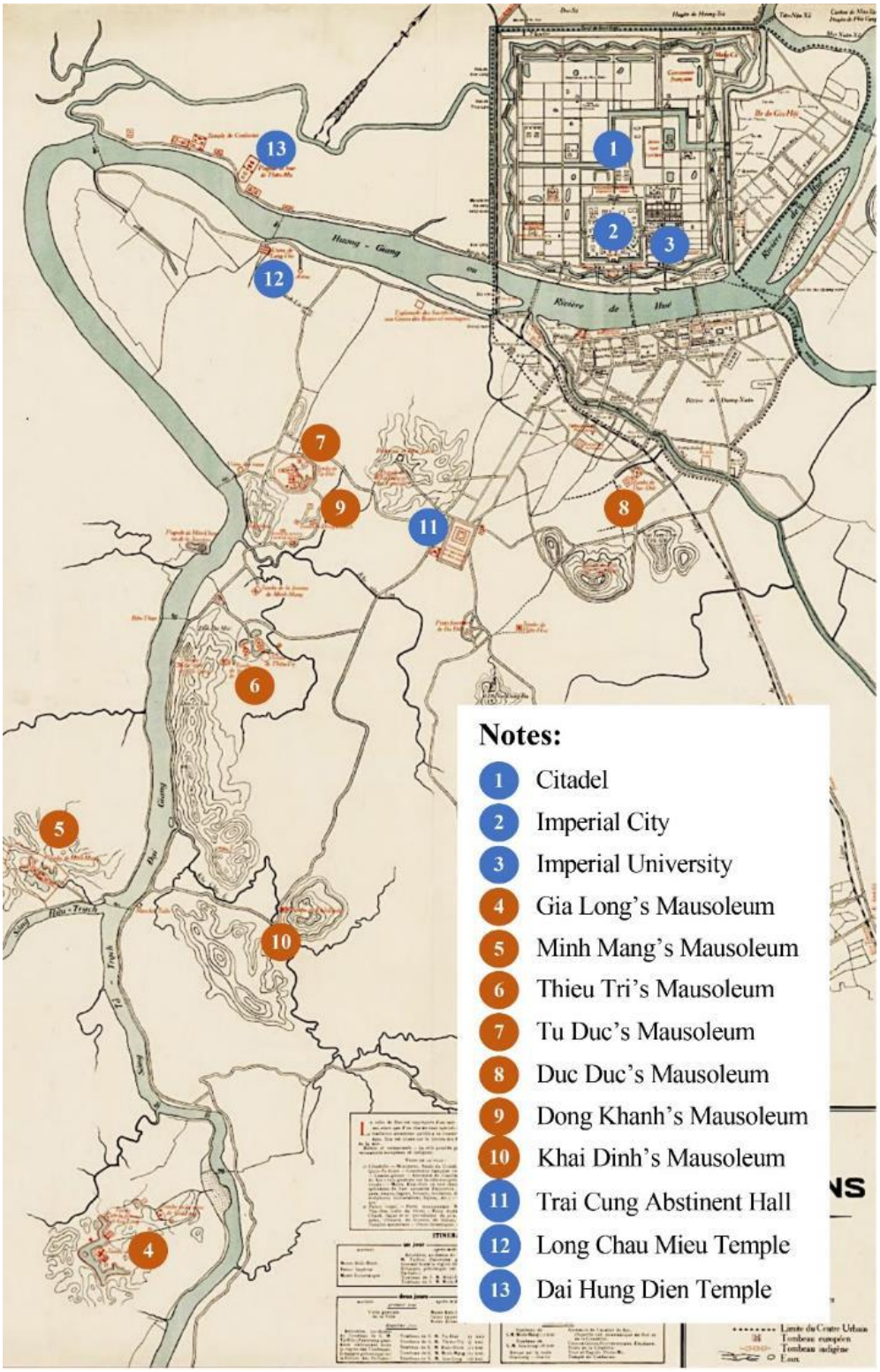


Figure 2: Locations of monuments in Hue
Source: National Library of France, Department of Cartography and Planning, GE C-4798, 1930.
https:// gallica.bnf.fr/ark:/12148/btv1b530647505.r=Hu%C3%AA?rk=321890;0.
Accessed on October 8, 2025 & Author's modifications

It can be said that the mausoleums hold significant global value for both Vietnam and the international community, attracting numerous domestic and international tourists and researchers for visits and study each year.

The mausoleums embody the spiritual traditions of East Asian cultures as a whole and specifically reflect the beliefs of the Vietnamese people. They symbolize the peace, prosperity, and development of the Vietnamese nation. These mausoleums are considered the second palace of the emperors (Phan, 2014, p. 11), serving as venues for spiritual activities and national rituals, and they represent the power of the Emperors and the Nguyen Dynasty. This cultural heritage has been passed down to the people of Hue and the global community, earning recognition as a World Cultural Heritage site by UNESCO.

According to the traditional concept of East Asians, after death, humans will live another life in heaven. They believe in the potential for reincarnation, where individuals can be reborn anew. As a result, the Kings and Emperors of the Vietnamese feudal dynasties consistently strategized to construct their mausoleums immediately upon ascending the throne, establishing these sites for the interment of their bodies and the veneration of their souls. Notable examples include the Mausoleum of the Ngo Dynasty (939-965) (It includes the temple and mausoleum of King Ngo Quyen in Duong Lam Village, Son Tay District, Hanoi City) (Figure 3), the Tran Dynasty (1225-1413) (Figures 4,5), later the Le Dynasty (1428-1527) (Figure 6), and the Nguyen Dynasty (1802-1945).




Figure 3: The temple of King Ngo Quyen (left) and the tomb of King Ngo Quyen (right)
Source: Bui Thuy Dao Nguyen, 2013



Figure 4: The An Sinh temple of the Tran Dynasty's Kings
Source: https://dantri.com.vn/du-lich/chiem nguong-ngoi-den-600-nam-tuoi-tho-8-vi-vua-trieu-tran-20190518104515852.htm. Accessed on September 9, 2025



Figure 5: Shrine of the Tran Dynasty's Kings in Thai Binh province
Source: https://thanhnien.vn/nhieu-su-kien-dac-biet-tai-le-hoi-den-tran-thai-binh-1851540429.htm. Accessed on September 9, 2025



Figure 6: The tomb of the Le Dynasty's Kings
Source: Photo by Author (2020)

The mausoleum reflects the Vietnamese people's practice of ancestor worship. This belief system forges a 'bond' connecting living with the deceased and bridging the realms of the tangible and the spiritual (Le, 2013). For the Vietnamese, death is not the ultimate conclusion, and their ancestors, those beloved ones who have passed away, persistently remain a part of their lives. Although ancestor worship in Vietnam is primarily based on Confucian rituals, it exhibits notable influences from Buddhism and Taoism. The practice is intricately linked with the concept of “Hieu” (filial piety), forming a distinctive connection to fundamental Confucian ideology. Ancestor worship was also one of the essential activities that paid particular attention to the Nguyen Dynasty. The construction of temples and mausoleums for ancestors of the Nguyen Dynasty and the organization of rituals have become typical features of imperial culture. Following the tradition of ancestor worship of the Vietnamese and Chinese Confucianism, the Nguyen Dynasty established ancestor temples and burial sites in the ancient capital of Hue and temples at mausoleums in their homeland in Thanh Hoa Province (Huynh, 2012). In the Imperial City of Hue, four ancestral temples are arranged symmetrically to the left and right of the central axis, called the spiritual axis of Hue Imperial City. They are located in the front-left and right of the Forbidden City and arranged symmetrically on the left and right-hand sides of the Thai Hoa Dien main palace (Figure 7). A Dynasty called “Thuong Trieu Chinh Dien,” where court meetings took place and essential royal ceremonies were held (Hoang, 2003). The Nguyen Dynasty places significant importance on funerals and ancestral worship, considering them as expressions of filial piety by descendants towards their ancestors (The National Department of History of Nguyen Dynasty, 2002, p. 823).

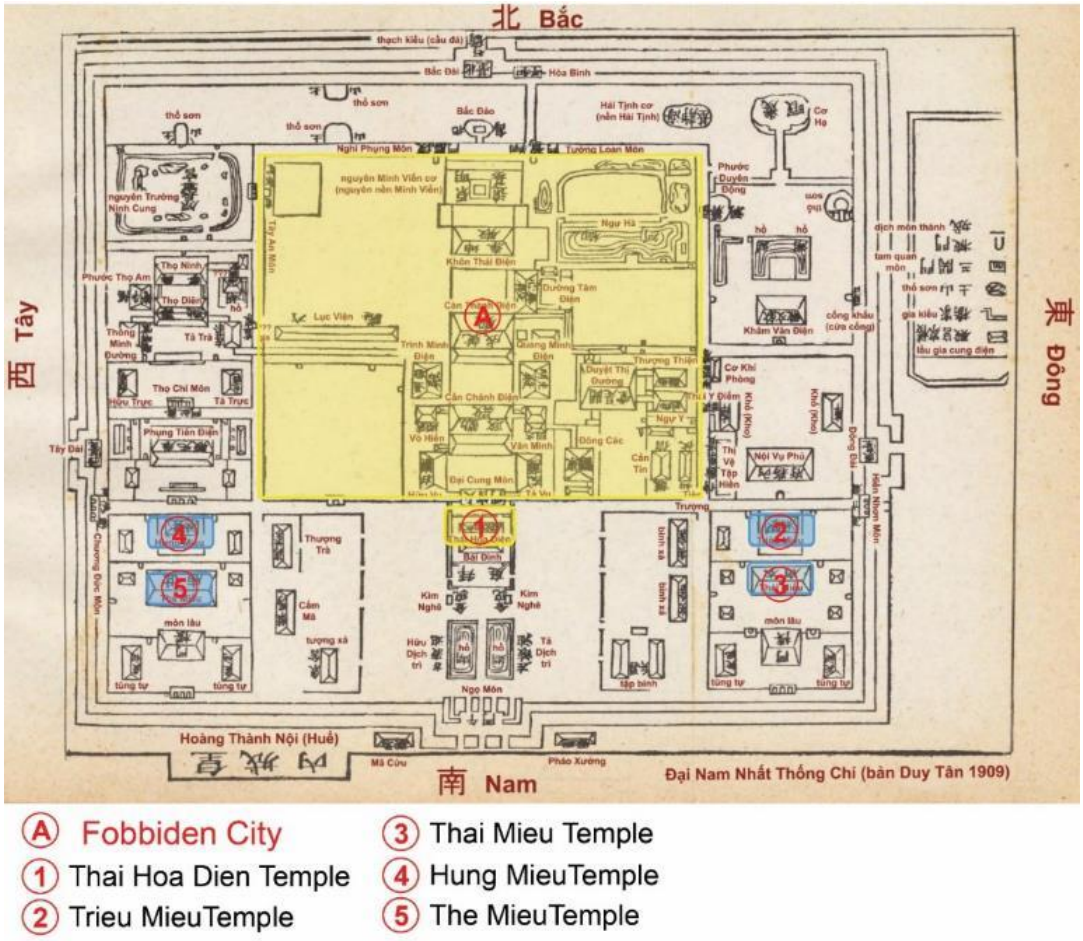


Figure 7: Locations of Trieu Mieu, Thai Mieu, The Mieu, and Hung Mieu temples in the Hue Imperial City

Source: Modified by the author from Dai Nam Nhat Thong Chi, Duy Tan Period, 1909

The mausoleums of the Nguyen Dynasty in Hue were designed based on the principles of geographical Feng Shui in ancient times. The typical structure of a mausoleum often includes three main parts: A tomb (grave) known as the "Lang" (body burial), a Temple known as the "Tam Dien" (worshipping the soul), and the Steel Hall known as the "Bi Dinh" (record of the emperor's background and merit). These three main parts are planned to be built on ample land, in harmony with nature, including architectural buildings, mountains, rivers, lakes, trees, roads, and bridges. They were designed under the rigorous architectural regulations governing the imperial mausoleum 'Vien Tam,' a standard upheld by the Nguyen Dynasty. Reflecting imperial architectural

principles, mausoleum architecture incorporates various materials, including stone floors, wooden structures, brick walls, and tiled roofs.

Their interiors and exteriors are exquisitely decorated with high-class and costly sustainable construction materials, arranged symmetrically across each area's central axis to show the majesty of the Mausoleum and the power of the emperor. The spatial structure of both Imperial City and Mausoleum areas is also associated with religious factors, such as the "Five Points" (Center, East, West, South, and North) implied the "Five Elements" (Iron, Wood, Water, Fire, and Earth) and expressed by the "Five Colors" (Yellow, White, Blue, Red, and Black). They contain philosophical meanings according to ancient China's geographical Feng Shui principle (Huynh, 2011). The lands chosen for constructing Mausoleum areas can predict a Dynasty or nation's fortunes, prosperity, or decline (Mai, 1993, pp. 83–84).

The Imperial City and Mausoleum areas are closely correlated; the Imperial City is the area devoted to royal, court, and cabinet activities, while the Mausoleum is considered the second palace dedicated to the emperor after death. Both are divided into two parts: the front part of the Imperial City includes areas devoted to political power and worship of royal ancestors without burial activities (Phan, 2005, p. 39). The back part is where the emperor and the royal family live and conduct their activities. The mausoleum's front part is where spiritual rituals are performed, including the “Temple,” and the back part is the “Tomb,” which is the burial place and has no political activities (Phan, 2014, p. 11).

Furthermore, the Emperor's Mausoleums in Hue probably reflect Vietnam's political and social situation during the Nguyen Dynasty and Southeast Asia from the nineteenth to the twentieth centuries. The Nguyen Dynasty employed Confucianism as its orthodox political system to unify the country and centralize government and social order. The Nguyen Dynasty governed the country mainly based on the foundation of "Duc Tri" virtuous rule

and "Nhan Tri" human rule (Do, 2005). However, Confucianism only existed for a certain period of history. Later, it became increasingly outdated and no longer qualified as the ideological foundation of the Nguyen Dynasty in organizing and operating its social and political system. Therefore, the political and ethnic ideology of the Nguyen Dynasty gradually returned to doctrines of Taoism, the thought of Zen Buddhism, and Buddhism, which had been in place since the Nguyen Lords (Phan, 1986). The mausoleum reflects the essence of the socio-political authority wielded by the Nguyen emperors. Consequently, it is often grand and majestic in scale, befitting the stature of a formidable Dynasty. This design reaffirms the legitimacy and elevated status of the Nguyen family, diligently established over centuries, and serves as a testament to their resilience. This significance became especially pronounced after the destruction of the Tomb of the Nguyen Lords during the Tay Son Dynasty (The National Department of History of Nguyen Dynasty, 2002, p. 466). This is also an inevitable trend of a feudal Dynasty after the restoration of the family inheritance. Furthermore, the act of demolishing the mausoleums of rival clans is accompanied by the restoration of their own ancestral mausoleums and lineages.

Compared to other countries in Southeast Asia, the construction of the grand ancestral mausoleum asserted the strength and standing of the Nguyen Dynasty, signifying the political landscape and the independence and autonomy of Vietnamese power in Southeast Asia during the nineteenth to the twentieth centuries. This was particularly notable at a time when many neighboring nations were subject to European invasions and dominion (Pham, 2005, pp. 223–224).

Over time, natural disasters and wars, most of the heritage buildings and infrastructure of the Emperor's Mausoleums in Hue were largely collapsed, damaged, and seriously degraded. Since being recognized by UNESCO as a World Cultural Heritage, with the support of the international community and

the efforts of the Vietnamese government, most of the Mausoleums have been restored and preserved. However, many collapsed buildings still have yet to be reconstructed.

Although previous studies have examined the Complex of Hue Monuments, they have primarily focused on the history of formation, socio-cultural contexts, and traditional spiritual activities related to the Nguyen Dynasty in Hue. They provided information on the overall layout and wooden structure of the temple area in the mausoleum. However, this knowledge and information have not been researched, analyzed, systematized, or fully explained. Most essential issues in architectural studies are often concerned with planning and design principles, architectural proportions, and construction techniques. Still, those issues have yet to be clearly defined in previous studies.

Therefore, this thesis aims to study the Mausoleum of the Nguyen Emperors, dating back to the nineteenth century, in which special attention is paid to the tombs of the early Nguyen Dynasty emperors (1802-1848), namely those of Emperor Gia Long, Emperor Minh Mang, and Emperor Thieu Tri, as case studies due to their association with Vietnamese beliefs, culture, history, society, and politics of the early nineteenth century. Among the thirteen Emperors of the Nguyen Dynasty, the reign of Emperor Minh Mang is considered the most famous and prosperous period economically, politically, and militarily in contemporary Vietnamese history.

1.2 Significance of the Study

This study will provide a new and comprehensive development of the imperial mausoleum of the early Nguyen Dynasty in Hue, complementing existing research information and specialized knowledge in this field of study. It will comprehensively conclude historical knowledge related to architectural buildings by verifying historical information, survey results, and analyzing the design methods, construction techniques, and the process of forming heritage

values. It will also provide more in-depth knowledge about the mausoleum architectural types of the emperors and contribute to improving the quality of monument conservation and restoration projects.

Furthermore, the mausoleums of the three early emperors were built during the golden period of the Nguyễn Dynasty, when Vietnam was an independent, unified, and prosperous country in Southeast Asia. The study on this Mausoleum will help to explain the logic of the philosophical trilogy, including the human view, world view, and cosmology of Nguyen's Emperors in Vietnam.

1.3 Research Purposes

With the background of the study mentioned above, this study topic is implemented with the following specific purposes:

To examine the imperial mausoleums of the Nguyen Dynasty dating from the early stages of the Nguyen Dynasty (1802-1848), with particular attention paid to the early three mausoleums of the Nguyen emperors, namely those of Emperor Gia Long, Emperor Minh Mang, and Emperor Thieu Tri**.**

To understand the principles of site planning design, compare them with historical documents from the early period of the Nguyen Dynasty and traditional concepts that have been used for land selection and the layout of construction items within the mausoleum areas.

To search for design units of architectural heritage buildings and architectural proportion systems.

To analyze the similarities and differences among mausoleum heritage buildings, along with evolving site planning principles and design methods during the early Nguyen period.

1.4 Scope of the Study

Although there are seven Imperial Mausoleums of the Nguyen Dynasty in Hue, this thesis primarily focuses on the mausoleums of Emperor Gia Long, Emperor Minh Mang, and Emperor Thieu Tri, the first, second, and third emperors of the Nguyen Dynasty. The heritage buildings from these reigns have endured to the present day. These mausoleum areas have been recognized as one of the essential components of the World Cultural Heritage and possibly represent the remaining mausoleums in Hue. Furthermore, the mausoleums of the three Emperors were built to continue the Vietnamese tradition on a monumental scale and with the perfection of architectural design that previous feudal dynasties in Vietnam had not achieved. It is considered the most important among Hue's complex imperial mausoleums of the Nguyen Dynasty.

1.5 Research Methodology

The research methodology of the study combines a series of methods, such as collecting and researching primary and secondary historical documents of the Nguyen Dynasty; architectural measurement surveying; observing the heritage sites; taking photographs; interviewing researchers, knowledgeable older adults, scholars, and traditional master carpenters; systematizing documents; creating an inventory for each heritage area and architecture; building hypotheses to restructure collapsed heritage buildings; and writing the thesis. Details of the research methodology are as follows:

(a) Collect and explore historical documents

Surveying existing primary and secondary historical sources to understand the historical context of the Nguyen Dynasty and the formation of the Imperial Mausoleums in Hue to determine the time of construction, the restoration process, and architectural acculturation during these periods.

(b) Investigate archaeological data

Collecting and studying archaeological reports of the imperial mausoleums in Hue (carried out by the National History Museum of Vietnam from 2002 to 2014) to learn about the ruins of the building's foundation, construction techniques, and how to reinforce the architectural foundation and transformation process of architecture over time.

(c) Study traditional measurement units of the Nguyen Dynasty

Investigating and studying types of the existing measurement rulers during the Nguyen Dynasty (those are still stored in domestic museums). Surveying research documents relating to Vietnamese traditional measurement units under the Nguyen Dynasty to determine the measurement units used for architectural planning and designing in the imperial mausoleums.

(d) Site measurement survey

Measuring the site plan and location of construction items in the mausoleum area using an optimal measurement machine. Detailed surveys, sketching, hand-measurement, and digital photos of heritage buildings aim to determine architectural size, form, and structure. Making statistics and evaluating the status of remaining buildings to make a list of works to be restored, collecting other measurement data for comparative analysis of master plan principles, the principle of Feng Shui arrangement in mausoleum areas.

A manual measurement method involves sketching a drawing on paper to determine the centerline or central axis of architectural wooden columns using white chalk. This is achieved by using a 7.5m roll ruler to measure the sizes of the building foundation components and wooden frame systems. This method is only valuable for a narrow measuring range and applies to component sizes that machine measuring equipment cannot handle accurately. The permissible error is within the range of 8mm to 10mm.

(e) Photo-record, observe, and compare

Taking photographs of current architectural conditions, directly observing each heritage architecture, and comparing it with the collected historical information. The study uses a digital camera, Canon D100 (DIGIC 5 image processing chip, effective pixel resolution of 18MP), and its method is taking pictures in sequence from overall to details, from exterior to interior, and finally, the structural information and representative decorative elements.

Observation is a method to determine architectural sizes by eye in the field. This method is combined with the historical information matching method to confirm whether the information described in the historical document and the actual building in the area are identical. If these two sources are not identical, it can lead to other research questions; for example, has there been a change due to past renovations? When and how?

There have been many differences between these two sources of information in the process of observation and matching. Historical documents often recorded architectural works immediately after completion, or at least at essential times in Nguyen Dynasty history when these structures were still intact. Wars, natural disasters, and historical events can cause heritage architecture to be damaged and changed. Therefore, architectural changes are necessary to supplement the information in analyzing planning principles and architectural design methods.

(f) Analyze site planning principles and architectural design method

Searching for architectural spacing, technical terms, component names, and traditional design solutions from existing drawings and site investigation results. At the same time, analyzing the three-dimensional aspects of heritage buildings and site plans to understand their architectural proportion systems and the principles used in the mausoleum site plans.

1.6 Thesis Chapters

This thesis consists of eight chapters, references, and appendices, including inventory, 2D drawings of architectural buildings, old photographs, site photographic documents, and drawings of the master site plan of the mausoleums.

Chapter One: Introduction, including background, the significance of the study, purposes, scope, methodology, and definition of terms and key concepts.

Chapter Two: Literature Review, comprising previous studies related to the study. They are grouped into subtopics, namely, Vietnamese royal mausoleums, the history of the Nguyen Dynasty, the ancient capital of Hue, the complex of Hue monuments, conservation and restoration, archaeological report on the mausoleum of Emperor Minh Mang, and measurement data.

Chapter Three: A Short History of the Nguyen Dynasty and Its Spiritual Tradition Influence on Vietnamese Imperial Mausoleum Architecture. This chapter presents an overview of the historical issues associated with the establishment of the Nguyen Dynasty and the Hue Imperial City, as well as the history of the construction of the imperial mausoleums. It also highlights the profound impact of spiritual traditions on the characteristics of the mausoleums, including construction regulations and architectural features specific to the Nguyen Dynasty. This emphasis on spiritual traditions underscores the deep cultural significance of the mausoleums, affirming their unique value through comparisons with those of other dynasties in Vietnam and China.

Chapter Four: This chapter focuses on analyzing the layout and architectural features of the early imperial tombs of the Nguyen Dynasty, specifically the mausoleums of Emperors Gia Long, Minh Mang, and Thieu Tri. Additionally, it highlights the detailed examination of the main architectural components of the tombs, including the main temple, sub-temples,

sub-houses, stele halls, pavilions, main gates, and other supplementary structures.

Chapter Five: This chapter refers to analyzing the site planning of the Nguyen Dynasty mausoleums using measurement units for construction and grid-rod arrangement as the primary analytical method. Each mausoleum's site planning organization follows distinct principles. Specifically, Emperor Gia Long's mausoleum: the principle of the three parallel axes translation, the primary construction unit deployment, and the proportional relation between the components. Emperor Minh Mang's mausoleum features the symmetric principle across the central axis, the Symmetric principle across the axis of Landmark Towers, and the principle of grid-rods advancing equally along the central axis. Emperor Thieu Tri's mausoleum: the principle of the two parallel axes translation, the primary construction unit deployment, and the Grid-rods advance equally along the Central axis. This chapter provides a detailed examination of how these principles influence the architectural and spatial composition of the Nguyen Dynasty mausoleums.

Chapter Six: This chapter presents the study results, focusing on key aspects of the Nguyen Dynasty mausoleums, including the mausoleum’s location, mausoleum axes and direction, and Concepts of the Three-Elemental Constitution that Structure the Mausoleum: the Tomb, the Worship Temple, and the Stele Hall area.

Chapter Seven: Conclusion.

1.7 Definitions of Terms and Key Concepts

Consistent in the use and understanding of the terms and basic concepts used in the thesis, they are clarified in Table 1.

Table 1. List of terms used in place names

No.	Full name			Explanation
	Vietnamese	Chinese	English	
1	Cồn Dã Viên	野園岛	Da Vien Bank	*Con Da Vien Bank* is a small alluvial island located in the middle of the Huong River, in Duc Ward, Hue City, Thua Thien Hue province. It is situated to the right, directly in front of the Hue Citadel.
2	Cồn Yến Thanh (Cồn Hến)	晏青岛	Yen Thanh Bank	*Con Hen Bank* is a small alluvial island in the middle of the Huong Giang River, located in Vy Da Ward, Hue City, Thua Thien Hue province. It is situated to the left, directly in front of the Hue Citadel.
3	Đại Nam	大南	Dai Nam	*Dai Nam* was the official name of the country under the Nguyen Dynasty from 1839 to 1945.
4	Đại Việt	大越	Dai Viet	*Dai Viet* was the official name of the country during the periods 1054–1400 and 1428–1804.
5	Hoàng Thành (Đại Nội)	皇城/ 大内	Imperial City	The second rectangular wall layer inside the citadel encloses the Imperial City. This area was the most significant, serving as the residence of the emperor, the royal family, and the administrative center of the Nguyen Dynasty.
6	Huế		Hue	*Hue* is the capital city of Thua Thien Hue province, Vietnam. It served as the capital of Vietnam during the Tay Son period (1788–

No.	Full name			Explanation
	Vietnamese	Chinese	English	
				1801) and the Nguyen Dynasty (1802–1945). Today, Hue is a center for culture and tourism, specialized healthcare, education, and training, as well as science and technology in the Central, Central Highlands, and the entire country.
7	Kinh Đô	京都	Capital City	The capital city of Vietnam during the Nguyen Dynasty (1802–1945).
8	Kinh Sư	京師	Capital	The *Capital* of Vietnam under the Nguyen Dynasty (1802–1945) is located in today's Thua Thien Hue province. It represents both a geographical and administrative concept.
9	Kinh Thành (Thành Nội)	京城	Citadel	The *Citadel* is the core urban area of the capital city, enclosed by the first layer of walls designed in the 'Vauban' style. It housed the government and military offices of the Nguyen Dynasty, such as departments and institutes, as well as accommodations for mandarins and citizens.
10	Ngã ba Bằng Lãng		Bang Lang Fork	*Bang Lang Junction* (Tuan Junction) is the confluence of two watercourses, Ta Trach and Huu Trach, which merge to form the Huong River.
11	Núi Kim Phụng	金凤山	Kim Phung Mountain	*Kim Phung Mountain*, located in Hai Cat village, Huong Tho commune, Huong Tra district, is approximately 427 meters high and is the highest mountain in Thua Thien Hue province. In the 17th year of Minh Mang's reign

No.	Full name			Explanation
	Vietnamese	Chinese	English	
				(1836), the king had the image of this mountain carved into the Chuong Dinh while casting the Cuu Dinh.
12	Núi Ngự Bình	御屏山	Ngu Binh Mountain	*Ngu Binh Mountain* is a 103-meter-high dirt mountain located on the right bank of the Huong River, between Con Hen Bank and Con Gia Vien Bank, approximately 4 kilometers south of Hue city center. The mountain has a trapezoidal shape with a flat top and is flanked by two smaller mountains, Ta Bat Son and Huu Bat Son.
13	Sông Hương Giang	香江	Huong Giang River	The *Huong Giang River* is the main river of Hue, formed by two tributaries, Huu Trach and Ta Trach. It flows through the center of Hue City, passing in front of Hue Citadel, and then converges with the Bo River at Sinh Confluence before emptying into Tam Giang Lagoon.
14	Thừa Thiên Huế		Thua Thien Hue	*Thua Thien Hue* has been the official name of a province in Vietnam from 1989 to the present.
15	Tử Cấm Thành	紫禁城	Forbidden City	The third square wall layer inside the Imperial City encloses the Forbidden City. It is a top-secreted area used only for the emperors and their family.

Table 2. List of symbols and abbreviations used in the thesis

No.	Symbols/Abbreviations	Meaning
1	B.A.V.H	Bulletin des Amis du Vieux Hue
2	DNNTC	Dai Nam Nhat Thong Chi
3	DNTL	Dai Nam Thuc Luc
4	GIS	Geographic Information System
5	GPS	Global Position System
6	HMCC	Hue Monuments Conservation Center
7	Kham Dinh	Kham Dinh Dai Nam Hoi Dien Su Le
8	LC	Lunar calendar
9	QĐ-BVHTT	Decision - Ministry of Culture and Sports
10	SC	Solar calendar
11	Toan Thu	Dai Viet Su Ki Toan Thu

มหาวิทยาลัยศิลปากร

Chapter 2

Literature Reviews

Previous studies related to the subject can be divided into six principal areas, namely, Vietnamese royal mausoleums, the history of the Nguyen Dynasty, the ancient capital of Hue and the complex of Hue monuments, conservation and restoration, archaeological reports on the mausoleums, as well as measurement data. Vietnamese mausoleums have been documented in both Vietnamese and English sources. Local sources in Vietnamese are in the form of books and journals. Foreign sources, on the other hand, are typically master's theses and international cooperation projects on restoring architectural items in the mausoleum of the Nguyen Dynasty in Hue.

2.1 Vietnamese Royal Mausoleums

2.1.1 Vietnamese Authors

Influential Vietnamese scholars of royal mausoleums include Thai Van Kiem, Mai Khac Ung, Phan Thuan An, and Phan Thanh Hai.

a) The book "Co Do Hue: Lich Su – Co Tich - Thang Canh" (Hue Ancient Capital: History - Legends - Scenic Sites) (Thai**,** 1960**)**

The book by Thai Van Kiem explores the fundamental characteristics of mausoleum layouts, delving into the construction history, architectural scales, and design features of seven existing mausoleums. Additionally, it introduces the concept of human philosophy underlying the construction of imperial mausoleums during the Nguyen Dynasty. These mausoleums are distinguished by their mystical beauty and unique artistic values. The book is valuable and helpful in understanding the mausoleum layout, construction, and completion time of the seven remaining imperial mausoleums of the Nguyen Dynasty.

b) The book "Lang Cua Hoang de Minh Mang" (The Mausoleum of Emperor Minh Mang) (Mai**,** 1993**)**

It gives an overview of the Nguyen family, the government establishing process, and the expansion of the territory of the nine Nguyen Lords. The author also described the social context and ways of governing the country that created a prosperous period during the reign of Emperor Minh Mang. It outlines identifying suitable land and analyzing the optimal terrain for constructing Emperor Minh Mang's Hieu Lang mausoleum. This process adheres to traditional concepts and the emperor's visionary ideas.

The construction process of the Hieu Lang mausoleum started from the beginning to the completion of the principal architecture to bury the emperor. Other information is added, such as rituals during Emperor Minh Mang's burial, the Mausoleum's layout, and architectural scales and meanings according to Feng Shui philosophy.

c) The book "Khiem Lang va Vua Tu Duc" (Khiem Lang Mausoleum and Emperor Tu Duc) (Mai**,** 2004**)**

The book gives knowledge of the Vietnamese social context under Emperor Tu Duc, whose reign was full of contradictions within the royal family and the country's social problems. The emperor encountered challenges, with bandits appearing in various locations and invaders looming beyond the ocean.

Khiem Lang mausoleum was originally named Khiem Cung in the 36th year of Tu Duc (1883) and was created for Emperor Tu Duc. This Mausoleum was in Thuong Ba Village, Thuy Xuan Ward, Hue City, Thua Thien Hue Province. In accordance with ancient beliefs, upon ascending the throne, every Emperor consistently sought out a suitable land known as 'Van Nien Cat Dia' (land for ten thousand years) to construct their mausoleum. Van Nien Co is the construction site of Khiem Cung, which was considered the second palace

dedicated to Emperor Tu Duc. Additionally, the book provides details on the history of architectural construction, scale, layout, and meanings in the Khiem Lang Mausoleum according to Eastern philosophical theory.

The book is beneficial for comparing studies with the Hieu Lang mausoleum regarding their similarities and differences in selecting suitable land, direction, and architectural layout.

d) The book "Quan The Di Tich Hue" (The Complex of Hue Monuments) (Phan**,** 2005**)**

The book is divided into two parts: the first focuses on Hue, recognized by UNESCO as Vietnam's first World Cultural Heritage, and the second delves into the significance of the Mausoleum's facade and the value inherent in the complex monuments of Hue.

The first part explains the historical context of the Imperial City of Hue and the Nguyen Dynasty. It analyzes the culture in Hue according to the traditional Eastern and Vietnamese philosophies. Since there is a harmonious relationship between nature and humans in Hue, its architecture has profound philosophical and sustainable aesthetic values. The second part describes the appearance and value of the complex of Hue monuments, imperial mausoleums of the Nguyen Dynasty, and the ancient belief that each Nguyen king, while being on the throne, took care of his future by building an "eternal house" to live in the afterlife. Most of these mausoleums are located near the mountains, southwest of Hue City. When constructing the mausoleum, planners and architects of the Nguyen Dynasty adhered to traditional Oriental theories thoroughly. Every mausoleum site converges the principles of "Son Chau Thuy Tu," "Tien An Hau Cham," and "Ta Long Huu Ho." "Son Chau Thuy Tu " refers to a complex of mountains and hills surrounding water to form a river, lake, or pond in front of the mausoleum site. "Tien An Hau Cham" is a couple of the highest mountains on the front and back sides of the mausoleum site,

shaping the natural screen at the front and back. "Ta Long Huu Ho" refers to two ranges of mountains or soil banks placed on the front-left-hand side of the mausoleum site, shaping the dragon figure, and placed on the front-right-hand side of the mausoleum site, shaping the tiger figure. In addition, the book also gives details of the construction history, building scales, and artistic value of the remaining seven mausoleums of the Nguyen Dynasty. It also suggested orientations in Feng Shui at the Hieu Lang mausoleum and explored the similarities and differences in ideological themes and artistic styles among the imperial Nguyen mausoleums.

e) The book "Royal Mausoleums in Hue - A Wonder" (Phan**,** 2014**)**

The book primarily presents the design ideas and artistic values of the imperial mausoleums of the Nguyen Dynasty, affirming that these mausoleums represent the most brilliant achievement of Vietnam's ancient architecture. They all adhere to the Feng Shui concept, in which people are subjects of architecture and nature. It also describes the general construction scale, calendar, and architecture of the seven remaining mausoleums.

Although it is a valuable reference on the history, artistic value, and overall layout of the imperial Nguyen mausoleum, the author has not clearly analyzed the issues related to the design method and architectural construction.

f) The article "Royal Tombs of the Nguyen Dynasty in Hue" (Phan**,** 2010**)**

This article highlights the value of the Nguyen Emperor's mausoleums, which reach the pinnacle of traditional architectural art and harmony with nature. It includes the history of the mausoleum construction of Vietnamese feudal dynasties and the process of building mausoleums of the Nguyen Dynasty, starting from finding good land, drawing a topographical map for construction, and finally holding a thankful ceremony to the Mountain God. In addition, it also presents information and details on the scale, structure,

construction materials, and regulations of mausoleums, funeral ceremonies, and worship of the Nguyen Emperors. The author compared the Nguyen mausoleums with those in China to find their similarities and differences.

This research paper is a valuable reference on the history and regulation of mausoleum construction, architectural scale, structure, and materials, funeral ceremonies, and comparisons with Chinese mausoleums.

2.1.2 Foreign Authors

a) Restoration report of the Huu Phoi Dien monument–Hieu Lang Mausoleum, Nihon University – Japan (1997) (Shigeda**,** 1997**)**

The report was conducted from 1994 to 1996, with sponsorship from the Toyota Foundation. It aimed to restore the Huu Phoi Dien project in the mausoleum of Emperor Minh Mang. This project was considered the first international cooperation initiative between Vietnam and Japan following UNESCO's recognition of the ancient imperial capital of Hue as a World Heritage Site in December 1993.

This document is a technical restoration report focusing mainly on architectural research, renovation, repair, and modification of the Huu Phoi Dien building. It provided helpful information about the construction history and the mausoleum's formation process. Additionally, it describes the shapes, sizes, and structures of the buildings' foundations, wood-frame systems, and roofing systems.

Although the report mainly focuses on restoring the Huu Phoi Dien building, its appendices and comparative studies provide information on construction techniques and dimensions of architectural components. This report inspires an analysis method of architectural proportion for this study.

b) The report "The Site Plan Design Method of Thien Tho Lang, Hieu Lang, and Xuong Lang Mausoleums" (Takemura**,** 2001**)**

This master's thesis compares and provides information on the design methods of mausoleum site plans of the first three Nguyen emperors, namely, Gia Long (Thien Tho Lang), Minh Mang (Hieu Lang), and Thieu Tri (Xuong Lang).

It includes the construction of the mausoleum of Emperor Minh Mang based on the description in historical sources published under the Nguyen Dynasty, such as "Dai Nam Nhat Thong Chí" [Book of Geography - History of Vietnam under the Nguyen Dynasty], "Kham Dinh Dai Nam Hoi Dien Su Le," [Book recording the legal documents, regulations, and data related to the activities of organizations in the Nguyen Dynasty state apparatus] and "Dai Nam Thuc Luc" [Book of the official history of the Nguyen Dynasty, Vietnam]. An experimental analysis was conducted on a site plan of the entire Lang (burial) and Tam Dien (temple) area to determine the planning principle of Emperor Minh Mang's mausoleum.

Although the thesis is a helpful reference, it does not comprehensively mention architectural proportion systems, designing methods, and construction issues.

c) The master thesis "The Master Plan of Khiem Lang Mausoleum" (Kojima**,** 2005**)**

This master's thesis primarily aimed to study the master site planning of the Khiem Lang (mausoleum of Emperor Tu Duc, the fourth emperor of the Nguyen Dynasty). Based on official historical data, the author re-verified information on the construction items of Khiem Lang and compared them with site survey results. The study was based on actual survey drawings to analyse the master plan of Khiem Lang and to determine the correlation of location and ratio between construction buildings in this mausoleum.

Although it is a helpful reference, the study does not provide technical or architectural information related to the mausoleum of Emperor Minh Mang.

2.2 History of the Nguyen Dynasty

They were two official agencies of the Nguyen Dynasty, and historical documents regarding geography, economy, politics, laws, policies, culture, architecture, and construction, including: The National Department of History of Nguyen Dynasty (Quoc Su Quan/國史館), 1821-1945); and the Cabinet of Nguyen Court (Noi Cac/內閣, 1829-1945). The National Department of History of the Nguyen Dynasty, known as Quoc Su Quan, was responsible for recording and compiling historical events while preserving essential documents related to the Nguyen Dynasty. On the other hand, the Cabinet of the Nguyen Court, referred to as Noi Cac, assisted the king in managing court affairs and processing important documents. Both agencies played a crucial role in maintaining the administrative and historical frameworks of the Nguyen Dynasty, contributing to the preservation of valuable records from Vietnam's last feudal period.

Their original versions were engraved in negative on wood (woodblocks) and printed positively on “Do” paper, a special paper used for writing, printing, and publishing during the Nguyen Dynasty. The content of these documents has been translated into Vietnamese, and their new scripts were formed in the sixteenth century.

These records are written in two different ways: Chronicle and Headlines records. Some documents published by the Department and the Cabinet provided valuable data for this thesis.

- *Dai Nam Nhat Thong Chi* (大 南 一統 志) (The National Department of History of Nguyen Dynasty, 1960) was compiled in two periods, the Tu Duc (1847-1883) and the Duy Tan (1909-1916). This is a set of geophysical books

covering geography, history, economics, politics, and art and literature. The document describes the location, construction history, and scale of cultural and historical buildings in the city of Hue, including the tombs of the Lords Nguyen and the imperial Mausoleum of the Nguyen Dynasty.

- *Kham Dinh Dai Nam Hoi Dien Su Le* (欽定大南會典事例, abbreviated as Kham Dinh) (The Cabinet of Nguyen Court, 1993 and 2012) is divided into three parts: dictionaries, norms, and other information related to the organization and activities of the Nguyen Dynasty during the period of Emperor Gia Long (1802) to that of Dong Khanh (1851). The book, also known as the Chinh Bien part, presents a relatively affluent and diverse image of traditional Vietnamese society, particularly in its organization of the national administrative apparatus from central to local levels. It contains 262 volumes (plus an introductory volume). The "Bo Le" in volume 96 refers to worshipping and looking after the mausoleum, volume 124 mentions the grand funeral of Emperor Gia Long, volume 125 describes the lavish funeral of Emperor Minh Mang, and volume 126 writes about the impressive funeral of Emperor Thieu Tri. The "Bo Cong" volume 216 refers to the general regulations, construction, trees, bans, and constructional regulations of the imperial mausoleums of the Nguyen Dynasty.

- *Dai Nam Thuc Luc* (大南寔錄, abbreviated as DNTL) is a chronicle of Vietnam written about the dynasties of Lord Nguyen and Emperor Nguyen, having two parts, Dai Nam Thuc Luc Tien Bien and Dai Nam Thuc Luc Chinh Bien. Dai Nam Tru Luc Tien Bien (also known as Liet Thanh Thuc Luc Tien Bien) records the career of the Nine Lords of the Nguyen Dynasty (1558-1777). Dai Nam Thuc Luc Tien Bien was compiled in 1821, the second year of the Minh Mang era, and completed and engraved in 1844 during the fourth year of the Thieu Tri era. "Dai Nam Thuc Luc Chinh Bien" recorded the history of the Nguyen Dynasty, from the Gia Long to the Dong Khanh periods. DNTL consists of three sets. Firstly, DNTL includes ten volumes, which record the

entire activities of the Emperors from the Gia Long to the Dong Khanh periods (1802-1888) and were published in 2002, 2006, and 2007. Secondly, DNTN Chinh Bien De Luc Ky Phu Bien recorded the activities of the Emperors from the Thanh Thai to Duy Tan periods (1889-1916). Thirdly, Chinh Bien De That Ky recorded the activities of Emperor Khai Dinh (1916-1925) and was published in 2012. This primary source contains a large amount of important historical information about the Nguyen Dynasty written in the style of a chronicle record. Therefore, the contents are listed not according to the record's title but in chronological order by the daily routines of the Nguyen court. By studying these historical documents, we can gather accurate information about the time, royal ordinations, and construction history of the imperial Nguyen mausoleums in Hue.

2.3 The "Bulletin des Amis du Vieux Hue" (B.A.V.H) Magazine

The historical documents of the Nguyen Dynasty constitute a crucial and reliable primary source for this thesis. Among them, Document B.A.V.H, contemporaneously published with the Nguyen Dynasty, holds significant value as a secondary document. B.A.V.H Magazine (Friends of the Ancient Capital of Hue/Bulletin des Amis du Vieux Hue) is a set of thirty-one magazines containing several articles relating to the ancient capital of Hue and the Complex of Hue Monuments from 1914 to 1944. Researchers included French and Vietnamese, such as priests, military personnel, and Vietnamese scholars who were interpreters or Nguyen's court officials exposed to European culture.

The research content comprehensively covers the society, politics, economy, culture, art, and architecture of Hue Capital, which are essential components directly related to Hue Capital and the imperial mausoleum of the Nguyen Dynasty.

Research articles in the B.A.V.H document related to this thesis include:

a) B.A.V.H, volume 3, 1916:

According to Bishop Pellerin, L. Cadière mentioned the rituals of Emperor Thieu Tri's funeral (Cadière, 1916, pp. 103–117). At the same time, R. Orband, based on documents, is stored in the Annam Archives to compare the official content of the rites of Emperor Thieu Tri's Funeral (Official Document) with the narrations of Father Pellerin (Orband, 1916, pp. 118–130).

b) B.A.V.H, volume 5, 1918:

A. Laborde and Nguyen Bon described the scales and materials of the Bi Dinh architectural construction and the stele inscribed with the talents, merits, and virtues of Emperor Thieu Tri (Cadière & Nguyen, 1918, pp. 5–20).

c) B.A.V.H, volume 7, 1920:

M. Delamarre wrote about the inscribed stele at the Hieu Lang mausoleum, erected by Emperor Thieu Tri to commemorate the talents, merits, and virtues of Emperor Minh Mang (Delamarre, 1920, pp. 290–301).

d) B.A.V.H, volume 26, 1939:

G. Langrand explained architectural scales, layouts, construction materials, functions, and artistic values in the Mausoleum of Emperor Thieu Tri. It also indicated the influences of Chinese tomb architecture on those of the Vietnamese (Langrand, 1939, pp. 5–39).

2.4 Conservation and Restoration

Documents related to conservation and restoration projects play a pivotal role in understanding the technical and technological aspects, providing insights into the architectural structure and construction techniques of the imperial mausoleums in Hue. After UNESCO designated the Complex of Hue Monuments as a World Cultural Heritage site in December 1993, various organizations, including the Vietnamese government, the Toyota Foundation, the Japan Foundation, the UNESCO World Heritage Institute-Waseda

University, American Express Bank, the World Monuments Fund, and other benefactors (Table 3) that have gradually returned the original appearance of mausoleums of the Emperors in Hue, with project documents specifically, including:

- The project for the restoration and enhancement of the overall value of the Emperor Gia Long Mausoleum (Remaining Components) was undertaken by the Hue Monuments Conservation Center (2019) (Hue Monuments Complex Project Management Board, 2019).

- Projects supported by governments and international organizations during the period 1992–2017 (Hue Monuments Conservation Center, 2022).

Table 3. List of projects supported by governments and international organizations during the period 1992–2017

No.	Project Title	Year of Implementation	Sponsoring and Partnering Organizations
1	Huu Tung Tu Right Sub-Temple (Mausoleum of Emperor Minh Mang)	1996	Toyota Foundation and Japan Foundation (Japan)
2	Conservation and Restoration of Minh Lau Pavilion (Mausoleum of Emperor Minh Mang)	1997 - 1999	Express Bank (USA), through the World Monuments Fund (WMF)
3	Conservation and Restoration of Bi Dinh Stele Hall (Mausoleum of Emperor Minh Mang)	2001 - 2003	World Monuments Fund (WMF)
4	Conservation and Restoration of the Bi Dinh Stele Hall (Mausoleum of Emperor Minh Mang)	2001 - 2003	World Monuments Fund (WMF)
5	Conservation, Restoration and Enhancement of Hien Duc Gate (Mausoleum of Emperor Minh Mang)	2008 - 2009	- Robert W. Wilson Challenge to Conserve Our Heritage Fund through the World Monuments Fund

			(USA) - Vietnam National Coal and Mineral Industries Group (Vinacomin)
6	Restoration and Enhancement of Ta Tung Left Sub-Temple (Mausoleum of Emperor Minh Mang)	2011 - 2012	Robert W. Wilson Challenge to Conserve Our Heritage Fund through the World Monuments Fund® (USA)
7	Joint Project for Research, Training, and Conservation at the Hue Monuments Complex	2005 - 2012	The UNESCO World Heritage Institute and Waseda University, Japan.

- Project to preserve, restore, and promote the overall value of the Emperor Thieu Tri's mausoleum, part of the Hue Monuments Complex, from 2006 to 2010. The project will focus on renovating Ho Dien Lake, the Courtyard, the Nghi Mon Gate, the Ta Phoi Dien and Huu Phoi Dien sub-temples in the central area of the mausoleum, along with the front screens, the Landmark Towers, and the Nhuan Trach and Ngung Thuy lakes within the mausoleum grounds (According to Vietnam News Agency (VNA) – VietNamNet, 2006).

- Project to restore and conserve Ta Tung Vien and Huu Tung Vien sub-houses under the investment project to preserve, restore, and promote the value of Emperor Thieu Tri's mausoleum in 2013-2014 (Bui, 2013).

These project documents include the demonstration of the construction of the restoration project, site analysis drawings of architectural monuments with complete measurement data, restoration design drawings, and the cost estimate of building restoration. Their figures are valuable reference sources for this research.

2.5 Archaeological Reports on the Mausoleum of Emperor Minh Mang

The Archaeological Report of Emperor Minh Mang's Mausoleum is classified as a first-order document. This report serves as a vital resource for collecting information and original documents, facilitating the analysis of solutions on the foundation structure, function, and types of lost architectural elements in the Hieu Lang Mausoleum.

The Vietnam History Museum collaborated with the Hue Monuments Conservation Center to conduct an archaeology investigation and survey of the monuments at the Hieu Lang mausoleum from March to July 2004 (Pursuant to Decision 286/QD-BVHTT dated February 10, 2004, by the Ministry of Culture and Information (now the Ministry of Culture, Sports and Tourism)). The aim was to address scientific questions related to the construction history of the Nguyen Dynasty mausoleum system and to collect information and document sources that would support the project of restoring and conserving the overall mausoleum of Emperor Minh Mang.

The investigation and archaeological survey of monuments at Hieu Lang mausoleum were conducted on demolished architecture, such as Truy Tu Trai mansion, Quan Lan So, Linh Phuong Cac pavilion, Ta Tung Phong chamber, Huu Tung Phong chamber, Thuan Loc Hien office, Dieu Ngu Dinh Hall, Hu Hoai Ta floating pavilion, and Than Kho store. This revealed many traces of the original architectural foundation in the mausoleum area, allowing us to learn about the history of construction and the existence of architecture in this mausoleum area. At the same time, it provided more accurate documentation to support restoration and conservation work.

This archaeological report will aid in determining the location, analyzing the foundation structure's solution, and clarifying architectural typologies and functions in the Hieu Lang mausoleum.

2.6 Measurement Data

The survey data of the Nguyen Dynasty mausoleums in Hue, jointly obtained by Waseda University (Tokyo, Japan) and the Hue Monuments Conservation Center between 1994 and 2012, were digitalized into drawings and have been used as the basis for subsequent reconstruction studies (Le et al., 2022); (Trương & Le, 2024). It includes architectural plan drawings of seven mausoleums of the Emperors in Hue (Thien Tho Lang, Hieu Lang, Xuong Lang, Khiem Lang, Tu Lang, An Lang, and Ung Lang). This measurement data was collected by combining several types of equipment, including an OMM (Optimal Measurement Machine), GPS (Global Positioning System), and GIS (Geographic Information System), which enables the accurate location of architectural features.

Microsoft Excel software transfers and analyzes measurement data, calculating the proportional correlation between the parts and the whole. By connecting the position locator of the mausoleums to the global positioning map, the allowable error ranges from 5mm to 8mm. This data is then converted into digital format using Vectorworks software (for Macintosh operating system) and AutoCAD (for Windows operating system).

This data source facilitates the accurate analysis of the master planning principles of the mausoleums and determines the specific location of their architecture. However, this data source lacks detailed dimensions for each architecture. Therefore, further study requires additional surveys to be carried out by drawing sketches of plans, sections, and elevations of the architecture and measuring the size by hand.

The literature reviews reveal that domestic studies have yet to encompass a comprehensive examination of the Nguyen Mausoleums in Hue. They fall short in providing a thorough assessment of crucial architectural elements, such as master planning principles, architectural design methods,

proportional systems, construction techniques, and principles governing the organization of landscape spaces. Additionally, key documents, namely B.A.V.H. and measurement records, lack specific numerical data, dimensions, and detailed information. Despite these shortcomings, they still provide a foundational basis for analyzing the architectural aspects under consideration. These studies have not yet examined the fundamental compositional principles of a typical imperial mausoleum in Hue. They also lack a comprehensive classification and inventory of the existing architectural structures and their positional arrangements within the three mausoleums of Emperor Gia Long, Emperor Minh Mang, and Emperor Thieu Tri. Additionally, there is an absence of explanations regarding the locations of the mausoleums and their geographical distances from the urban center, the Hue Citadel.

This thesis aims to address the gaps in current research, specifically focusing on resolving the missing elements in the study of the imperial mausoleum architecture of the Nguyen Dynasty.

2.7 Conclusion

Domestic studies about the subject have focused on historical document sources, calendaring construction, and the cultural, artistic, and architectural values associated with the remaining imperial mausoleums of the Nguyen Dynasty. These studies have conclusively demonstrated that the imperial mausoleum in Hue is the pinnacle of ancient Vietnamese architecture. The construction of these mausoleums consistently adheres to the principles of Eastern tradition, particularly in terms of Feng Shui.

Foreign studies concerning the imperial mausoleum of the Nguyen Dynasty were primarily conducted through the lens of architectural history and techniques. Notably, researchers and graduate students from Japanese universities undertook this research between 1994 and 2005, receiving valuable cooperation and assistance from technicians at the Hue Monuments

Conservation Center. The resulting documents offer a comprehensive perspective on the master planning of the imperial mausoleums of the Nguyen Dynasty during the first half of the nineteenth century, when Vietnam was independent and autonomous.

Additionally, the measurement document from Waseda University World Heritage Institute and Field Survey work offers tangible data obtained while the surveyed objects were still extant. This actual data serves as an essential foundation for analysis in subsequent chapters, providing default parameters for fundamental elements.

Literature reviews show that domestic studies have not provided a comprehensive examination of the Nguyen Mausoleums in Hue. They lack thorough assessments of essential architectural elements, such as master planning principles, design methods, proportional systems, construction techniques, and landscape organization. Key documents, including B.A.V.H. and measurement records, also lack specific data and dimensions.

Moreover, current research has not explored the compositional principles of typical imperial mausoleums or provided a classification and inventory of the structures within the mausoleums of Emperor Gia Long, Emperor Minh Mang, and Emperor Thieu Tri. There are also no explanation of the mausoleum’s locations and their distances from the Hue Citadel.

This thesis aims to address these gaps in the study of the Nguyen Dynasty's imperial mausoleum architecture.

Chapter 3

A Short History of the Nguyen Dynasty and Its Spiritual Tradition Influence on Vietnamese Imperial Mausoleum Architecture

This chapter is divided into three subtopics: Establishment of the Nguyen Dynasty and the Hue Capital City, Spiritual Tradition and Its Impact on the Architectural Features of the Mausoleums, and Similarities and Differences between the Imperial Mausoleum Architecture of the Nguyen Dynasty and that of previous feudal dynasties in Vietnam and China. The history of the Nguyen Dynasty unfolds through pivotal events such as the civil war between Nguyen Anh and the Tay Son Dynasty, the restoration of the Nguyen Lords' tombs, and the establishment of the Hue capital. The spiritual tradition is encapsulated in two primary themes: Vietnamese ancestor worship and ancestor worship specific to the Nguyen Dynasty.

3.1 Establishment of the Nguyen Dynasty and the Hue Capital City

Vietnam has a long history, spanning from before Christ to the present era, although the country was under Chinese rule for one thousand years, from 111 BCE to 938 CE (National History Association of Le Dynasty, 1993, pp. 18–20; 22–24; 28–36; 42–53). Accordingly, the history of Vietnam is divided into five main periods, namely predynastic Vietnam, ancient, Chinese domination, monarchical, and modern periods (Table 4). Predynastic Vietnam includes ethnic origins and cultural evolution. The ancient period (2879 – 111 BCE) was divided into the Hong Bang Dynasty (2879 - 258 BCE), the Thuc Dynasty (257 – 179 BCE), and the Trieu Dynasty (204 – 111 BCE). Chinese domination (111 BCE – 938 CE) contained the first Chinese domination (111 BCE – 40 CE), Hai Ba Trung sisters (40–43 CE), second Chinese domination (43–544 CE), early Ly Dynasty (544–602), third Chinese domination (602–

905), and autonomous era (905–938). The monarchical period (939–1945) included the independent age (939–1407), the fourth Chinese domination (1407–1427), the restored era (1428–1527), the warlord era (1527–1802), and the unified era (1802–1858). Lastly, the modern period started in 1858 and continues to the present.

Table 4. The summaries of the historical periods of Vietnam

No.	Periods	Sub-Period / Dynasty	Time Frame
1	Predynastic Vietnam	Ethnic origins and cultural evolution of the Vietnamese people	
2	Ancient period (2879 – 111 BCE)	Hong Bang Dynasty	2879 - 258 BCE
		Thuc Dynasty	257 – 179 BCE
		Trieu Dynasty	204 – 111 BCE
3	Chinese domination (111 BCE – 938 CE)	First Chinese domination	111 BCE – 40 CE
		Hai Ba Trung sisters	40–43 CE
		Second Chinese domination	43–544 CE
		Early Ly Dynasty	544–602 CE
		Third Chinese domination	602–905 CE
		Autonomous era	905–938 CE
4	Monarchical period (939 – 1945)	Independent Age	939 – 1407
		Fourth Chinese Domination	1407 – 1427
		Restored Era	1428 – 1527
		Warlord Era	1527 – 1802
		Unified Era	1802 – 1858
5	Modern period		1858 – Present

The warlord era (1527–1802) included the civil war between Nguyen Anh and the Tay Son Dynasty.

3.1.1 A Brief History of the Civil War between Nguyen Anh Lord and the Tay Son Dynasty

The most significant event in Dai Viet history was the civil war between the Tay Son movement and Lord Nguyen, which lasted from the second half of the eighteenth to the early nineteenth centuries. The Tay Son Dynasty in

Vietnam was led by three brothers known as the Tay Son brothers. This conflict involved neighboring countries, including Chan Lap, Van Tuong (present-day Laos), and Siam. The war ultimately resulted in Vietnam being unified for the first time in centuries and marked the beginning of French influence in Vietnam, which brought science, technology, and European capitalism to the region.

The civil war between the Tay Son movement and Lord Nguyen Anh can be divided into two stages: the first stage (1771 to 1785) and the second stage (1787 to 1802).

(1) The First Stage (1771 to 1785)

In 1771, three brothers from the Tay Son family—Nguyen Nhac, Nguyen Lu, and Nguyen Hue—launched a rebellion with the strategic slogan: "Overthrow the authority of the god Truong Phuc Loan and support Nguyen Phuc Duong," who passed away in 1777, was one of the Nguyen lords of Dang Trong. He was the first son of Nguyen Phuc Hieu, who was the son of Lord Nguyen Phuc Khoat. The Tay Son army frequently seized wealth from the rich and distributed it to the poor (Pham, 1960, p. 365), which garnered support from people throughout the region.

By 1776, the Tay Son army had grown strong enough to defeat Lord Nguyen's forces, and in 1777, they routed the remaining troops. Only Nguyen Phuc Anh, just 17 years old at that time, managed to escape and sought refuge on an island in the Gulf of Thailand. In 1778, Nguyen Nhac became King Thai Duc of the Tay Son Dynasty and expanded the Do Ban Citadel, also known as Hoang De Citadel, making it the capital. He took control of political matters, built the imperial court, and appointed Nguyen Hue as his general.

After facing defeat from the Tay Son army, Nguyen Phuc Anh, a lord of the Nguyen Dynasty, sought assistance from the King of Siam. On July 25, 1784, Siamese reinforcements, comprising 20,000 troops and 300 warships,

joined Nguyen Phuc Anh's forces to combat the Tay Son army, conquering several territories in the Nam Bo region. Vietnam is divided into three regions: Nam Bo (the South), Trung Bo (the Central region), and Bac Bo (the North). Since the 17th century, Nam Bo has been the newest region of Vietnam, established during the country's southward expansion. This area was formerly known as Gia Dinh and was later referred to as Cochinchina from 1832 to 1945. In December 1784, Nguyen Hue mobilized his troops and expelled the Siamese forces along with Nguyen Phuc Anh's army (Ta, 1973, p. 125) (Table 5).

By mid-1786, the Tay Son forces had divided into three regions. Nguyen Nhac proclaimed himself Emperor, establishing his base of operations at the Hoang De citadel. He appointed Nguyen Lu as Dong Dinh Vuong to govern Gia Dinh (Chinese character: 嘉定), an old place name in South Vietnam. Meanwhile, Nguyen Hue, designated as Bac Binh Vuong, was stationed in Phu Xuan. Phu Xuan (富春) served as the historical capital of the Nguyen lords, first under Lord Nguyen Phuoc Thai and then under Lord Nguyen Phuoc Khoat. It remained significant until the Tay Son Dynasty and later became the capital of the Nguyen Dynasty, which was renamed Hue Capital.

In 1788, Nguyen Hue was crowned Emperor, adopting the reign name Quang Trung (Tran, 2003, p. 361). He initiated construction projects and reforms that made Phu Xuan the capital of the entire country.

Table 5. List of two Vietnamese parties involved in the Civil War from 1771 to 1802

No.	Parties	Member Names	Later position/ Title
1	Tay Son family	Nguyen Nhac	King Thai Duc, based at Do Ban Citadel, known as Hoang De Citadel
		Nguyen Lu	Dong Dinh Vuong, governing the

No.	Parties	Member Names	Later position/ Title
			Gia Dinh area
		Nguyen Hue	Bac Binh Vuong, stationed in Phu Xuan. He later became Emperor Quang Trung, with Phu Xuan as the capital
2	Lord Nguyen	Nguyen Phuc Anh (also known as Nguyen Anh)	Emperor Gia Long, founder of the Nguyen Dynasty

(2) The Second Stage (1787 to 1802)

Despite the support of the Siamese army, the Tay Son forces continued to defeat Nguyen Phuc Anh's troops. In search of additional help, Nguyen Phuc Anh reached out to France, entrusting his eldest son, Prince Canh, to Bishop Pigneau de Behaine (also known as Ba Da Loc), who traveled to France to solicit aid (Tran, 2003, pp. 384–385).

On November 28, 1787, the Treaty of Versailles was signed by Count Montmorin, representing King Louis XVI, and Ba Da Loc, representing Nguyen Phuc Anh (Ta, 1973, p. 182). However, the treaty was ineffective due to the outbreak of the French Revolution at that time. King Louis XVI was deposed, and the newly established French government did not send troops to assist Nguyen Phuc Anh. In the meantime, Bishop Pigneau de Behaine had taken it upon himself to recruit soldiers and acquire ships, firearms, and munitions for Nguyen Phuc Anh (Tran, 2003, p. 385).

With strong support from France, Nguyen Phuc Anh recaptured Gia Dinh in 1788 and ultimately defeated the forces of the Tay Son Dynasty in 1802, thereby ending the conflict and reuniting Vietnam.

The thirty-two-year war concluded with Nguyen Phuc Anh experiencing numerous setbacks, with his soldiers often scattered and his life hanging by a thread. Ultimately, however, Nguyen Phuc Anh emerged victorious and

became the first Emperor of the Nguyen Dynasty, assuming the throne as Gia Long, choosing Hue as the capital, and opening a new chapter in Vietnamese history.

3.1.2 Nguyen Anh's Revenge and the Restoration of the Tombs of the Nguyen Lords in Hue

At the beginning of the war with the Tay Son Dynasty, Nguyen Phuc Anh found himself in a desperate situation, constantly on the run. The forces of Lord Nguyen, including those close to Nguyen Phuc Anh, were defeated, leaving him as the only survivor at the young age of 17. He was forced to hide in various places to escape the advancing Tay Son troops. Each time they pushed forward, Nguyen Phuc Anh faced defeat and was compelled to flee into exile. Despite these challenges, he made several attempts to gather new troops to reclaim Gia Dinh, a province in southern Vietnam, but each time he was driven back.

During that period, Confucianism became the foundation of society in the country. The principal idea of Confucianism posited that kings, seen as representatives of the Gods, should rule to ensure the happiness of the people. Consequently, kings were referred to as Thien Tu, meaning "the son of God." The relationship between the people and their kings mirrored that between citizens and the court. Those who rebelled against kings, usurped their power, and imposed new laws were considered imperialists. Nguyen Phuc Anh, the last prince of the Nguyen Lord family, was both loved and supported by the people of Dang Trong, which is written in Chinese characters as 塘中. This region, also known as Nam Ha (南河), refers to the southern part of Vietnam that was ruled by the Nguyen Lords, who later expanded their territory further south. The term "Dang Trong" was first recorded in Alexandre de Rhodes' Dictionarium Annamiticum Lusitanum et Latinum. In contemporary foreign documents, this area is commonly referred to as Cochinchina or Quinan. Even

though Nguyen Phuc Anh had to live in hiding, his duty was to reclaim the ancestral kingship, remain loyal to the people, restore order and discipline in the country, and assert the strength of both himself and the nation.

The Tay Son family was the first to act on the blood debt. They slaughtered Emperor Gia Long's relatives, including an uncle and three brothers. This feud had to be resolved in blood, forcing him to flee for 27 years in order to reclaim the kingdom.

In Vietnamese culture, it is the responsibility of descendants to care for their ancestors' graves as part of their worship. Ancestor worship is a deeply rooted spiritual practice among the Vietnamese people. Discussing beliefs and values related to this practice can often lead to strong emotions and conflict. For instance, Emperor Quang Trung exhumed the graves of nine generations of the Nguyen lords, including the biological father of Emperor Gia Long (Nguyen Phuc Con). This act added to the significant burden of historical debts that the Nguyen lords faced. In this context, the spiritual debt to the ancestors is seen as far more crucial than the blood debts arising from familial feuds.

After becoming Emperor in 1802, Gia Long executed the Tay Son family and generals who had served them to seek revenge. All martial generals were executed in the form of body tear-off, rubbed by elephants, beheaded, and skinned. For the Tay Son family, "Destroying the grave of Tay Son - Nguyen Van Hue enemy, chopping off his head, drying his head at the market. The sons, daughters, relatives, and army symbols of the thirty-one enemies were all cut to pieces (The National Department of History of Nguyen Dynasty, 2002, p. 473). The court's army escorted Nguyen Quang Toan and his brothers, Quang Duy, Quang Thieu, and Quang Ban, out of the citadel gate. The body was torn off and rubbed by five elephants (used five elephants to tie the head, arms, and legs, which is torture). Took the remains of Nguyen Van Nhac and Nguyen Van Hue, crushed and thrown away, and the skulls of Nhac, Hue,

Toan, and his wife's votive tablet are all detained at the prison" (The National Department of History of Nguyen Dynasty, 2002, p. 531).

The enemy was the Tay Son family, and Emperor Gia Long deliberately destroyed it out of revenge. He also took swift action to restore and renovate the tombs of the Nine Nguyen Lords, which had been constructed during the early Gia Long period, specifically between 1808 and 1809. The tombs were repaired during the Minh Mang reign in 1840 and the early Thieu Tri reign in 1841. The scale and architectural style of the renovations closely resembled that of the original structures.

3.1.3 Establishment of the Nguyen Dynasty and the Construction of the Hue Capital City

The Nguyen Dynasty was the last monarchy in Vietnam's history, established when Emperor Gia Long ascended the throne in 1802 and wholly ended when Emperor Bao Dai abdicated in 1945. The Nguyen emperors include Emperor Gia Long (1802-1820), Emperor Minh Mang (1820-1840), Emperor Thieu Tri (1840-1847), Emperor Tu Đuc (1847-1883), Emperor Duc Duc (1883), Emperor Hiep Hoa (30.7.1883-29.11.1883), Emperor Kien Phuc (2.12.1883-31.7.1884), Emperor Ham Nghi (1884-1885), Emperor Dong Khanh (1886-1888), Emperor Thanh Thai (1889-1907), Emperor Duy Tan (1907-1916), Emperor Khai Dinh (1916-1925), and Emperor Bao Dai (1926-1945) (Table 6).

Table 6. Chronological list of the Nguyen Dynasty's Emperors

No.	Successive Emperors		Reign Periods	Birth and Death Dates	Names of Royal Family (Vietnamese)	Names of Royal Family (English)
	Names	Chinese Names				
1	Gia Long	嘉隆	1802-1820	1762-1820	Nguyễn Phúc Ánh	Anh Phuc Nguyen
2	Minh Mang	明命	1820-1840	1791-1840	Nguyễn Phúc Đảm	Dam Phuc Nguyen

No.	Successive Emperors		Reign Periods	Birth and Death Dates	Names of Royal Family (Vietnamese)	Names of Royal Family (English)
	Names	Chinese Names				
3	Thieu Tri	紹治	1841-1847	1807-1847	Nguyễn Phúc Miên Tông	Tong Phuc Mien Nguyen
4	Tu Duc	嗣德	1847-1883	1829-1883	Nguyễn Phúc Hồng Nhậm	Nham Phuc Hong Nguyen
5	Duc Duc	育德	1883	1853-1883	Nguyễn Phúc Ưng Chân	Chan Phuc Ung Nguyen
6	Hiep Hoa	協和	1883	1847-1883	Nguyễn Phúc Hường Dật	Dat Phuc Huong Nguyen
7	Kien Phuc	建福	1884	1869-1884	Nguyễn Phúc Ưng Đăng	Dang Phuc Ung Nguyen
8	Ham Nghi	咸宜	1884-1885	1871-1943	Nguyễn Phúc Ưng Lịch	Lich Phuc Ung Nguyen
9	Dong Khanh	同慶	1885-1889	1864-1889	Nguyễn Phúc Chánh Mông	Mong Phuc Chanh Nguyen
10	Thanh Thai	成泰	1889-1907	1879-1954	Nguyễn Phúc Bửu Lân	Lan Phuc Buu Nguyen
11	Duy Tan	維新	1907-1916	1900-1945	Nguyễn Phúc Vĩnh San	San Phuc Vinh Nguyen
12	Khai Dinh	啓定	1916-1925	1885-1925	Nguyễn Phúc Bửu Đảo	Dao Phuc Buu Nguyen
13	Bao Dai	保大	1925-1945	1913-1997	Nguyễn Phúc Vĩnh Thụy	Thuy Phuc Vinh Nguyen

The Dynasty lasted for 143 years and went through two main periods, namely the first and second periods:

The first period (1802–1858) marked an era of independence, during which the Nguyen Dynasty's emperors took complete control of the country, comprising four emperors: Gia Long, Minh Mang, Thieu Tri, and Tu Duc (Tran, 2003, pp. 401–479). Emperor Gia Long and later Emperor Minh Mang

attempted to establish Vietnam on a Confucian foundation through systematic reform, consolidation, and completion of the state apparatus. The Nguyen court evolved into an absolute monarchy that rose to prominence (Viện Hàn Lâm Khoa Học Xã Hội Việt Nam – Viện Sử Học (Vietnam Academy of Social Sciences – Institute of History), 2017a, p. 25). However, during this period, the country faced numerous insurgencies against the government of the Nguyen Dynasty. Between 1802 and 1862, a period of 60 years, approximately five hundred farmers and various social strata revolted against the court (Viện Hàn Lâm Khoa Học Xã Hội Việt Nam – Viện Sử Học (Vietnam Academy of Social Sciences – Institute of History), 2017a, p. 516). At the same time, under Minh Mang's reign, several wars for influence and territory occurred in Cambodia, which led to significant depletion of the treasury. By the time of Tu Duc, all aspects of the country were in decline. In 1868, a group of intellectuals in Vietnam recognized the nation's stagnation and urged the king to implement reforms quickly, warning that the government would otherwise wither away (Tran, 2003, p. 469). However, most officials and scholars of the Nguyen Dynasty were oblivious to the need for reform and opening up the country. As a result, Tu Duc was reluctant to follow through with these proposals. Consequently, Dai Nam gradually became stagnant, backward, and vulnerable to invasion by European colonists.

The second period (1858–1945) was marked by the invasion and colonization of Vietnam by French colonialists. The French began their campaign by attacking Da Nang in August 1858 and later moved to invade Gia Dinh. By June 1862, Emperor Tu Duc signed a treaty ceding three eastern provinces to France. In 1867, France expanded its control by occupying three additional western provinces, which formed the Cochinchina colony.

Between 1873 and 1886, France solidified its position in Cochinchina and went on to conquer the rest of Vietnam through military actions in Tonkin. In 1884, the Nguyen Dynasty formally recognized French authority over

Vietnam (Luong, 2018, pp. 150–151), which allowed the French to govern the country while keeping the Nguyen kings on the throne as figureheads. The French army had the power to install whichever Nguyen king they chose. This period of French colonial rule came to an end when Emperor Bao Dai announced his abdication in 1945 (Viện Hàn Lâm Khoa Học Xã Hội Việt Nam – Viện Sử Học (Vietnam Academy of Social Sciences – Institute of History), 2017b, p. 718).

During the first period, the Gia Long Emperor designated Hue as the capital city of Vietnam and initiated a new citadel plan based on China's Feng Shui principles. Construction of the citadel began at the start of the Gia Long period (1802-1820) and intensified during the Minh Mang period (1820-1841) (The National Department of History of Nguyen Dynasty, 2007a, pp. 98, 316). This construction not only expanded but also repaired Hue's capital, which had been closely associated with the Nguyen Dynasty for nearly one and a half centuries. It preserved a significant amount of cultural heritage from that era, including the ecological environment, historic citadel, imperial palace, mausoleums, and religious facilities.

The Citadel, located along the left bank of the Huong River, was constructed under the Gia Long (1802-1820) and Minh Mang (1820-1841) periods (Figure 8). It merges the design concepts of the Chinese Citadel, known for its enclosed walls, with the defensive system inspired by the Vauban style, which was popular in Europe in the 17th century (Phan, 2005, p. 42).

The Imperial Palaces located within the Citadel - such as the Imperial City and the Forbidden City - were constructed between the Gia Long and Tu Duc periods (1802-1883) and underwent repairs during the Thanh Thai to Bao Dai periods (1889-1945). Notable structures include Ngo Mon, Thai Hoa Dien, Can Chanh Dien, Can Thanh Dien, To Mieu, and Thai To Mieu.

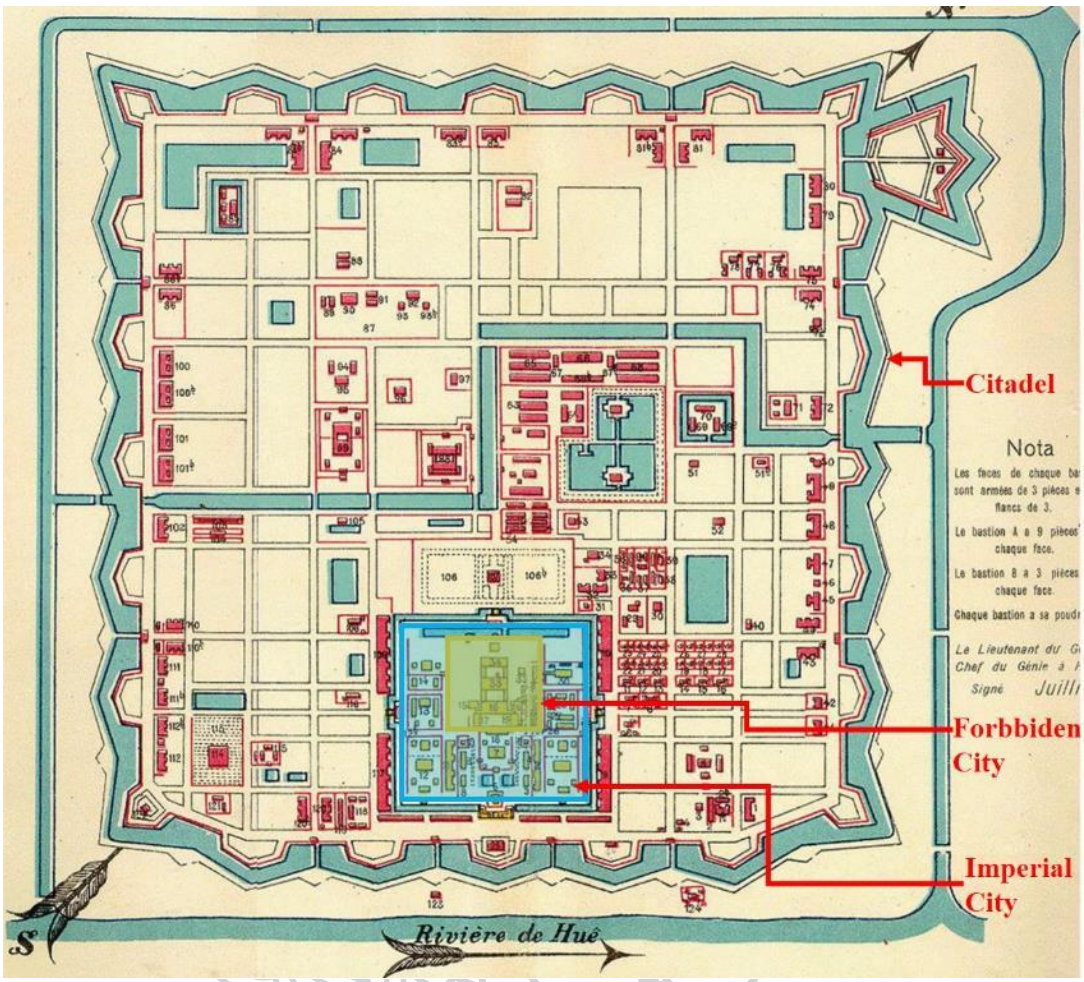


Figure 8: Citadel, Imperial City, and Forbidden City in the Hue Capital
Source: Cosserat H., "La Citadelle de Hue: Cartographie" (Hue Citadel: Mapping), Bulletin des Amis Du Vieux Hué (Magazine of B.A.V.H), Vol.33, Number 1-2, Map VIII – Hue Citadel, by engineer Lieutenant Jullien (Reduction by Mr. Nguyen Thu), IDEO Hanoi, 1933.

The Imperial Mausoleums, the final resting place of the Nguyen Emperors, are situated in a mountainous area to the southwest of the Citadel. They include the mausoleums of Emperor Gia Long, Emperor Minh Mang, Emperor Thieu Tri, Emperor Tu Duc, Emperor Duc Duc, Emperor Dong Khanh, and Emperor Khai Dinh.

The region is also home to numerous pagodas, temples, and shrines that are densely situated around Hue city. Notable examples include Thien Mu Pagoda, Van Mieu Temple, Vo Mieu Temple, and Linh Huu Quan Shrine. These sites are significant cultural icons that reflect the rich history and

traditions of the area, upheld through a combination of imperial heritage and spiritual beliefs.

Feng Shui, or geomancy, plays a crucial role in the arrangement of these natural and architectural elements. The surrounding natural features, such as the Huong Giang River, Ngu Binh Mountain, Da Vien Bank, and Hen Bank, further enhance this practice (Figures 9-10) (Tran, 2005, p. 172).

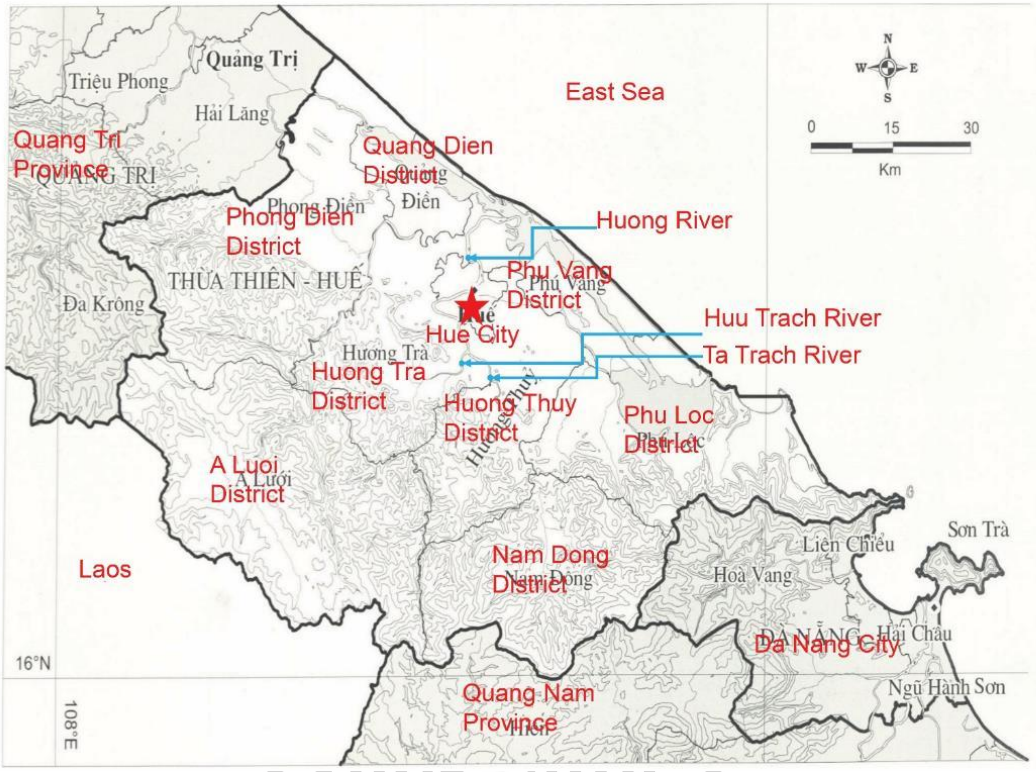
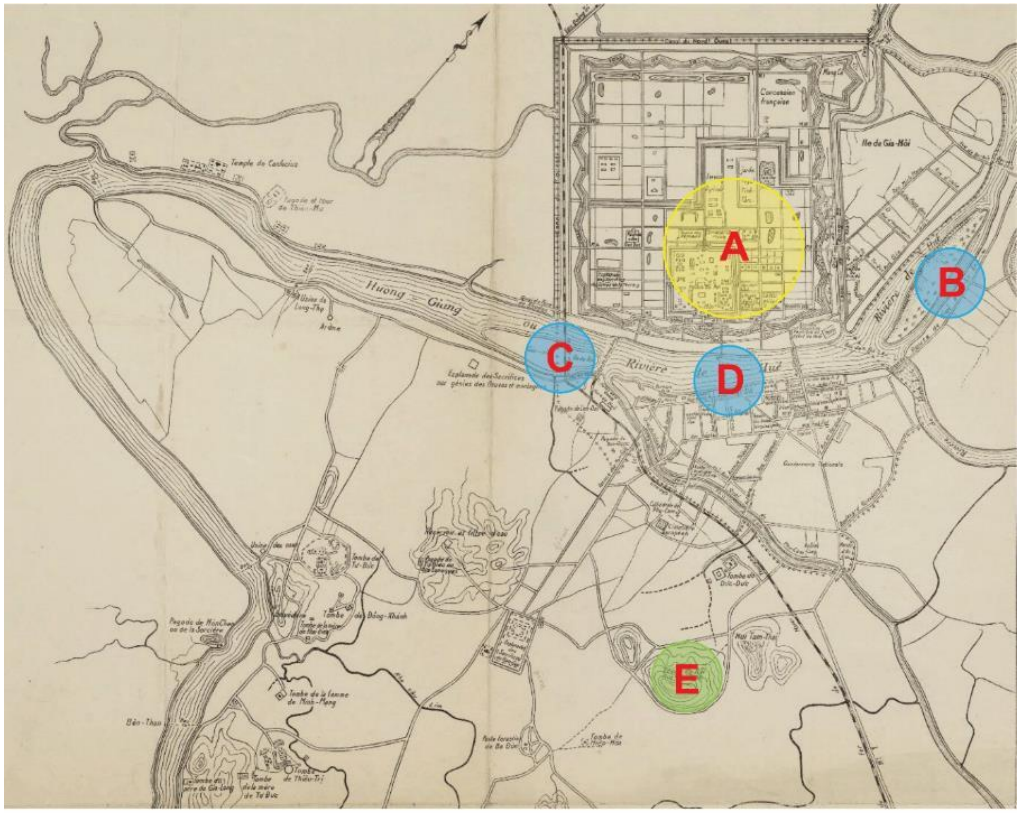


Figure 9: Map of the Thua Thien-Hue province at the end of the twentieth century
Source: Dong Khanh Dia Du Chi, Ha Noi: The Gioi Publishing House, 2003



(A): Citadel area (Huynh Tho)
(B): Hen Bank area (Thanh Long)
(C): Da Vien Bank area (Bach Ho)
(D): Huong Giang River (Minh Duong)
(E): Ngu Binh Mountain area (Chu Tuoc)

Figure 10: Map of the Hue Imperial Citadel
Source: National Library of France, Department of Cartography and Planning, GE C-4798, 1930.
https://gallica.bnf.fr/ark:/12148/btv1b530647505.r=Hu%C3%AA?rk=321890;0.
Accessed on October 21, 2024, & Author's modifications.

3.2 Spiritual Tradition and Its Impact on the Architectural Features of the Mausoleums

3.2.1 Ancestor Worship of the Vietnamese

Ancestor worship is a deeply rooted and universal traditional folk belief that holds a special place in the spiritual life of the Vietnamese. It is a fundamental element contributing to the rich tapestry of Vietnamese cultural identity (Dinh, 2020). The belief in ancestor worship is simple and deeply

humane, reflecting the Vietnamese belief that their ancestors remain sacred, even in the afterlife. They are seen as living alongside their descendants, eternally vigilant and protective.

This practice serves as a heartfelt expression of gratitude to the departed. The notion of a "family's root" is preserved in the spiritual realm and passed down through generations within Vietnam or across the globe. Remarkably, it has been officially recognized and supported by the state's political institutions throughout its history. Over time, it has grown to encompass and uphold the cherished values of the Vietnamese people (Dinh, 2020).

In Vietnam, ancestor worship is a multi-layered tradition expressed at three distinct levels: the family, the village, and the nation. As such, Vietnamese ancestor worship extends beyond the narrow concept of venerating one's immediate blood relatives, including grandparents and parents. It encompasses a broader perspective, honoring individuals who have made significant contributions to the community, such as village tutelary gods, occupational deities, and those who have contributed to the nation's prosperity, including the Hung Kings, Mother Au Co, Tran Hung Dao, Ho Chi Minh, and many others.

Ancestor worship reflects the core concept of the Vietnamese people: "Su Tu Nhu Su Sinh, Su Vong Nhu Su Ton" (Death is like birth; the loss is like existence). Ancestors are perceived as constant presence on the family altar, providing daily encouragement and support to their descendants. While many religions tend to emphasize the spiritual realm and transcendence, ancestor worship focuses on the past with a keen eye on the present and the future. This folk belief involves rituals that often vary according to local customs and family traditions rather than conforming to strict, uniform practices (Dinh, 2020). Worship typically occurs on significant occasions such as the anniversaries of ancestors' deaths, holidays, the New Year, and other important family events. The commemoration of these anniversaries underscores the

intimate connection between ancestors and their living descendants, bridging the realms of the living and the deceased.

Furthermore, ancestor worship has evolved into a form of "filial piety," serving as the foundational value for every individual. The filial piety displayed by descendants is a cherished moral principle in Vietnamese beliefs about ancestor worship.

It can be affirmed that in the minds of the living, their ancestors are perceived as immortal beings. Vietnamese customs involve offering and performing ancestor worship rituals to communicate with and seek blessings from ancestors, or to express gratitude for successful endeavours. The essence of Vietnamese ancestor worship stems from the profound belief that a close and supportive connection exists between the living and the deceased.

In Vietnamese culture, the "Dam Tang" funeral rites are considered the most significant ceremony, as they reunite the deceased with their primary ancestors, allowing them to join the collective of ancestors. Following the funeral, the anniversary of the death holds great significance in the Vietnamese psyche. Due to the deep respect for ancestors, the Vietnamese consider funeral rituals closely linked with ancestor worship.

Beyond the rituals conducted within individual families and ancestral lineages, a "Tao Mo" practice involves cleaning and ornamentation of ancestral graves. Families and clans often visit these graves and make offerings to maintain and repair them, particularly during the Qingming New Year. The offerings at the gravesite are typically more straightforward than those performed at home. Before paying respects at the gravesite, individuals usually seek permission from the "Tho Cong" (the Land God). Visiting and tending to ancestors' graves serves a dual purpose: a display of filial piety by descendants and a reflection of the profound importance of graves in the life of the entire family and clan (Dinh, 2020).

This form of folk belief has deeply permeated and influenced the spiritual lives of all Vietnamese people, a fact acknowledged by the country's political institutions. It encompasses the nation's valuable cultural and moral principles, embodying the Vietnamese perspective on the world and human existence. Consequently, ancestor worship has a profoundly positive influence on the lives of individuals, communities, and the nation. This influence is conveyed through the value system inherent in ancestor worship. It manifests in activities aimed at shaping the Vietnamese people's personalities while addressing their spiritual needs.

3.2.2 Uniqueness in Ancestor Worship during the Nguyen Dynasty

In the spiritual and cultural realm of the Nguyen Dynasty, ancestor worship held a place of utmost significance, capturing the court's special attention. The construction of temples and mausoleums dedicated to the Nguyen ancestors, along with elaborate ritual ceremonies, stood out as distinctive features of this era.

The Nguyen Dynasty established a unique system of ancestral temples and burial customs within the Hue Imperial City, drawing on the rich tradition of Vietnamese ancestor worship and the influence of Chinese Confucian practices. These practices were also extended to the temples at the Nguyen Dynasty's mausoleums, tailored to this royal lineage's specific needs and circumstances (Huynh, 2012).

Emperors of the Nguyen Dynasty designated the "Nguyen Mieu" (the dynastic ancestral temple of the Nguyen Emperors) as the principal temple in their ancestral homeland of Gia Mieu, Thanh Hoa province (Figure 11). They also made dedicated efforts to establish a comprehensive temple system within the precincts of the Hue Imperial City and at the various mausoleums (Huynh, 2012). These temples are dedicated to ancestor worship and include Trieu Mieu, Thai Mieu, The Mieu, and Hung Mieu temple (Figure 7). Trieu Mieu

was built to commemorate the first ancestor of the Nguyen Lords, while Thai Mieu honours the Nguyen Lords before the Nguyen Dynasty. The Mieu houses the ancestral tablet of the Nguyen emperors, and Hung Mieu is dedicated to Nguyen Phuc Luan, the first emperor of the Nguyen Dynasty. These temples were strategically positioned on both sides of the central axis, in front of the Forbidden City and the main palace of Thai Hoa Dien, which served as the central hub for celebrations throughout the Dynasty (Hoang, 2003).



Figure 11: Nguyen Mieu temple (the ancestral temple of the Nguyen Dynasty) in Gia Mieu village, Thanh Hoa province.
Source: https://vanvn.vn/thanh-hoa-lo-khai-thac-da-anh-huong-quan-the-di-tich. Accessed on February 20, 2025.

Funerals and ancestor worship practices held a place of high esteem within the Nguyen Dynasty, being regarded as a poignant means for descendants to express their deep filial piety towards their ancestors (The National Department of History of Nguyen Dynasty, 2002, p. 823). The fundamental funeral and worship regulations were established as follows:

3.2.2.1 Ceremonies for the Funerals of the Emperors

The rituals of performing the emperor's funeral were highly elaborate and were described in detail in the literature. The process generally unfolds as follows:

After the Emperor's death, his body was placed in the Can Thanh Palace, where he had resided. His soul was then transferred from the corpse into a dummy called “Than Bach.” A sub-shroud ceremony was performed while the body was in bed, followed by a sacrifice made to the Palace. A grand shroud ceremony was celebrated in the eastern area of the Palace, after which another sacrifice was offered to the Palace. The emperor's body was then placed in a coffin, and the son (the designated heir) and royal princes participated, accompanied by high-ranking mandarins who wept and prostrated themselves twice. A further sacrifice is made to the Palace during this time.

Next, the cabinet announced the emperor's death to the citizens of the country. The body was processed to a private palace: for example, the Gia Long Emperor's body was taken to Hoang Nhan Palace, the Minh Mang Emperor's to Khanh Ninh Palace, and the Thieu Tri Emperor's to Bao Dinh, which was built in the 5th Thieu Tri year (1845) and located on the Northern bank of the Ngu Ha royal river.

To commemorate the success of the funeral, regulations were promulgated regarding funeral attire and the mourning period, as well as prohibitions on certain activities during the funeral, such as wearing festive costumes, entertainment, chanting, and weddings. Additionally, "metal books" and "incense protection" (representing the imperial wood imitation state) were prepared. Posthumous names were offered, which were reported to the Heavens and Earth at Nam Giao Esplanade, ancestral shrines, and Xa Tac Esplanade.

The Golden Book of the Nguyen Dynasty is a unique type of ancient bibliography, typically made from gold, silver, or gilded silver. It was used to

record the decrees and decisions of the king regarding royal affairs and ceremonies. These metal books were created for Huu Ty, who was responsible for implementing the ceremonies. The books were compiled either by the emperors themselves or by renowned writers and princes.

A funeral committee was established, composed of the highest-ranking mandarins from the court. This committee selected the burial date and prepared the necessary tools for the funeral procession, including the spirit and dragon car, along with other items. The highest-ranking mandarin announced the burial dates to honour the Heavens and Earth, and worship was conducted at temples and the Xa Tac Esplanade. A ceremonial announcement was made to the mausoleums regarding the forthcoming funeral.

The final ceremony before the funeral, known as the revelation ceremony, was held. The emperor's coffin was taken from the palace and transported on a dragon ship up the Huong River to the mausoleum. The ship was adorned with a white flag, and nine cannon blasts were fired. Royal family members, mandarins, and local citizens along the river's path were expected to pay their respects, facing the ship while weeping and praying for the emperor's safe passage.

Upon arrival at the mausoleum, a ceremony to lower the grave was conducted. This included an offering ceremony, where silk and spirits were presented, as well as the burning of an air seal and the covering of the wooden coffin lid. A stone sarcophagus was constructed, and the grave was filled to close it. Ceremonies were performed at the main temple of the mausoleum to express gratitude to the gods of the territories and to present the “Than Chu” votive tablet of the emperor (which was entrusted to a high-ranking mandarin for delivery). The “Than Bach” dummy was then buried alongside the “Than Chu” votive tablet, and the delegation returned to the Imperial City for worship at the private temple.

After the burial, the highest-ranking mandarin conducted a ceremony to secure the mausoleum, offering sacrifices to the Heavens and Earth, worshipping at temples, and visiting the Xa Tac Esplanade. Relatives and local communities also participated in rites of progression and auxiliary offerings for worship. The funeral for the emperor and royal family lasted 27 months, while the funerals for mandarins and ordinary citizens were gradually decreed (Phan, 2010, p. 24).

3.2.2.2 Worship and Ritual Ceremonies

The worship of ancestors, particularly for emperors and queens after their death, was a significant focus of the Nguyen Dynasty. Ceremonies dedicated to ancestor worship, held in the “Liet Mieu” (temples for the Nguyen ancestors) and mausoleums, were classified as the “Dai Tu” national ceremonies. These were equivalent to the national ritual ceremonies conducted at the Nam Giao Esplanade and Xa Tac Esplanade.

Annual ceremonies at the mausoleums and temples were solemnly held on the death anniversary of the emperor or queen, the Lunar New Year celebrations, and throughout the four seasonal festivals. Additional observances occurred on the monthly “Soc” day and “Vong” day (the 1st and 15th days of the lunar calendar). These ceremonies were presided over by the emperor, or by a high-ranking mandarin representing him (Phan, 2010, p. 25).

Understanding the traditional Vietnamese concept of death—specifically the belief in the eternity of the soul—is essential for comprehending the significance of the mausoleums of the Nguyen Emperors. This belief system fosters the idea of worshipping the deceased and influences various aspects of mausoleum architecture. The themes of worship and the perpetuation of the soul are materially manifested in the overall design of the imperial mausoleums of the Nguyen Dynasty, as demonstrated by the presence of statues of

mandarins, horses, and elephants strategically arranged within courtyards, mausoleum precincts, and worship spaces.

It can be said that while ruling the country, the Nguyen Emperors placed great importance on ancestor worship rituals. They believed that sincere ancestor worship contributed to the spiritual strength of the Dynasty, and it remains a cherished custom among the Vietnamese people.

3.2.3 Manifestations of the Feng Shui concept and Confucian ideology in the overall site planning of the Nguyen Emperor's mausoleums.

3.2.3.1 Fengshui-Form school of the Mausoleums

When discussing the concept of Fengshui, international scholars commonly distinguish between two schools: the Form School and the Compass School (Kryžanowski, 2019, p. 126; Mak & Ng, 2009, p. 131). Within the scope of this dissertation, only the Form School of Fengshui is examined, as the mystical and sacred nature of the Compass School is closely associated with the emperor's heavenly mandate (Baratta & Magli, 2021, p. 767; Mak & Ng, 2009, p. 131).

Accordingly, as observed in the diagrams illustrating the Fengshui concepts of the tombs of Emperor Gia Long and Emperor Minh Mang (Figures 103, 104), it can be recognized that:

The locations of the imperial tombs are always closely related to surrounding natural elements such as mountains, rivers, and lakes, and the Nguyen mausoleums were continuously planned in the southwest mountainous area upstream of the Huong River, highlighting the importance of natural topography in royal burial siting (Vo et al., 2025, p. 45). In front of the tomb, on both the left and right sides (as viewed from the central axis of the tomb facing forward), there are high mountains representing the Thanh Long (Blue Dragon) on the left and the Bach Ho (White Tiger) on the right; at the center in front is the frontal sector identified as Chu Tuoc (Phoenix), while at the rear,

aligned with the main axis, a major backing mountain function as Huyen Vu (Black Turtle). This Four-Symbol geomantic model "Ta Thanh Long, Huu Bach Ho, Tien Chu Tuoc, Hau Huyen Vu"—is explicitly stated as the ideal spatial scheme and is applied to Nguyen royal tomb landscapes (Hoang & Tran, 2015, p. 62; Le et al., 2022, p. 7). At the central area of this spatial composition lies the imperial tomb complex itself, and this balanced arrangement can be interpreted through the Five-Phases (wuxing) mutual-generation cycle—Wood → Fire → Earth/Soil → Metal → Water—with Earth/Soil occupying the stabilizing center (He, 2025, p. 15).

In addition, in front of (and on both sides of) these imperial tomb complexes are water ponds that serve as the Minh Duong ("Clean Water") water element — the Yin element corresponding to the Yang quality of the surrounding mountains and hills, according to feng shui doctrines on the relationship between mountain (*shan*) and water (*shui*) (Le et al., 2022, p. 7). In the Nguyen imperial tombs in Hue, such ponds and lakes are typically created through early site-preparation works—most notably the digging and shaping of lakes—and then set within the broader riverine landscape in front of the complexes, especially the Huong Giang River system at the Bang Lang River junction (Le et al., 2022, pp. 6–7).

Regardless of whether the central axis of the tombs faces east, south, or north, the Fengshui-Form School principal is consistently defined as "Dong vi Ta – Tay vi Huu" (the left side represents the East, and the right side represents the West), derived from the viewer standing on the main axis and facing the principal direction of the complex (Tran, 1999, p. 260).

From this coherent principle, the clusters of structures and architectural units within each tomb are arranged in a deliberate and hierarchical manner along the central axis and in strict left–right symmetry, with the main ceremonial buildings concentrated in the central zone and secondary components scattered on surrounding hills or near the lakes yet oriented toward

the core space, reflecting a clear gradation of spatial function (Le et al., 2022, pp. 8, 16). This hierarchical ordering, combined with the careful siting of built structures within the surrounding topography and garden landscape, creates a distinctive feature of Nguyen-dynasty imperial tomb architecture: an organic integration with the natural environment, both inside and outside each complex (Le et al., 2022, p. 16).

3.2.3.2 Confucian ideology in the overall site planning

The philosophical foundation of the Nguyen dynasty in Vietnam was embedded in the long-standing Vietnamese idea of *Tam Giao Dong Nguyen* ("the Three Teachings share the same origin"), which understands Confucianism, Buddhism, and Taoism as ultimately deriving from a common source and mutually complementary. This syncretic tendency is a recurring pattern of Vietnamese statecraft, where rulers harmonized the Three Teachings to organize society (Vo & Nguyen, 2020, pp. 68–70). Within this framework, however, the Nguyen court elevated Confucianism to the position of dominant state ideology, continuing the *Le–Nguyen* tradition in which Confucianism served as the official ideological basis for governance, social hierarchy, and ritual propriety (Vo & Nguyen, 2020, p. 73).

This principle is clearly manifested in the master planning of the Nguyen imperial mausoleums, where the three fundamental architectural components—the Tomb area (A), the Worship Temples area (B), and the Stele Hall area (C)—are organized along one or more central axes (Vo et al., 2025, p. 39). Although the imperial mausoleums of different emperors may vary in the number of central axes (one, two, or three), the axis-based ordering remains a consistent planning characteristic governing the whole spatial system (Vo et al., 2025, pp. 54–55).

As for the natural elements, the mountainous topography and river systems around the royal tombs could not be selected or rearranged to form

perfectly symmetrical compositions, so bilateral symmetry along the planning axes is primarily expressed through man-made components such as architectural structures, bridges, causeways, and planned ponds within the tomb precincts. This is evident at Minh Mang's Hieu Lang, where the main buildings are laid out symmetrically along the central axis, while other elements are dispersed on surrounding hills or near lakes, showing that symmetry is concentrated in the built core rather than imposed on the whole natural setting (Le et al., 2022, p. 8). In the early Nguyen imperial mausoleums—particularly in the case of Minh Mang's Hieu Lang—historical records indicate that large numbers of workers were mobilised to prepare the site, including clearing vegetation, levelling the ground, and digging lakes (Le et al., 2022, p. 9). This confirms that ponds and lakes inside the complexes were deliberately excavated and shaped, rather than merely inherited from the terrain. Moreover, historical terminology and descriptions show that bridges, lakes, and ponds could be natural or artificial, and that soil from lake-digging was used to create artificial mounds/hills for construction—further supporting intentional man-made reshaping to coordinate water bodies and landform with the axial plan (Vo et al., 2025, p. 49).

The strict symmetry and order mentioned above were applied most rigorously within the central zones of the imperial tombs. In other words, the closer one moves toward the core area, the more strictly the principles of symmetry and hierarchy in architectural planning are enforced, especially in the ritual and worship precincts where the density of construction is highest, and the layout is most tightly regulated. This hierarchical axial ordering is reflected in the way principal buildings are aligned on the spiritual central axis and paired symmetrically (Le et al., 2022, p. 16; Vo et al., 2025, p. 47). Conversely, as the layout extends outward from the centre, these symmetrical principles are gradually relaxed and applied more flexibly so as to harmonise

with the irregular and asymmetrical characteristics of the surrounding natural environment (Le et al., 2022, p. 16).

Therefore, the application of Confucian ideological and geomantic principles in the spatial planning of the Nguyen dynasty imperial tombs can be understood as relative rather than absolute, allowing for flexible adaptation to the topography and landform of each selected site, in line with Form-School feng shui practice that begins from the given configuration of mountains and water. The Nguyen court's preference for sites of the "Son Hoi Thuy Tu" type—mountains enclosing and water gathering in the centre—illustrates this terrain-first logic (Le et al., 2022, p. 7).

3.3 Similarities and Differences between the Imperial Mausoleum Architecture of the Nguyen Dynasty and that of previous feudal dynasties in Vietnam and China

3.3.1 Compared with Other Royal Mausoleums in Vietnam

For Vietnamese feudal dynasties and other nations influenced by Chinese civilization, constructing mausoleums for kings was essential for the survival of the Dynasty, as well as the prosperity and sustainability of society and lineage.

The Dinh (968-980 CE), Early Le (980-1009 CE), and Ly (1009-1225 CE) dynasties did not build mausoleums. The mausoleum of Emperor Dinh Tien Hoang (924-979) is said to be located on Ma Yen Mountain in Hoa Lu, Ninh Binh Province. Emperor Dinh Tien Hoang (Chinese: 丁先皇) was the founding emperor of the Dinh Dynasty and the Dai Co Viet nation in Vietnamese history. He is renowned for defeating 12 warlords, unifying the country, and becoming the first emperor of Vietnam. However, there is no reliable documentation to verify this claim. Historical texts such as "Viet Su Luoc" and "Dai Viet Su Ky Toan Thu" state that the Ly kings were buried in Tho Lang, in Dinh Bang, the hometown of Bac Ninh Province.

Viet Su Luoc (Chinese: 越史略) is a Vietnamese history book written in Chinese by an anonymous author from the Tran Dynasty. It is the earliest surviving chronicle of Vietnam. In contrast, Dai Viet Su Ky Toan Thu (Chinese: 大越史記全書) is a national history of Vietnam, also written in Chinese, and it takes the form of a chronicle. This work documents Vietnamese history from the legendary era of Kinh Duong Vuong in 2879 BC to 1675 during the reign of King Le Gia Tong of the Later Le Dynasty. It was first printed and published in 1697, making it the oldest official history of Vietnam to have survived intact, compiled by various historical officials of the Later Le Dynasty.

The Ly Dynasty did not permit the construction of tombs and temples; instead, they planted trees and designated a forbidden zone. Numerous investigations and studies have been conducted in the area believed to be the "Son Lang Cam Dia" (the forbidden land of the mausoleum) of the Ly Dynasty, but no traces of the Ly Kings' tombs have been discovered thus far. Consequently, the comparison of mausoleums among Vietnamese feudal dynasties is limited to the Ngo (939–965), Tran (1225–1400), Later Le (1428–1789), Lords Nguyen in Dang Trong (1558–1777 and as southern rulers until 1786), and Emperor Nguyen (1802–1945) dynasties.

Regarding location and construction, all mausoleums were built and planned according to Eastern Feng Shui principles. They follow laws related to natural geographical features such as mountains, lakes, and streams. Specifically, the main burial chamber, or "Huyen Cung," located at the center of the mausoleum's master plan, must be situated along the "Long Mach" (Dragon Vein). This adheres to the principles of "Son Trieu Thuy Tu" (Mountains bow, waters gather), "Tien An Hau Cham" (Front table, rear pillow), and "Ta Long Huu Ho" (Left Dragon, Right Tiger) (Phan, 2005, pp. 223–224).

For the Lords and Emperors of the Nguyen Dynasty, the mausoleum construction sites were more carefully planned and complied with specific regulations of the Imperial Mausoleum. In terms of naming, mausoleums often became the names of the areas or mountains where they were built.

The mausoleum of the Tran Dynasty (1225–1400) has been largely destroyed over the centuries, leaving only underground ruins and local legends. In contrast, the Le Dynasty mausoleum in Lam Kinh is part of a complex that features the Thai Mieu temple, which honors the Nguyen Lords as its central structure. Unlike other mausoleums, this one does not have a separate temple; worship takes place within the Thai Mieu temple itself. Lam Kinh is a historical site located 50 km northwest of Thanh Hoa city, in Lam Son town, Tho Xuan district, Thanh Hoa province, Vietnam.

When examining the mausoleum of the Nguyen Dynasty within the context of Vietnam's feudal Dynasty architecture, it becomes clear that the Nguyen mausoleum architecture represents a significant advancement. Each mausoleum is an independent structure that showcases a high level of integrity and unity, achieving a peak in design and style. This is evident in the scale, the number of architectural buildings, and the surrounding space of each mausoleum.

3.3.2 Compared with the Mausoleums of the Ming Dynasty (1368-1644) in China

Due to cultural and political circumstances of the time, the mausoleums of the Nguyen Dynasty displayed notable influence from the Ming imperial mausoleums of China, particularly in naming practices and in the tripartite spatial organization of the complexes. Emperor Gia Long named his mausoleum Thien Tho Lang after Mount Thien Tho, recalling the Ming precedent of associating mausoleum names with surrounding mountains, as exemplified by the Shisan Ling (十三陵) near Beijing. This influence is also

evident in the division of the complexes into three functional zones - burial, worship, and management (Phan, 2010, p. 25) - a principle already codified under the Ming Dynasty. Nevertheless, the Nguyen mausoleums did not adopt the Ming model of collective concentration. After Thien Tho Lang, successive emperors established Hieu Lang, Xuong Lang, Khiem Lang, Boi Lang, Tu Lang, An Lang, and Ung Lang, reflecting a distinctive sequence unrelated to Chinese Dynasties. The Nguyen emperors further alternated between compound names in the early period (e.g., Thien Tho) and single-character names thereafter (e.g., Hieu, Xuong, Khiem), underscoring both initial borrowing and subsequent divergence from the Ming system. Moreover, Nguyen mausoleums developed unique architectural features: while the Hieu Lang Mausoleum of Emperor Minh Mang integrates the temple, tomb, and stele hall along a unified axial line (Phan, 2010, pp. 25–26), the Xuong Lang Mausoleum of Emperor Thieu Tri separates the temple from the tomb and stele hall, reflecting a distinct planning principle.

However, the Ming Dynasty mausoleums in China are massive in scale and have a unified style with a single axis; for example, the Changling Tomb (built from 1409 to 1427 in Beijing) (Figure 12), the largest of the Ming tombs.

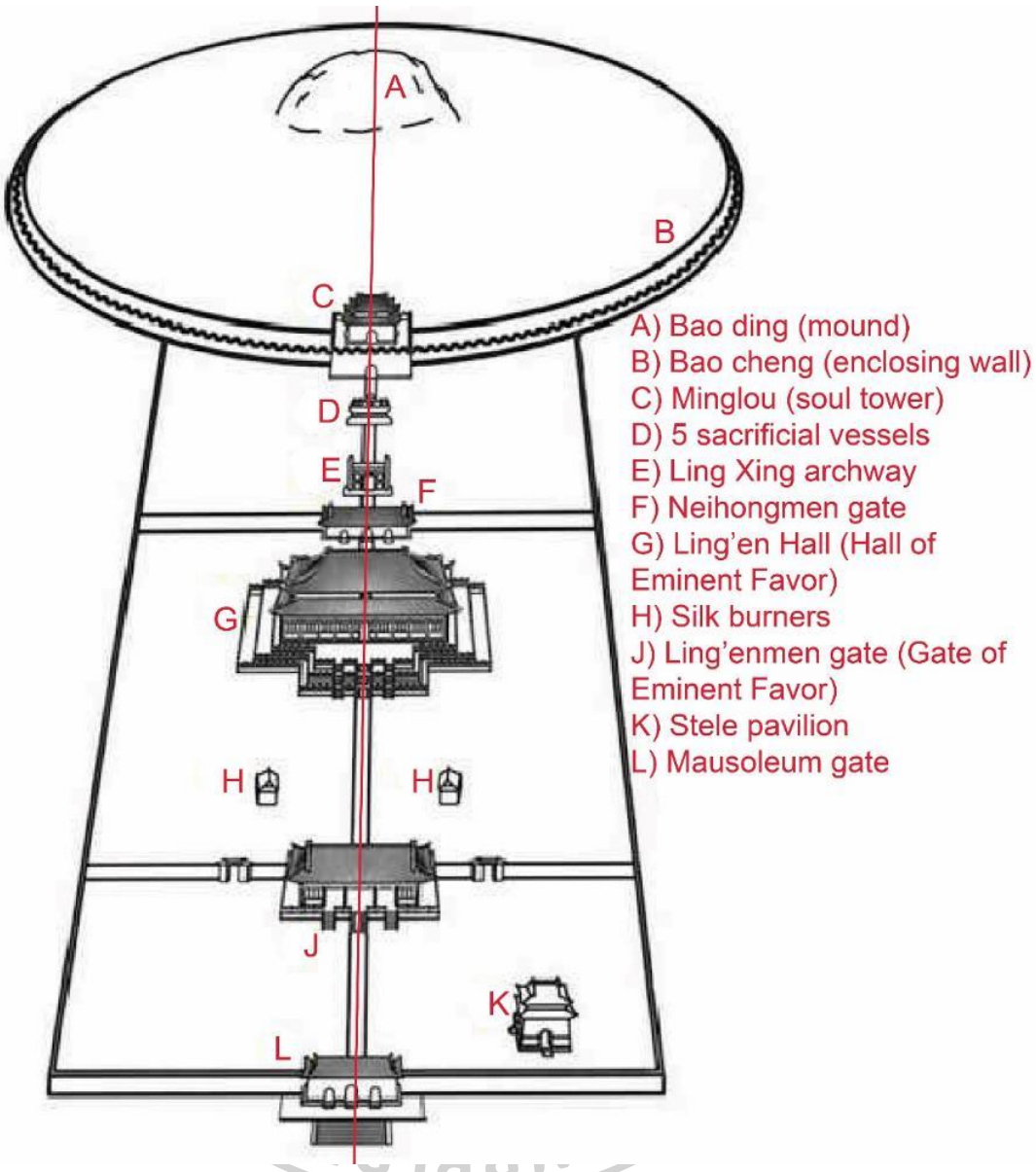


Figure 12: Layout of Changling tomb (1409 to 1427), Beijing
Source: https://www.orientalarchitecture.com/sid/688/china/beijing/changling-tomb

On the other hand, the mausoleums of the Nguyen Emperors in Hue display a diverse architectural style. Each mausoleum has unique characteristics and distinctive features that highlight Southern elements. Notably, they incorporate the natural landscape by utilizing rivers and water features to create a harmonious connection between the outer and inner architectural spaces, bringing the structures closer to nature. Furthermore, these mausoleums are situated not far from the capital and are in close proximity to the people, reflecting a reliance on the community for their continued significance and survival.

3.4 Conclusion

Despite facing a challenging civil war against the Tay Son Dynasty, Nguyen Phuc Anh ultimately emerged victorious. He established the Nguyen Dynasty and began constructing the capital in Hue. The Tay Son Dynasty's excavation of the ancestral tombs of the Nguyen family motivated Nguyen Phuc Anh to seek revenge. After ascending to the throne, he avenged the Tay Son Dynasty and undertook the restoration and renovation of the tombs of the nine Nguyen Lords.

The Nguyen Dynasty meticulously planned the capital city of Hue, adhering to the principles of Eastern Feng Shui philosophy. The Citadel was located along the left bank of the Huong Giang River, with the emperors' mausoleums strategically arranged in the mountains to the west and southwest of the Citadel. Within the Citadel, temples, pagodas, and shrines are scattered throughout the area.

Ancestor worship is a traditional belief that reflects the cultural identity of the Vietnamese people. This practice involves honouring ancestors as spiritual guardians who watch over and protect their descendants, serving as a demonstration of gratitude and respect for the deceased. Ancestor worship in

Vietnam is expressed through significant rituals, including funerals, death anniversaries, and To Mo (the cleaning and decorating of ancestral graves). This belief system embodies valuable cultural and moral principles, reflecting the Vietnamese worldview and understanding of human existence. Consequently, ancestor worship positively impacts the lives of individuals, communities, and the nation. Its influence is evident in the values instilled through ancestor worship, which help shape the character of the Vietnamese people and address their spiritual needs.

During their reign, the Nguyen Emperors placed great importance on rituals associated with ancestor worship and established specific regulations regarding funerals and the veneration of the Emperor and Queen. The Nguyen Dynasty believed that respectful ancestor worship bolstered the spiritual strength of the Dynasty and highlighted the beautiful customs of the Vietnamese people. This religious practice also significantly influenced the design of the mausoleums of the Nguyen Dynasty Emperors, resulting in a distinctive and memorable architectural style.

In the broader historical context of Vietnamese royal funerary architecture, the mausoleums of the Nguyen Dynasty represent a significant milestone in development. In contrast to earlier dynasties, such as the Tran and Le, which left behind simpler structures, the Nguyen emperors established a highly developed and individualized architectural style. Drawing inspiration from both indigenous traditions and the monumental style of the Ming imperial tombs, the Nguyen mausoleums stand out for their stylistic diversity, integration with natural landscapes, and innovative architecture.

Each Nguyen mausoleum functions as a complete complex, combining burial, worship, and other purposes within a harmonious layout. While they borrowed certain elements, such as axial planning and naming conventions, from Chinese models, the Nguyen mausoleums in Hue exhibit a localized identity characterized by their sensitivity to the terrain, emphasis on water

features, and proximity to the Citadel and its inhabitants. This unique fusion not only distinguishes the Nguyen mausoleums from their predecessors but also signifies the culmination of Vietnam's royal tomb-building tradition, reflecting a refined aesthetic, political symbolism, and cultural adaptation in the early Nguyen period.

Chapter 4

Mausoleum Layout and Architecture

This chapter analyzes the layout and architecture of the early Nguyen Dynasty mausoleums, focusing on those of Gia Long, Minh Mang, and Thieu Tri. Each mausoleum is examined to clarify the principles of overall spatial organization and the relationship between architecture and the natural landscape. Additionally, this chapter presents the main architectural components that comprise the mausoleums.

4.1 Construction History of the Emperors' Mausoleums

The Nguyen Dynasty, which lasted 143 years (1802-1945), saw the reign of 13 emperors. However, due to various political, economic, and social factors during the Nguyen Dynasty, only seven mausoleums remain, each with its own scale and architectural style. These seven mausoleums belonged to the first, second, third, fourth, fifth, ninth, and twelfth Nguyen emperors (Table 7, Figure 13).

Table 7. List of the remaining Emperor mausoleums

No.	Name of Mausoleums		Emperors	Years of Construction	Locations	Distance from the Citadel
	Names	Chinese				
1	Thien Tho Lang	天授陵	Gia Long, the first	1814-1820	Dinh Mon village, Thua Thien Hue province.	16 km
2	Hieu Lang	孝陵	Minh Mang, the second	1840-1843	An Bang village, Thua Thien Hue province.	12 km
3	Xuong Lang	昌陵	Thieu Tri, the third	1848	Cu Chanh village, Thua Thien Hue province.	8 km
4	Khiem Lang	謙陵	Tu Duc, the fourth	1864-1873	Duong Xuan Thuong village, Thua Thien Hue province.	7 km
5	An Lang	安陵	Duc Duc, the fifth	1899-1906	Tay Nhat village, Thua Thien Hue province.	3 km
6	Tu Lang	思陵	Dong Khanh, the ninth	1907-1917	Duong Xuan Thuong village, Thua Thien Hue province.	7 km
7	Ung Lang	應陵	Khai Dinh, the twelfth	1920-1931	Chau Chu Mountain, Thua Thien Hue province.	10 km

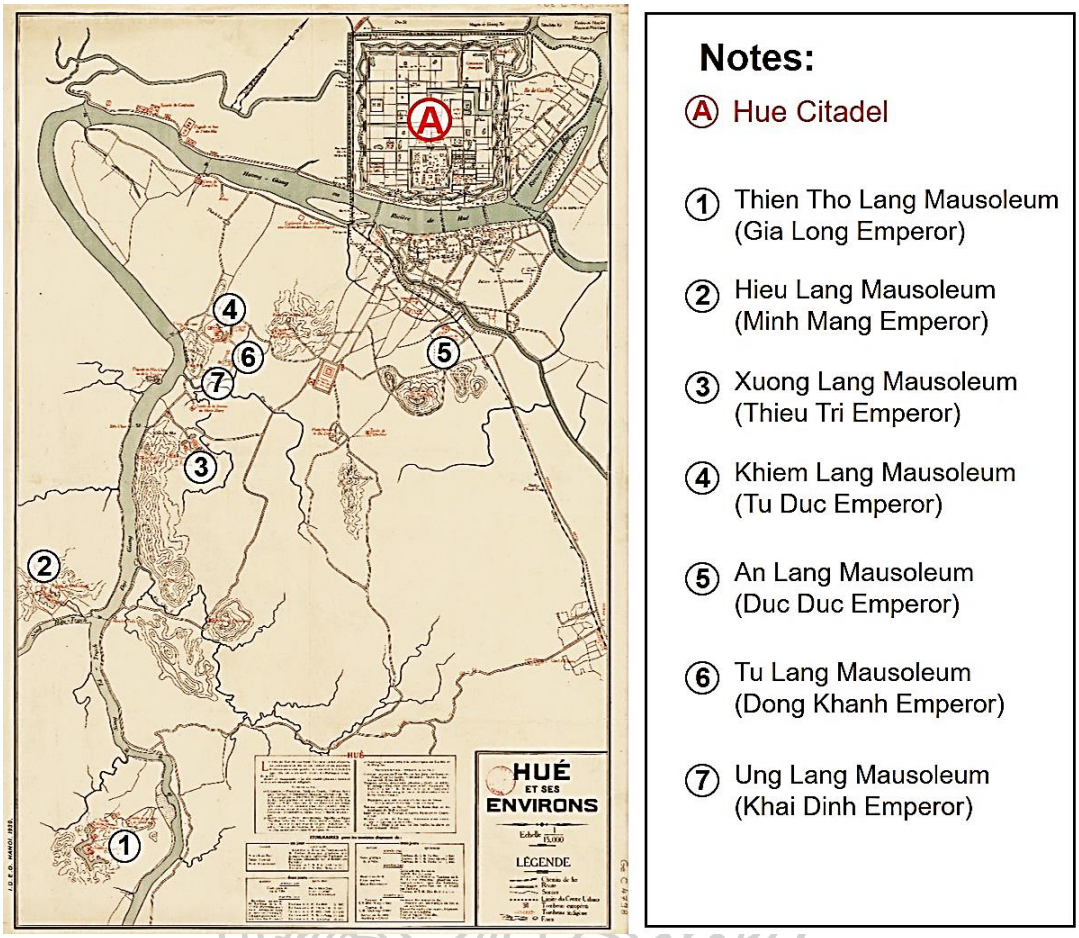


Figure 13: Locations of the Nguyen Dynasty's mausoleums associated with the Citadel

Sources: National Library of France, Department of Cartography and Planning, GE C-4798, 1930. https://gallica.bnf.fr/ark:/12148/btv1b530647505.r=Hu%C3%AA?rk=321890;0. Accessed on October 21, 2024, & Author's modifications

Emperor Gia Long was the first emperor of the Nguyen Dynasty. After restoring the imperial tomb complex for Lord Nguyen and the royal family, which had been ravaged during the wars (The National Department of History of Nguyen Dynasty, 2002, p. 466), he selected a suitable site within the area designated by his ancestors for the Nguyen family to build his mausoleum, known as the Thien Tho Lang Mausoleum. This mausoleum is located approximately 16 kilometres southwest of the center of Hue City, marking the farthest point from the Hue Citadel. Construction began in 1814 and was completed in 1820 (The National Department of History of Nguyen Dynasty,

1960, p. 56).

During the reign of the second emperor, Minh Mang, the courtiers identified suitable land for the construction of the Emperor's mausoleum, named Hieu Lang (The National Department of History of Nguyen Dynasty, 2007b, p. 680). It was constructed in 1840 and completed in 1843 (The National Department of History of Nguyen Dynasty, 2007c, pp. 190–191). The third emperor, Thieu Tri, who was a son of Emperor Minh Mang, played a significant role in completing the Hieu Lang Mausoleum according to his father's original plans (The National Department of History of Nguyen Dynasty, 1960, pp. 56–57). The site of the mausoleum extends from the slopes of Kim Phung Mountain, the highest mountain in the region, to the Bang Lang Junction, where the Huu Trach and Ta Trach Streams converge to form the Huong Giang River, which flows toward the center of Hue City. This location is approximately 12 km Southwest of Hue City.

Emperor Thieu Tri reigned for seven years before his passing. His son, Emperor Tu Duc, succeeded him and constructed the Xuong Lang Mausoleum for his father, located about 8 kilometers southwest of Hue City. The construction of this mausoleum began in 1847 and was completed in 1848 (The National Department of History of Nguyen Dynasty, 1960, pp. 57–58).

These three imperial mausoleums of the Nguyen Dynasty were built during Vietnam's independence (1802-1848) and reflect traditional Vietnamese architectural identity.

During the reign of the fourth emperor, Tu Duc, the courtiers identified a suitable site for his mausoleum, Khiem Lang, on the right bank of the Huong Giang River (The National Department of History of Nguyen Dynasty, 1960, pp. 58–60). It is located approximately 7 km from Hue City. Construction began in 1864 and was completed in 1873, while the emperor was still alive (The National Department of History of Nguyen Dynasty, 2007d, pp. 1073–

1074). Even though Vietnam had been under the French since 1885, the courtiers of the Nguyen Dynasty continued to build mausoleums for succeeding emperors. During this time, the architecture was influenced by Western styles, blending them with traditional Vietnamese design. Three royal mausoleums were built during this period, namely those of the fifth, ninth, and twelfth emperors.

The An Lang Mausoleum of the fifth emperor, Duc Duc (The National Department of History of Nguyen Dynasty, 1960, p. 60), is located 3 km south of Hue City. It was built between 1899 and 1906. The Tu Lang Mausoleum of the ninth emperor, Dong Khanh, was constructed from 1916 to 1917 and is situated near the mausoleum of the fourth emperor, Tu Duc (The National Department of History of Nguyen Dynasty, 1960, p. 60). The Ung Lang Mausoleum of the twelfth emperor, Khai Dinh (Tran, 2010), is located 10 km southwest of Hue City, with construction taking place from 1920 to 1931.

In later periods, Emperor Duc Duc's descendants, Emperor Thanh Thai and Emperor Duy Tan, the tenth and eleventh succeeding rulers, were buried and worshipped at the An Lang Mausoleum.

4.2 Terminologies and Conceptions

Based on historical documents from the Nguyen Dynasty, there are 32 terms related to the architectural features of the mausoleums (Quoc Su Quan Trieu Nguyen, 2006, 2007; Noi Cac Trieu Nguyen, 1993; see Table 8). Among these, two common nouns directly refer to the concept of a mausoleum, three pertain to the ideas of a spiritual axis and underground spatial arrangement, and twenty-six describe the visible elements that comprise the mausoleums and their associated buildings. Consequently, the analysis of the constituent elements of the mausoleums primarily focuses on three main concepts: the Tomb area, the Worship Temple area, and the Stele Hall area (Vo et al., 2025).

Table 8. List of terminologies according to the historical documents of the Nguyen Dynasty

No.	Terminology			Conceptions and Functions
	Vietnamese	Chinese	English	
1	Lăng Tẩm	陵寢	Mausoleum	The burial and worship place for emperors and queens consists of three main elements: the Tomb area, where the coffin is buried; the Worship Temple area, which houses the votive tablet and worships the soul; and the Stele Hall area, which records the merits and messages of the emperor.
2	Sơn Lăng	山陵	Tomb at mountain area	The tombs of the emperors and royal family are located in the mountainous area.
3	Thần Đạo	神道	Spiritual-central axis	The spiritual axis at the center of the emperor's mausoleum is also the axis for planning and construction according to the principle of absolute symmetry.
4	Toại Đạo	隧道	Underground tunnel	The underground tunnel was used to transport the emperor's coffin to the grave and was filled in after the burial was completed.
5	Huyền Cung	玄宮	Grave	The underground section of the tomb housed the emperor's coffin.
6	Bửu Thành	寶城	Tomb area	The tomb area, where the emperor's body was buried, includes the grave, the underground tunnel, and the enclosing wall.
7	Tẩm Điện	寢殿	Worship Temple area	It was for ritual worship activities to commemorate the deaths of the emperor and queen, and includes the main temple, sub-temples, auxiliary houses, and the main gate, serving as the entrance to the worship area.

No.	Terminology			Conceptions and Functions
	Vietnamese	Chinese	English	
8	Bi Đình	碑亭	Stele Hall area	It identifies the square stele hall, which contains a large stone stele that records the emperor's merits and messages.
9	Chính Tẩm	正寢	Main Temple	It holds votive tablets, worshipping the souls of the emperor and queen, and conserving and displaying worship items.
10	Bái Đình	拜庭	Courtyard	It is located in front of each worship temple and tomb area of the mausoleum and was used by military officials during royal ceremonies.
11	Trụ Biểu	柱表	Landmark Tower	It is arranged symmetrically on the front side or both sides of the stele hall area and serves the function of marking the terrain and reminding people of the sanctity of the mausoleums.
12	Môn	門	Gate	It features three passages, known as Tam Quan (with doors), arranged along the central front wall of the worship temple area. The gate features one path (with doors) that typically serves as the main entrance to the tomb area or as a side entrance to the worship temple area.
13	Phường Môn	坊門	Symbol Gate	The gate features three passages (without doors), typically made of bronze or marble, adorned with elaborate decorations. It serves as a welcoming or symbolic gate.
14	Phối Điện	配殿	Sub Temple	The sub-temples are symmetrically positioned in front of the main temple, on either the left or right side. They are simple and small, used for worshipping the emperor's courtiers during his

No.	Terminology			Conceptions and Functions
	Vietnamese	Chinese	English	
				reign.
15	Phối Viện	配院	Sub House	The sub-houses are symmetrically located on the left and right sides at the back of the main temple and share the same scale and architectural features as the sub-temples. They serve as storage for clothes and furniture, as well as a place to display offerings for worship ceremonies.
16	Lâu	樓	Pavilion	The building features a square floor plan on a two-level foundation, consisting of two stories with tiered, yellow-glazed tube-tiled roofs aligned along the central axis behind the worship temple area or the stele hall area.
17	Các	閣	Pavilion	The building has a rectangular floor plan across one or two levels. It features two stories with tiled tiered roofs, positioned on either the right or left side of the central axis.
18	Đình	亭	Open House	The small building features an octagonal plan, lacks doors, and is roofed with flat or glazed tube tiles. It serves as a space for sightseeing and relaxation.
19	Quán	觀	Observing Port	The small building features a quadrangular plan and a tiled roof, with no doors. It serves as a place to enjoy the scenery and the breeze.
20	Tạ	榭	Floating House	The small building is situated partly on land and partly floating on the water, located near the edge of the lake in the mausoleum. It serves as a place to

No.	Terminology			Conceptions and Functions
	Vietnamese	Chinese	English	
				admire the scenery, read, and relax during hot weather.
21	Phòng	房	Chamber	The small rectangular sub-house has a simple structure and accommodates military officers guarding the mausoleum and servants providing support and living arrangements.
22	Trai	齋	Study House	The small rectangular sub-house, with its simple structure, was used by the emperor during his period of vegetarianism, as well as for reading and studying.
23	Sở	所	Office	The public building, with its scale and architectural features similar to those of the sub-houses, is used for military officers and soldiers.
24	Hiên	軒	Part House	The small building serves as a resting place during walks or as a shelter from the rain and sun.
25	Khố	庫	Store	The warehouse stores furniture for worship and daily activities.
26	Trù	廚	Kitchen	The kitchen prepares meals and offerings for military officials and staff at the mausoleum.
27	Kiều	橋	Bridge	The stone and brick bridge provides access across the lake in the mausoleum area.
28	Hồ	湖	Lake	The lakes, whether natural or artificial, are essential water sources, providing water for daily use and irrigation in mausoleums.
29	Trì	池	Pond	The ponds, whether natural or artificial, are smaller than lakes and serve as essential water elements in mausoleums, similar to lakes.
30	Sơn	山	Mountain	The natural mountains located far from the mausoleum help with

No.	Terminology			Conceptions and Functions
	Vietnamese	Chinese	English	
				spatial orientation. Artificial mountains and hills are often created by filling soil during the process of digging lakes, resulting in high mounds on which buildings are constructed.
31	Đảo	嶋	Peninsula	The artificial peninsula is located at the lake's edge, featuring a raised section that extends toward the water's surface, where a floating pavilion is constructed.
32	La Thành	羅城	Outermost-surrounding walls	The outermost wall of the mausoleum serves as a defensive barrier, protecting the interior from the exterior.

From the early days of the Nguyen Dynasty, the imperial family developed a distinctive system of ancestral temples and burial customs within the Hue Imperial City. This system was influenced by the rich tradition of Vietnamese ancestor worship and the principles of Chinese Confucianism. These practices were also applied to the temples at the mausoleums of the Nguyen Dynasty, adapted to meet the specific needs and circumstances of the royal lineage (The National Department of History of Nguyen Dynasty, 2007b, p. 680).

4.3 Mausoleum Layout

This study aims to examine the early three mausoleums of the Nguyen emperors, namely those of Emperor Gia Long, Emperor Minh Mang, and Emperor Thieu Tri. Emperor Gia Long ordered the repair of the ancestral mausoleums of the Nguyen Lords and their consorts (The National Department of History of Nguyen Dynasty, 2002, p. 466). He subsequently built the Thien Tho Lang Mausoleum at the farthest southwest point of the Hue Citadel (The National Department of History of Nguyen Dynasty, 1960, p. 56). His son,

Emperor Thieu Tri, completed the Hieu Lang Mausoleum of Emperor Minh Mang according to his father's plan. This mausoleum stretches from Kim Phung Mountain to the Bang Lang Junction, where the Huu Trach and Ta Trach Streams merge to form the Huong Giang River, or Perfume River, flowing towards Hue City. Emperor Tu Duc later constructed the Xuong Lang Mausoleum for Thieu Tri.

The Nguyen Dynasty believed that thoughtful ancestor worship contributed to the spiritual strength of the Dynasty. This religious practice has profoundly influenced the design of the mausoleums of the Nguyen Dynasty's emperors, imparting them with an exceptionally unique and memorable style.

A secretive principle known as Feng Shui (風水) was applied for urban planning and the construction of imperial mausoleums. This principle was likely continuously implemented up until the Nguyen Dynasty in Vietnam. The essence of Feng Shui remains complex and has yet to be fully deciphered. However, in the case of the imperial mausoleums of the Nguyen Dynasty in Vietnam, Feng Shui is understood as the interaction between two fundamental elements - Wind (風) and Water (水) - which contribute to the prosperity and harmony of the capital city and ensure the longevity of the Dynasty.

Therefore, all Nguyen Dynasty mausoleums were built in the southwestern mountainous area of the Hue Citadel, where numerous hills, mountains, rivers, and streams exist. The mountains are the first to receive water from the sky, channelling it into the rivers. The difference in elevation between the mountains and rivers creates air pressure variations, generating wind, which helps purify the air in the land and the space where the mausoleums are located. Indeed, each mausoleum corresponds to a prominent mountain and a major river. Additionally, large water reservoirs were often placed in front of the imperial mausoleums to store natural water and,

seemingly, to capture cool breezes, maintaining a serene and refreshing atmosphere for the worship spaces.

The three mausoleums of Emperor Gia Long, Minh Mang, and Thieu Tri have similarities and differences in locations, directions, sizes, numbers of axes, and architectural arrangement (Table 9).

Table 9. Comparison of the three mausoleums

Criteria	**Thien Tho Lang of Emperor Gia Long**	**Hieu Lang of Emperor Minh Mang**	**Xuong Lang of Emperor Thieu Tri**
Water to the front	Man-made pond	Huu Trach River	Man-made pond
Area and boundary wall	2,875 hectares, without outer boundary walls (Including the mausoleum of Emperor Gia Long and the mausoleums of his family members)	500 hectares with outer boundary walls	6 hectares, without outer boundary walls
Facing direction	Southwest	Southeast	Northwest
Axis/Axes	3 axes, each for the Tomb area (A) at the center, Worship Temple area (B) to its right, and Stele Hall area (C) to its left	1 axis for A (Tomb area), B (Worship Temple area), and C (Stele Hall area) aligned from inner to outer	2 axes, one for A (Tomb area) and C (Stele Hall area), and the other for B (Worship Temple area)

The locations of the three mausoleums are similar, with water to the front and mountains to their rear. The mausoleum of Emperor Gia Long is surrounded by 36 hills and mountains, among which Thien Tho Son Mountain is the largest and serves as a landmark for the mausoleum.

Meanwhile, the mausoleum of Emperor Minh Mang is located on Hieu Son Mountain, the highest in the area, to its rear. The mausoleum faces the direction of the Huu Trach River to the southeast.

On the other hand, the mausoleum of Emperor Thieu Tri is backed by the region's highest peak, Thuan Dao Mountain. Like the mausoleum of Emperor Gia Long, it lacks outer walls, as it is believed to be naturally protected by the surrounding hills and mountains.

4.3.1 Axis/Axes

The three main areas - the Tomb area (A), Worship Temple area (B), and Stele Hall (C) - are arranged in distinct configurations in these three case studies. In Emperor Gia Long's Mausoleum, these elements are positioned along three parallel axes, while in Emperor Minh Mang's Mausoleum, they are aligned along a single axis. In contrast, Emperor Thieu Tri's Mausoleum features these areas arranged along two parallel axes. The mausoleum of Emperor Thieu Tri can be described as a balanced blend of the mausoleums of Emperor Gia Long and Emperor Minh Mang (Figure 14) (The National Department of History of Nguyen Dynasty, 2007d, p. 71).

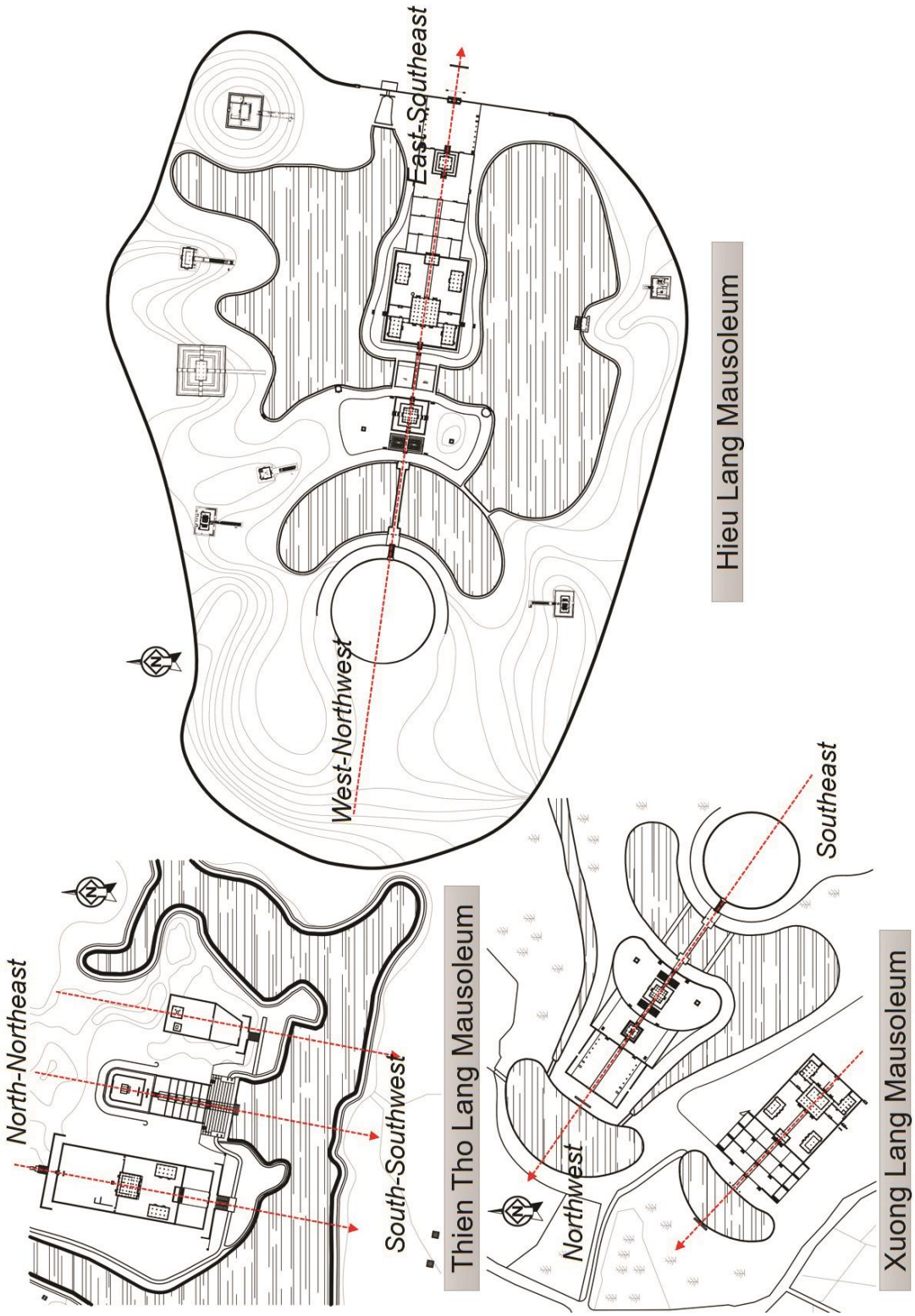


Figure 14: Comparison of the directions and axes of the three mausoleums
Source: Adapted by Author in 2025 based on a drawing of Wasada Heritage Institute

4.3.2 Architectural Arrangement

The architectural characteristics of the three elements (A, B, and C) at Emperor Minh Mang's and Emperor Thieu Tri's mausoleums share similarities and differ from those at Emperor Gia Long's Mausoleum.

The mausoleum of Emperor Gia Long is divided into three main constituent areas set along three parallel axes for the Tomb area (A), the Worship Temple area (B), and the Stele Hall area (C). The mausoleum of Emperor Minh Mang only has the Than Dao spiritual axis at the center, divided into three main sections facing southeast. Starting from the inner to the outer, it includes the Tomb area (A), the Worship Temple area (B), and the Stele Hall area (C). While the mausoleum of Emperor Thieu Tri (Xuong Lang) is organized along two parallel centripetal axes, from interior to exterior. These main areas include the Tomb area (A) and the Stele Hall area (C) on the right spiritual axis, and the Worship Temple area (B) on the left spiritual axis. In scale and architecture, the structures closely resemble those of Emperor Minh Mang's Mausoleum, though they are slightly smaller and less complex.

The mausoleums of Emperor Gia Long, Emperor Minh Mang, and Emperor Thieu Tri are detailed as follows.

4.3.3 Mausoleum of Emperor Gia Long

The Mausoleum of Emperor Gia Long, the first ruler of the Nguyen Dynasty, is officially named Thien Tho Lang with a total area of 2,875 hectares, surrounded by 36 hills and mountains, among which Thien Tho Son Mountain is the largest and serves as a front screen and landmark for the mausoleum. The mausoleum has no outer-surrounding wall and is divided into three main constituent areas set along three parallel axes: the Tomb area (Figure 15, A area), the Worship Temple area (Figure 15, B area), and the Stele Hall area (Figure 15, C area), all of which face southwest (Figures 15-19).

The Tomb area is where the corpses of Emperor Gia Long and Queen Thua Thien Cao Hoang Hau are buried. It is situated on the middle spiritual-central axis and features a rectangular shape, enclosed by two defensive wall layers made of brick. The inner wall measures 30 meters in length, 24 meters in width, and has a height of 3.16 meters, featuring an entrance. The outer wall is 40 meters long, 31 meters wide, and stands 3.56 meters high, complete with a bronze door. The tombs (refer to Figure 15, number 1) are built in a two-stone adjacent-roofed house that includes a tiled courtyard (Figure 17). In front of the outer wall layer, there is a seven-stepped tiled courtyard (number 2). The central axis of the aisle is paved with granite. At each end of the courtyard, there are two symmetrical rows of stone statues depicting mandarins, elephants, and horses.

The Worship Temple area is located on the right-hand side axis parallel to the axis of the Tomb area. The area is enclosed by a rectangular wall measuring 102 m in length, 19 m in width, and 2.5 m in height. The main temple, Minh Thanh Dien (Figure 15, number 3 and Figure 18), features a twin-ridge beam style and is placed at the center of the area, facing south. The Nghi Mon main gate (Figure 15, number 4) is located at the central front wall with two sub-temples, Ta Tung Tu (Figure 15, number 5) and Huu Tung Tu (Figure 15, number 6), to its front left and right-hand sides. The altars of the Emperor and Queen are located in the central compartment of the main temple. Two sub-buildings, Ta Tung Vien (Figure 15, number 8) and Huu Tung Vien (Figure 15, number 7), are constructed on the main temple's back left and right-hand sides. The buildings kept clothes and worship items for the Emperor and Queen. One more back-sub gate (Figure 15, number 9) connects to the outer space at the central back wall. In front of the worship temple lies a tiled courtyard with a central aisle paved in granite.

The Stele Hall area is situated on the left-hand side axis along the parallel axis of the Tomb area. The main stele hall, named Bi Dinh (Figure 15,

number 10), features a square building with two roof layers. Brick walls enclose all four sides of the square stele hall, and the courtyard of the stele hall area measures 30 m wide and 42 m long. In the center of the square stele hall stands a stone stele inscribed with a Chinese character by Emperor Minh Mang in praise of his father. All the inscriptions on the heart of the stele are covered with gold plating. The stone stele is built on a pedestal. Additionally, there is a small stone stele altar (Figure 15, number 11) that stands 1.2 meters high, dedicated to the earth genie, located on the right-hand side of the square stele hall. Furthermore, two landmark towers, Tru Bieu (Figure 15, number 12), are positioned at the forefront of the three main areas and are visible from all directions.

มหาวิทยาลัยศิลปากร

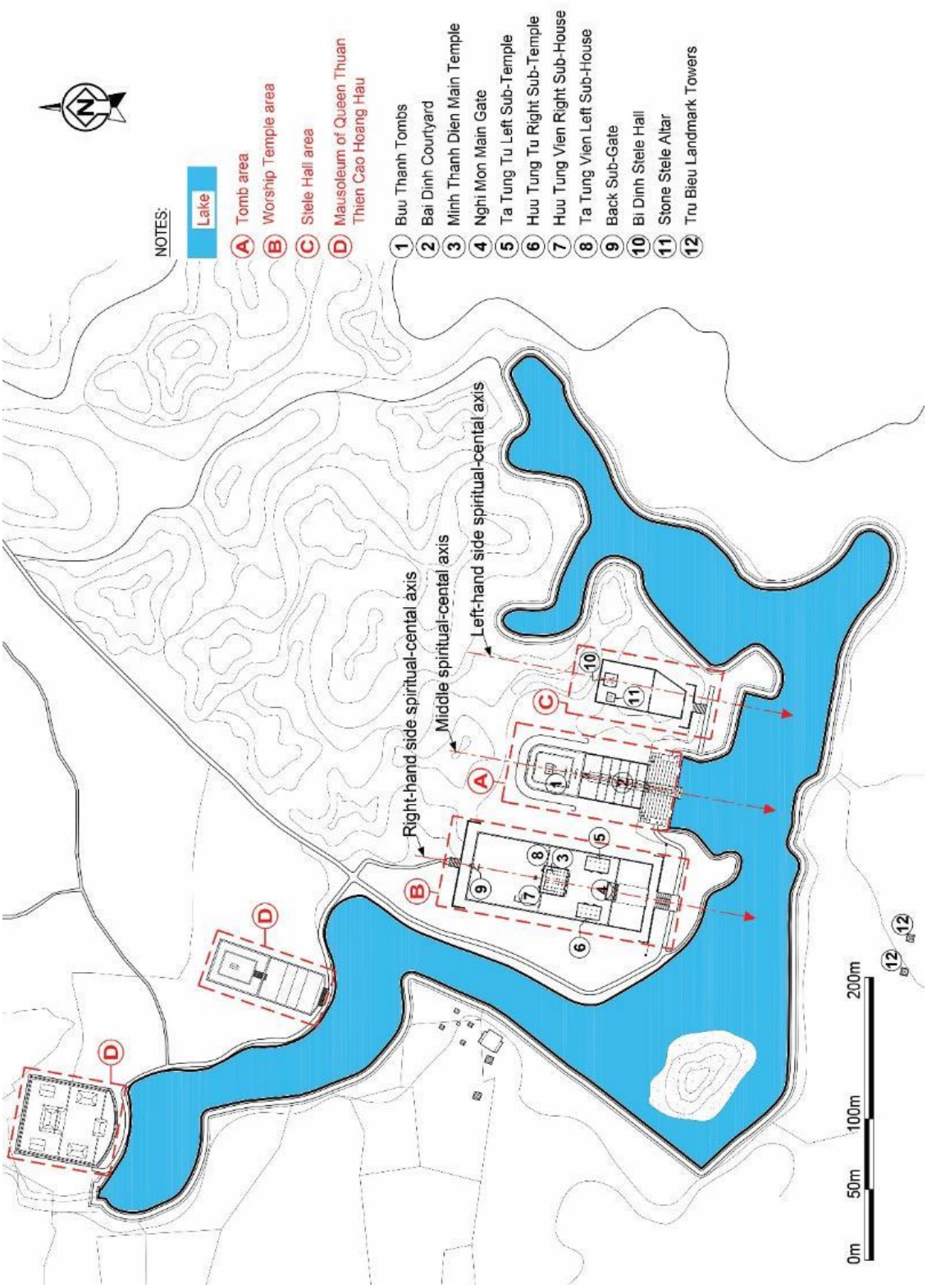


Figure 15: Site plan of Emperor Gia Long's mausoleum (Thien Tho Lang mausoleum)

Source: Adapted by Author in 2025 based on a drawing of Wasada Heritage Institute



Figure 16: Aerial photograph of Emperor Gia Long's mausoleum
Source: https://hidicar.com/travel-guide/lang-vua-gia-long-hoanh-trang-be-the.html.
Accessed on October 20, 2024



Figure 17: Tombs of Emperor Gia Long (right) and Queen Thua Thien Cao Hoang Hau (left)
Source: https://kienthuc.net.vn/kho-tri-thuc/ngam-dien-mao-lang-mo-cac-vua-nha-nguyen-100-nam-truoc-1019807.html. Accessed on October 20, 2024.



Figure 18: Minh Thanh Dien main temple of Emperor Gia Long's mausoleum
Source: Photo by Author (2020)



Figure 19: The tomb area of Emperor Gia Long's mausoleum
Source: https://www.flickr.com/photos/143243747%40N04/51944934031/?utm.
Accessed on October 10, 2025.

The mausoleum also contains several tombs of the emperor's family members. One notable example is the Thien Tho Huu Lang Mausoleum, which belongs to Queen Thuan Thien Cao Hoang Hau, the second wife of Emperor Gia Long. This mausoleum was built by Emperor Minh Mang to honor his

biological mother. This tomb area is located to the north and set apart from the main tomb area. Because it was not a part of Emperor Gia Long's original construction plan, this item will not be considered an original constituent element of this mausoleum.

4.3.4 Mausoleum of Emperor Minh Mang

The Mausoleum of Emperor Minh Mang, the second emperor of the Nguyen Dynasty, spans a total area of 500 hectares, with the central section measuring approximately 15 hectares (Figures 20, 21). In 1840, Hieu Son Mountain, the tallest mountain in the area, was selected as a landmark behind the mausoleum. Shortly thereafter, the mausoleum was named Hieu Lang (Figures 20-27). It is enclosed by an outer brick wall that stands 3.6 meters high and extends about 2,000 meters in length. The central site plan is divided into three main sections facing southeast along the Than Dao spiritual axis, with a central aisle paved in granite. Starting from the inner to the outer, it includes the Tomb area (Figure 20, A area), the Worship Temple area (Figure 20, B area), and the Stele Hall area (Figure 20, C area).

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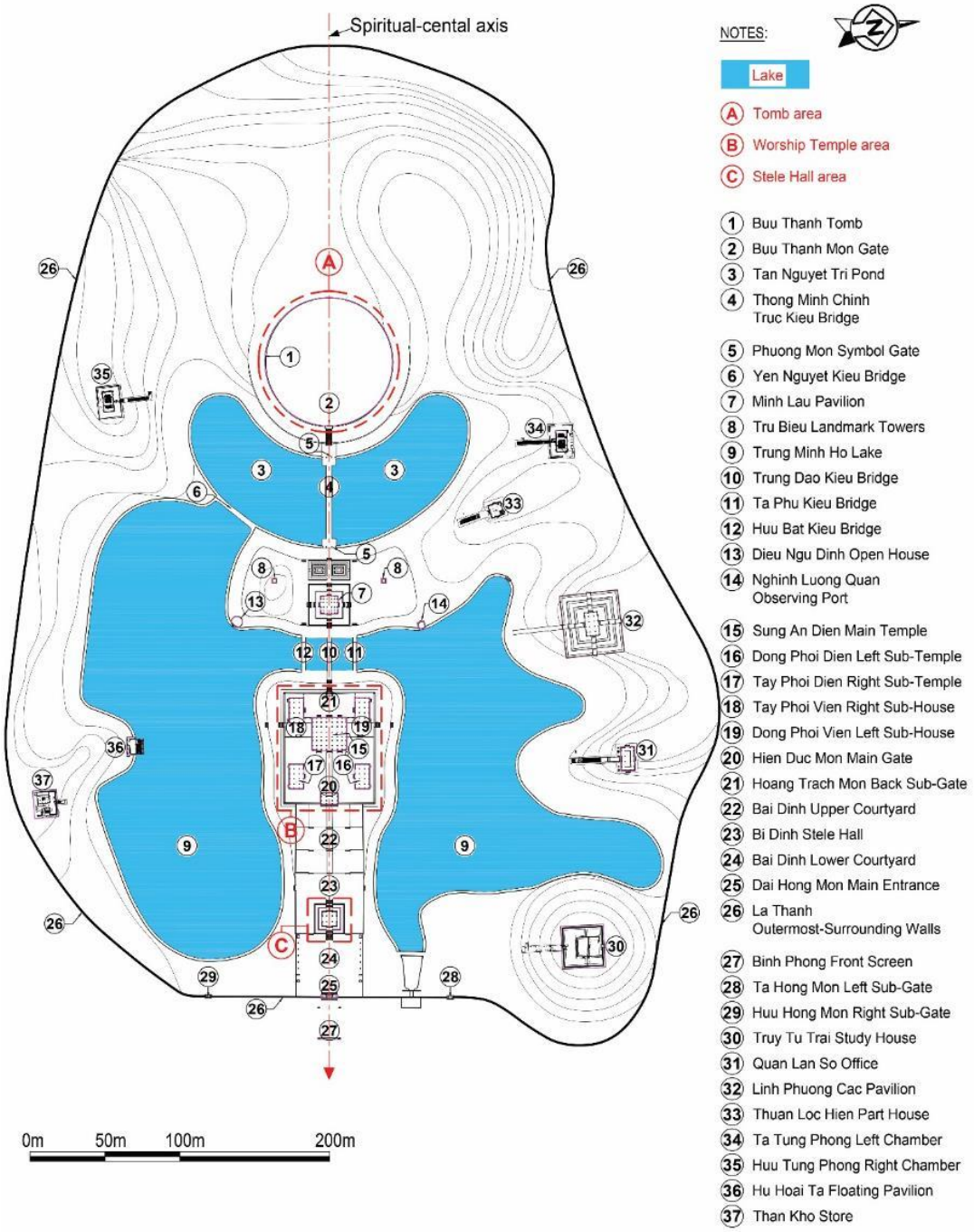


Figure 20: Site plan of the Emperor Minh Mang's mausoleum (Hieu Lang mausoleum)

Source: Adapted by Author in 2025 based on a drawing of Waseda Heritage Institute

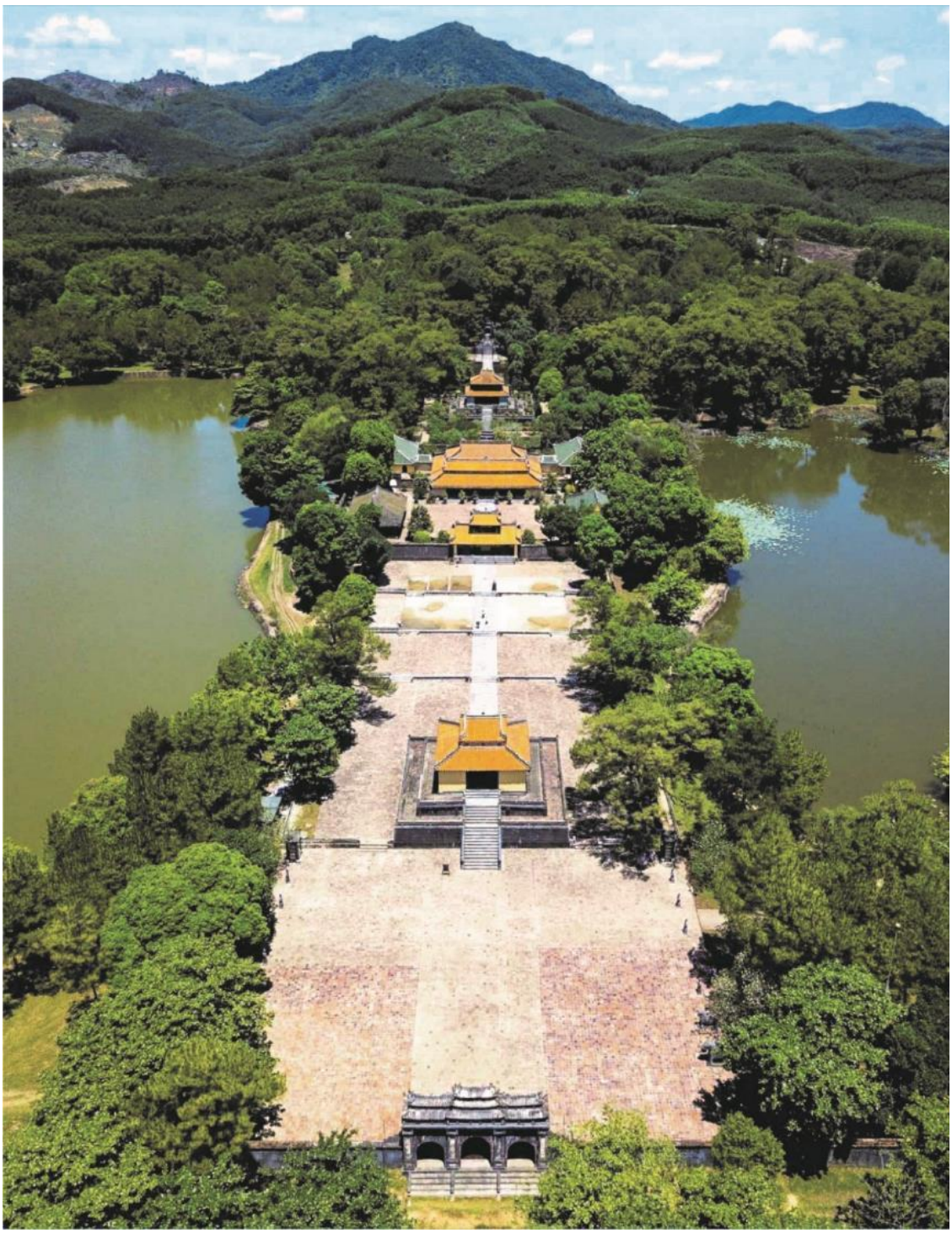


Figure 21: An overview photograph of Hieu Lang, Emperor Minh Mang's mausoleum
Source: Trieu Chien, 2018



Figure 22: Buu Thanh tomb of Hieu Lang, Emperor Minh Mang's mausoleum
Source: Photo by Author (2020)



Figure 23: Buu Thanh Mon gate of Hieu Lang, Emperor Minh Mang's mausoleum
Source: Photo by Author (2020)

The Tomb area, located at the end of the spiritual axis, was designed after the traditional underground pathway leading to the burial site, where the coffin, known as Buu Thanh tomb (Figure 20, number 1 and Figure 22), is

placed. This area features a circular shape, enclosed by a brick wall. The main gate of the Tomb area is called Buu Thanh Mon gate (Figure 20, number 2 and Figure 23), positioned on the front facing the tomb. In front of the gate is a semicircular pond named Tan Nguyet Tri Pond (Figure 20, number 3), with the Thong Minh Chinh Truc Kieu bridge (Figure 20, number 4) at the center. Two bronze-symbol gates, Phuong Mon symbol gate (Figure 20, number 5), are placed at the beginning and end of the bridge. Another bridge, Yen Nguyet Kieu bridge (Figure 20, number 6), is built on the right-hand side of the pond. At the front center of the tomb area stands Tam Tai Son Mountain, on which the Minh Lau pavilion (Figure 20, number 7), a multi-story wooden structure, is situated. Flanking the pavilion are two mountains, Thanh Son on the left and Binh Son on the right, each topped with a Tru Bieu landmark tower (Figure 20, number 8). In front of the pavilion lies Trung Minh Ho, the main lake (Figure 20, number 9), which features a long, stone-bounded dike. Three stone and brick bridges run parallel to the pavilion: Trung Dao Kieu bridge (Figure 20, number 10), Ta Phu Kieu bridge (Figure 20, number 11), and Huu Bat Kieu bridge (Figure 20, number 12). On either side of the bridges are an octagonal open hall, Dieu Ngu Dinh Open House (Figure 20, number 13), and a pavilion for viewing landscapes, Nghinh Luong Quan Observing Port (Figure 20, number 14).

The Worship Temple area is in the middle of the spiritual-central axis, enclosed by brick walls, and placed in front of the Minh Lau pavilion. The Sung An Dien main temple (Figure 20, number 15) for worshipping the Emperor and Queen features a twin-ridge beam design built at the center of the Phung Than Son Mountain. Symmetrically positioned to the front left and right of the main temple are two sub-temples, Dong Phoi Dien left sub-temple (Figure 20, number 16) and Tay Phoi Dien right sub-temple (Figure 20, number 17). To the rear left and right are two additional structures, Tay Phoi Vien right sub-house (Figure 20, number 18) and Dong Phoi Vien left sub-house (Figure

20, number 19). Directly in front of the main temple is a courtyard with the main gate of the worship area, Hien Duc Mon main gate (Figure 20, number 20). At the back wall stands another gate, Hoang Trach Mon back sub-gate (Figure 20, number 21), with two smaller gates on either side connecting to the outer areas. Located in front of the main gate is Bai Dinh, an elevated courtyard that features three tiled levels, measuring 44.8 meters in width and 45 meters in length upper courtyard (Figure 20, number 22).

The Stele Hall area is positioned at the front of the spiritual axis. The square Bai Dinh Stele Hall (Figure 20, number 23) stands on a two-tiered foundation, measuring 9 meters in height and 20 meters by 20 meters in width. Inside, a stone stele named Thanh Duc Than Cong, which records the emperor's merits, stands 3 meters tall, with a pedestal measuring 1.09 meters high, 2.33 meters wide, and 1.65 meters long. In front of the Stele Hall lies a tiled lower courtyard (Figure 20, number 24) measuring 42 meters by 44.8 meters. Two rows of stone statues depicting mandarins, elephants, horses, and a pair of bronze unicorns housed in bronze shelters line the left and right sides of the courtyard. The main entrance to the mausoleum, known as Dai Hong Mon main entrance (Figure 20, number 25), is a brick gate with three entrances located at the central front wall of the La Thanh enclosure (Figure 20, number 26). In front of the main gate is a brick screen, called Binh Phong front screen (Figure 20, number 27), which is flanked by two stone lion statues that serve as guardians. To the left and right of the main entrance are two smaller gates, Ta Hong Mon left sub-gate (Figure 20, number 28) and Huu Hong Mon right sub-gate (Figure 20, number 29).

The central spatial area is surrounded by seven small mountains (hills), each of which once supported a building constructed sequentially. In the northern area, Phuc Am Son Mountain hosted the Truy Tu Trai Study House (Figure 20, number 30); Dao Thong Son Mountain housed the Quan Lan So Office (Figure 20, number 31); Khai Thach Son Mountain featured the Linh

Phuong Cac Pavilion (Figure 20, number 32); Duc Hoa Son Mountain held the Thuan Loc Hien Part House (Figure 20, number 33); and Tinh Son Mountain contained the Ta Tung Phong Left Chamber (Figure 20, number 34). In the southern area, Y Son Mountain supported the Huu Tung Phong Right Chamber (Figure 20, number 35), and the Tran Thuy Dao Peninsula contained the Hu Hoai Ta Floating Pavilion (Figure 20, number 36). While these seven buildings were positioned similarly on artificial hills surrounding Trung Minh Ho Lake and oriented toward the central spatial area, they varied in scale and architectural design based on their classification and function. All buildings have since collapsed, leaving only their foundations.

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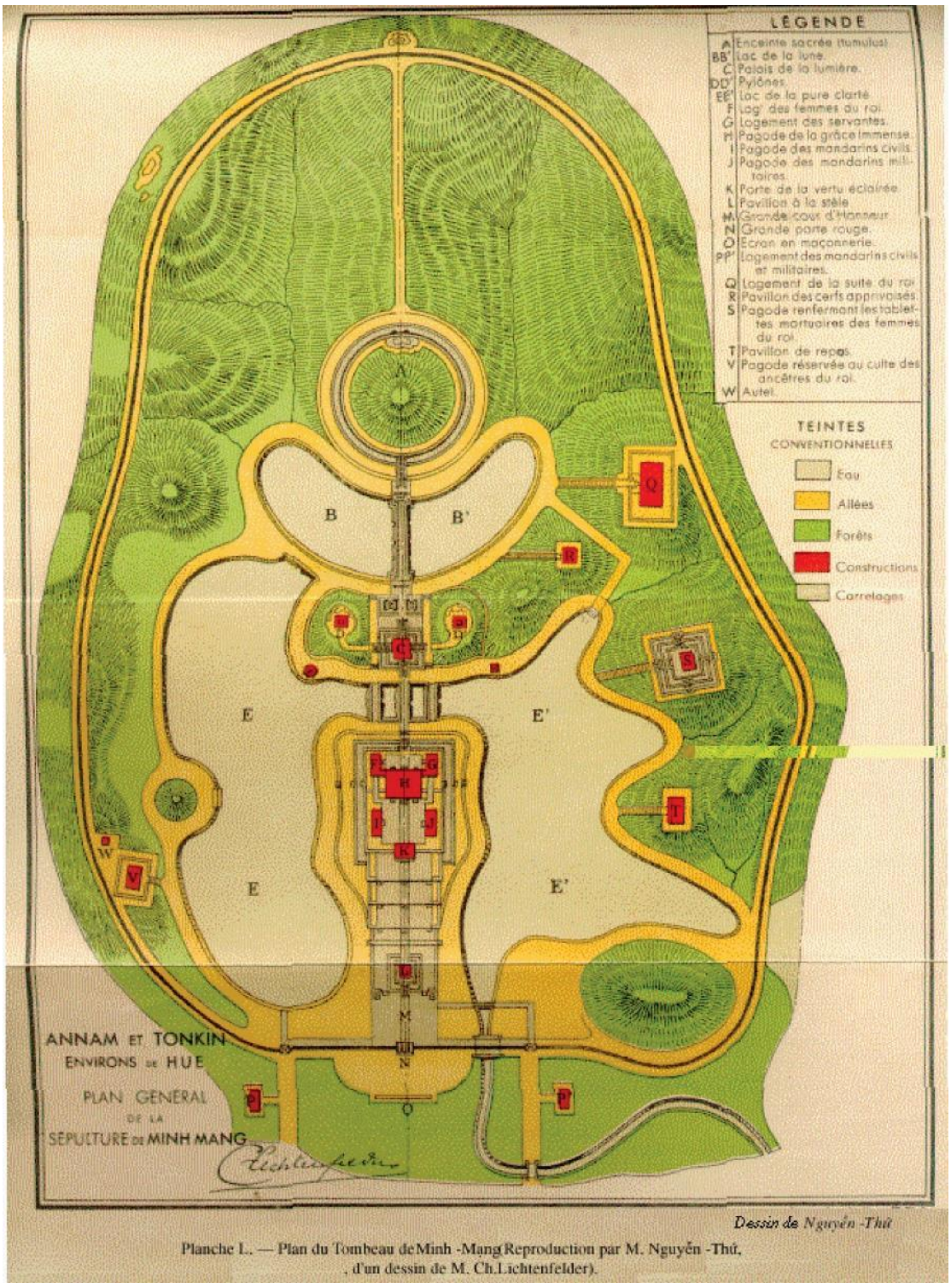


Planche L. — Plan du Tombeau de Minh -Mang Reproduction par M. Nguyễn -Thú, , d'un dessin de M. Ch. Lichtenfelder).

Figure 24: Master plan of Emperor Minh Mang's mausoleum
Source: Photo @ Bulletin des Amis du Vieux Hue, 1937 drawn by Nguyen Thu

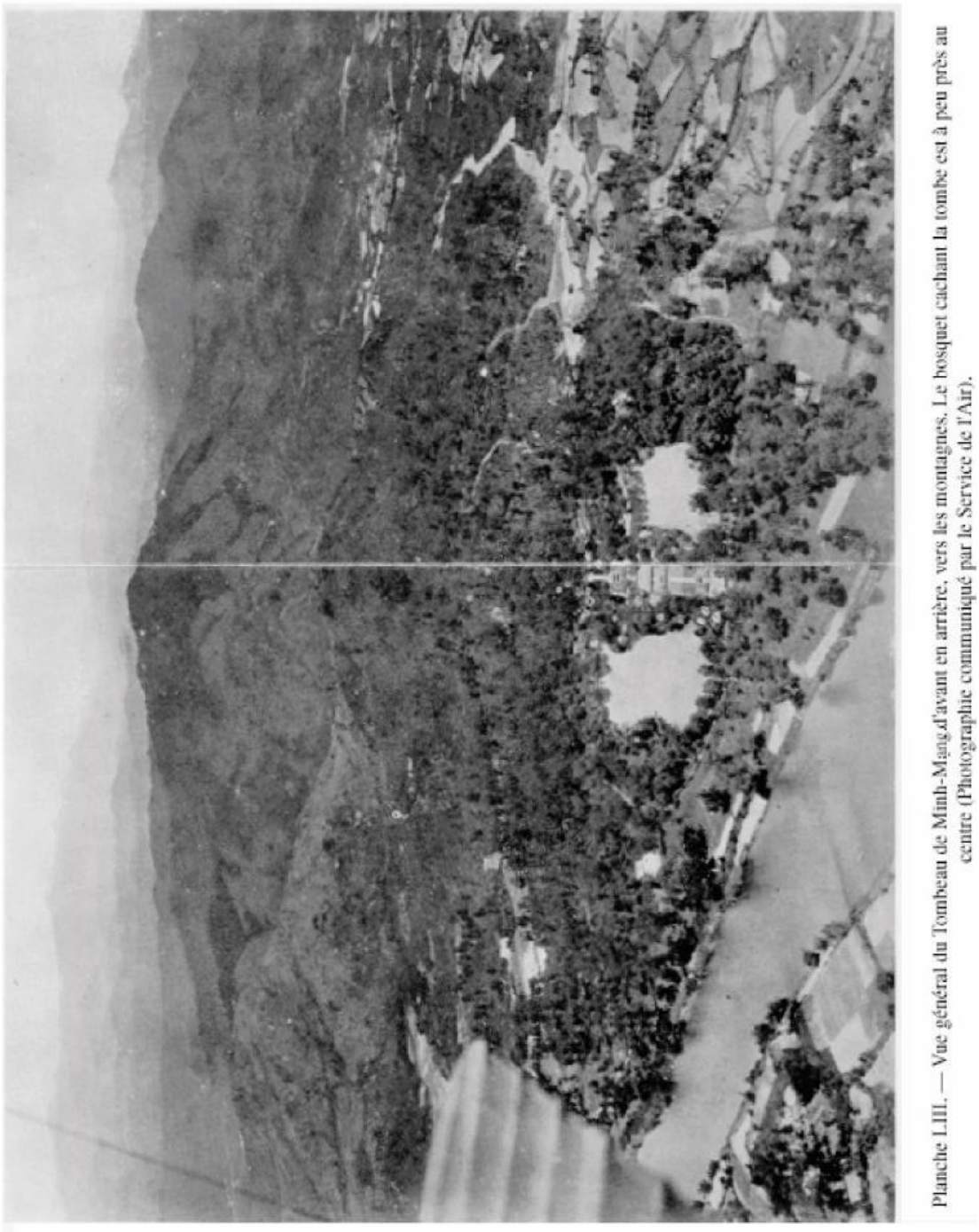


Planche LIII. — Vue général du Tombeau de Minh-Mang d'avant en arrière, vers les montagnes. Le bosquet cachant la tombe est à peu près au centre (Photographie communiqué par le Service de l'Air).

Figure 25: Comprehensive aerial view of Emperor Minh Mang's mausoleum
Source: Photo @ Bulletin des Amis du Vieux Hue, 1937



Planche LIV. — Vue générale du Tombeau de Minh-Mạng1 arrière en avant, vers la Capitale. Le bosquet cachant la tombe est dans le coin inférieur de gauche (Photographie communiquée par le Service de l'Air).

Figure 26: Comprehensive aerial view of Emperor Minh Mang's mausoleum
Source: Photo @ Bulletin des Amis du Vieux Hue, 1937



Planche LV. — Vue générale du Tombeau de Minh-Mang, d'avant en arrière. Le bosquet cachant la tombe est dans le coin supérieur de gauche (Photographie communiquée par le Service de l'Air).

Figure 27: Comprehensive aerial view of Emperor Minh Mang's mausoleum
Source: Photo @ Bulletin des Amis du Vieux Hue, 1937

4.3.5 Mausoleum of Emperor Thieu Tri

The Mausoleum of Emperor Thieu Tri, the third emperor of the Nguyen Dynasty, covers an area of 6 hectares and is backed by the region's highest peak, Thuan Dao Mountain (Figures 28, 29). The mausoleum faces northwest and is designed along two parallel centripetal axes that extend from the interior to the exterior. The main components of the structure include the Tomb area (Figure 28, A area), the Stele Hall area (Figure 28, C area) located along the right spiritual axis, and the Worship Temple area (Figure 28, B area) situated along the left spiritual axis. Similar to the mausoleum of Emperor Gia Long, it does not have an outer wall because it is thought to be naturally shielded by the surrounding hills and mountains. The structures reflect similar scale and architecture to those of Emperor Minh Mang's mausoleum, although they are slightly smaller and less intricate.

At the central spiritual axis of the Tomb and Stele Hall areas, from the interior to the exterior, lies the circular tomb named Bao Thanh tomb (Figure 28, number 1 and figure 30). This tomb, constructed from bricks, has a circumference of 260 meters and is adorned with bronze doors at its entrance, referred to as Bao Thanh Mon gate (Figure 28, number 2). Directly in front of the Tomb area is a semicircular pond named Ngung Thuy Tri Pond (Figure 28, number 3), which covers a water surface area of 7,600 m². The shores of the pond are connected by three bridges made of brick and stone: Chanh Trung Kieu bridge (Figure 28, number 4) in the center, Dong Hoa Kieu bridge (Figure 28, number 5) on the left, and Tay Dinh Kieu bridge (Figure 28, number 6) on the right. Additionally, there are two bronze symbolic gates named Phuong Mon sumbol gate (Figure 28, number 7) at both ends of the central bridge.

The Stele Hall area, located in front of the Tomb area, includes a pavilion called Duc Hinh Lau (number 8), with a floor plan measuring 18.5 m by 18.5 m. Its architectural features resemble the Minh Lau Pavilion in Emperor Minh Mang’s mausoleum. Flanking this pavilion are two landmark

brick towers, Tru Bieu landmark tower (Figure 28, number 9), arranged symmetrically. Next is the square Stele Hall named Bi Dinh (Figure 28, number 10), set on a two-tiered platform 2.65 m high. Inside, a stone stele named Thanh Duc Than Cong records the merits of Emperor Thieu Tri. In front of the stele hall is a tiled courtyard named Bai Dinh right courtyard (Figure 28, number 11), lined at both ends with rows of stone statues depicting mandarins, elephants, and horses. The courtyard entrance features the Nghi Mon symbolic bronze gate, and in front of this gate is a front screen called Binh Phong right-front screen (Figure 28, number 12). In front of the area is a semicircular lake called Nhuan Trach Ho Lake (Figure 28, number 13), with a water surface area of approximately 3,300 m^2.

On the spiritual-central axis of the Worship Temple area, the sequence begins with a brick front screen (Figure 28, number 14), followed by a semicircular lake named Ban Nguyet Ho (number 15), which covers a water surface area of 2,400 m^2. Next is the Phuong Mon symbolic gate (Figure 28, number 16) and a three-stepped tiled courtyard (Figure 28, number 17) with a central aisle paved in granite. The Worship Temple area is rectangular and enclosed by a brick wall, featuring sub-gates at the center of each of its four sides. The main entrance, Hong Trach Mon main gate (Figure 28, number 18), resembles the Hien Duc Mon main gate of Emperor Minh Mang's mausoleum. At the center of the area stands the main temple, Bieu Duc Dien main temple (Figure 28, number 19), with a floor plan measuring 23.4 m by 21.5 m. Its architecture features twin ridge beams, similar to the Sung An Dien main temple of Emperor Minh Mang's mausoleum. Flanking the main temple are two sub-temples, Ta Vu left sub-temple (Figure 28, number 20), on the left and Huu Vu right sub-temple (Figure 28, number 21) on the right, along with two sub-houses, Ta Tung Vien left sub-house (Figure 28, number 23) on the left and Huu Tung Vien right sub-house (Figure 28, number 22) on the right.

Historically, to the right of the grave and slightly to the rear was a pavilion named Hien Quang Cac, accompanied by a storage area called Than Kho located to the right of the pavilion. Additionally, a house was situated on the back-left side outside the Worship Temple area, along with a duty room for soldiers near the storage area (The National Department of History of Nguyen Dynasty, 1960, pp. 57–58). Unfortunately, all of these structures have since collapsed and become indistinguishable.

The mausoleum of Emperor Thieu Tri can be described as a balanced blend of the mausoleums of Emperor Gia Long and Emperor Minh Mang. The three main areas - the Tomb area (A), Worship Temple area (B), and Stele Hall (C) - are arranged in distinct configurations. In Emperor Gia Long's mausoleum, these elements are positioned along three parallel axes, while in Emperor Minh Mang's mausoleum, they are aligned along a single axis. In contrast, Emperor Thieu Tri's mausoleum features these areas arranged along two parallel axes. The architectural characteristics of the three elements (A, B, and C) in the mausoleums of Emperor Minh Mang and Emperor Thieu Tri are similar, as they feature floored buildings. However, these elements differ from those found in Emperor Gia Long's mausoleum. Additionally, both Emperor Gia Long's and Emperor Thieu Tri's mausoleums do not have surrounding walls, in contrast to Emperor Minh Mang's mausoleum, which does (The National Department of History of Nguyen Dynasty, 2007d, p. 71).

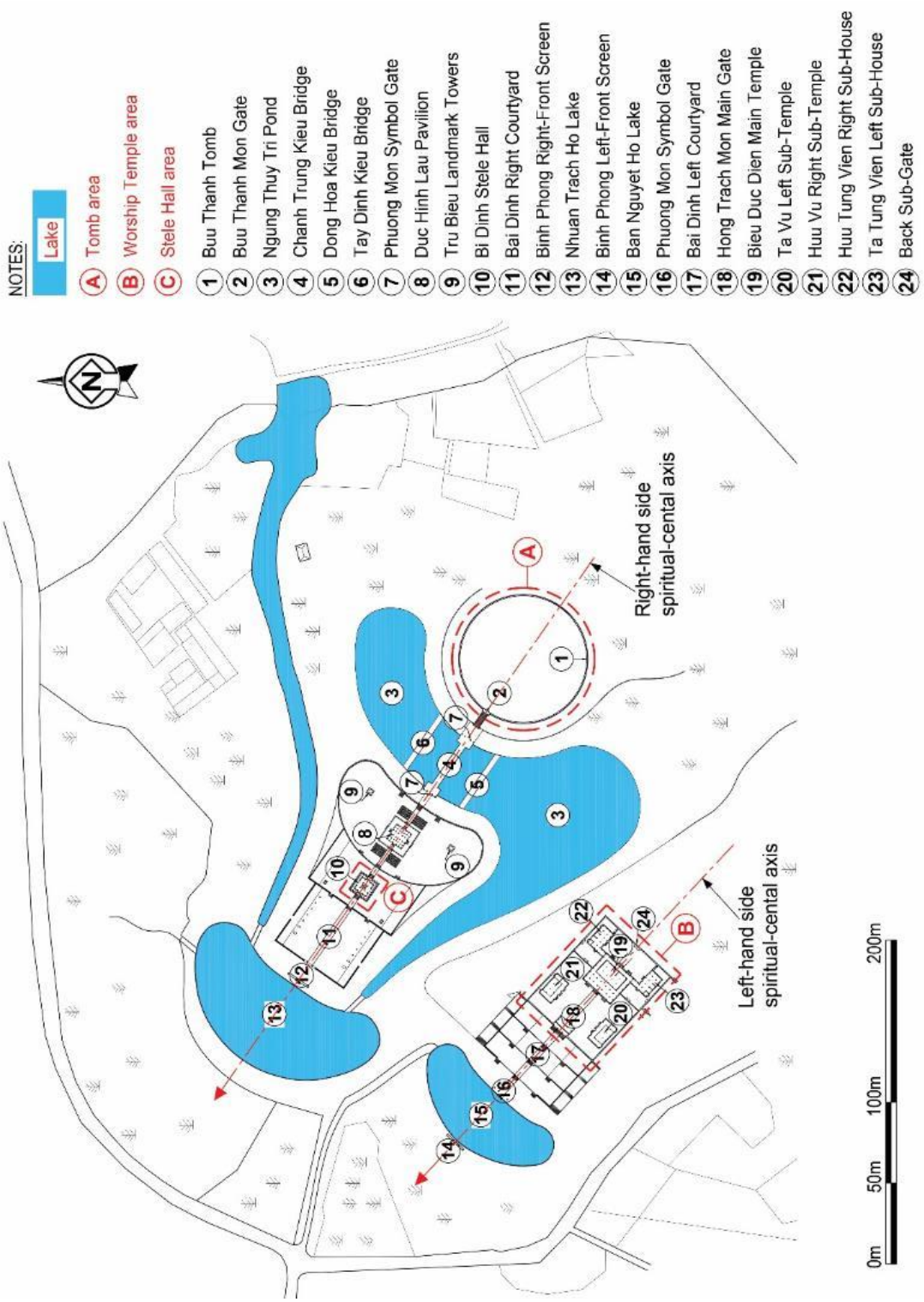


Figure 28: Site plan of the Emperor Thieu Tri's mausoleum (Xuong Lang mausoleum)

Source: Adapted by Author in 2025 based on a drawing of Waseda Heritage Institute



Figure 29: Aerial photograph of Emperor Thieu Tri's mausoleum
Source:
https://thuathienhue.gov.vn/desktopmodules/DNNTinBai/PrintTinBai.aspx?newsid=411CA93B-5CC6-4588-B67B-9893870C3223.
Accessed on October 20, 2024.



Figure 30: Buu Thanh tomb of Xuong Lang, Emperor Thieu Tri's mausoleum
Source: Photo by Author (2020)

4.3.6 Comparison of the Three Mausoleums

4.3.6.1 Tomb Area

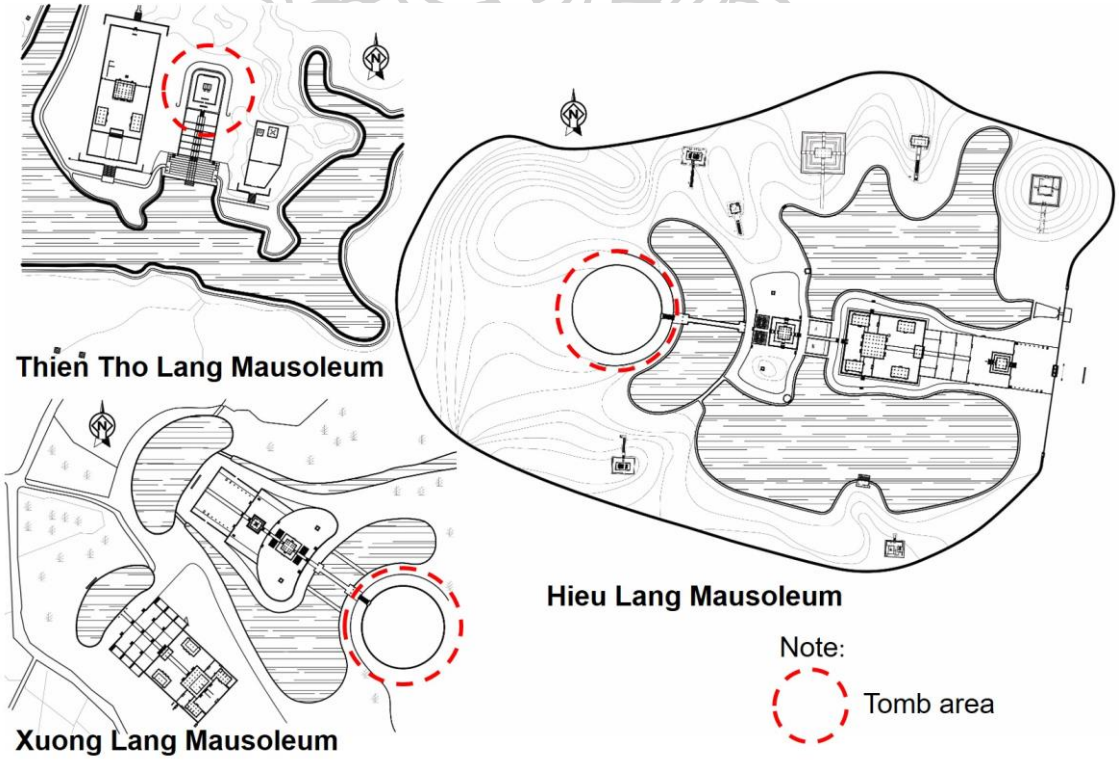


Figure 31: The tomb area location of the three mausoleums
Source: Adapted by Author in 2025 based on a drawing of Wasada Heritage Institute

Table 10. Tomb area comparison of the three mausoleums

Tomb Area		
Mausoleum of Emperor Gia Long (Thien Tho Lang)	**Mausoleum of Emperor Minh Mang (Hieu Lang)**	**Mausoleum of Emperor Thieu Tri (Xuong Lang)**
The tomb area is enclosed by brick walls.	Tomb area with a circular shape, enclosed by brick walls.	The tomb area is in the form of a circular shape.
Tombs were built in two stone sarcophagi surrounded by the inner walls.	Buu Thanh Tomb was designed after the traditional underground pathway at the end of the spiritual axis.	Buu Thanh, a circular tomb.
A stepped courtyard with two rows of stone statues.	Buu Thanh Mon Gate.	Buu Thanh Mon Gate.
-	Tan Nguyet Tri, a semicircular pond	Ngung Thuy Tri, a semicircular pond
-	The Thong Minh Chinh Truc Kieu Bridge is at the centre.	Chanh Trung Kieu, Dong Hoa Kieu, and Tay Dinh Kieu, brick and stone bridges
-	Phuong Mon, two bronze gates, at the beginning and end of the bridge.	Phuong Mon, two bronze symbolic gates at both ends of the central bridge.
-	Yen Nguyet Kieu Bridge on the right side of the pond.	-
-	Minh Lau Pavilion at the center and front of the tomb area.	-
-	Tru Bieu landmark tower flanking Minh Lau Pavilion.	-
-	Trung Minh Ho Lake.	-
-	Trung Dao Kieu, Ta Phu Kieu, and Huu Bat Kieu, three stone and brick bridges.	-
-	Dieu Ngu Dinh and Nghinh Luong Quan for viewing the landscape.	-

4.3.6.2 Worship Temple Area

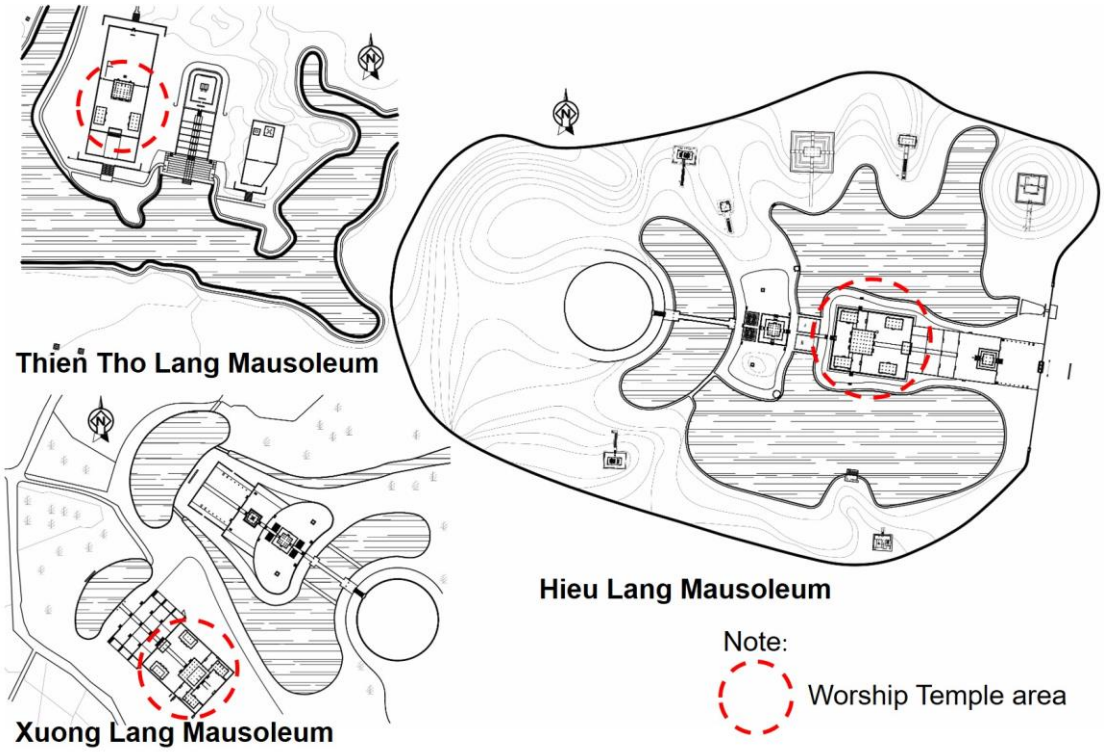


Figure 32: The worship temple area location of the three mausoleums
Source: Adapted by Author in 2025 based on a drawing of Wasada Heritage Institute

Table 11. Worship temple area comparison of the three mausoleums

Worship Temple Area		
Mausoleum of Emperor Gia Long (Thien Tho Lang)	**Mausoleum of Emperor Minh Mang (Hieu Lang)**	**Mausoleum of Emperor Thieu Tri (Xuong Lang)**
The Worship Temple area, located on the right-hand axis.	The area is along the spiritual-central axis.	The axis of the Worship Temple area to the left of the Tomb area's axis.
Minh Thanh Dien, the main temple where the altars of the Emperor and Queen are located.	Sung An Dien Main Temple for worshipping the Emperor and Queen.	Bieu Duc Dien Main Temple for worshipping the Emperor and Queen.
Nghi Mon Main Gate at the center of the front wall.	Hien Duc Mon Main Gate of the worship area.	Hong Trach Mon Main Gate, the main entrance.
Ta Tong Tu and Huu Tong Tu, two sub-	Dong Phoi Dien and Tay Phoi Dien, two sub-	Ta Vu and Huu Vu, two sub-temples

temples to the front left and right of the main temple.	temples, to the front left and right of the main temple.	flanking the main temple.
Ta Tong Vien and Huu Tong Vien, two sub-houses, storing clothes and worship items for the Emperor and Queen.	Dong Phoi Vien and Tay Phoi Vien, sub-houses to the rear left and right.	Ta Tong Vien and Huu Tong Vien, two sub-houses on the left and right.
Sub gate at the center of the back wall.	Hoang Trach Mon, back-sub gate flanked by two smaller gates on either side.	Sub gate at the center of the back wall.
In front of the Worship Temple area is a tiled courtyard.	Bai Dinh, a stepped courtyard with three levels.	Bai Dinh, a three-level courtyard.
Ho Dai Lake, a long lake	Trung Minh Ho Lake surrounds 3 sides of the Worship Temple area.	Ban Nguyet Ho Lake, a semicircular lake.
-	-	Phuong Mon symbol gate.

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4.3.6.3 Stele Area

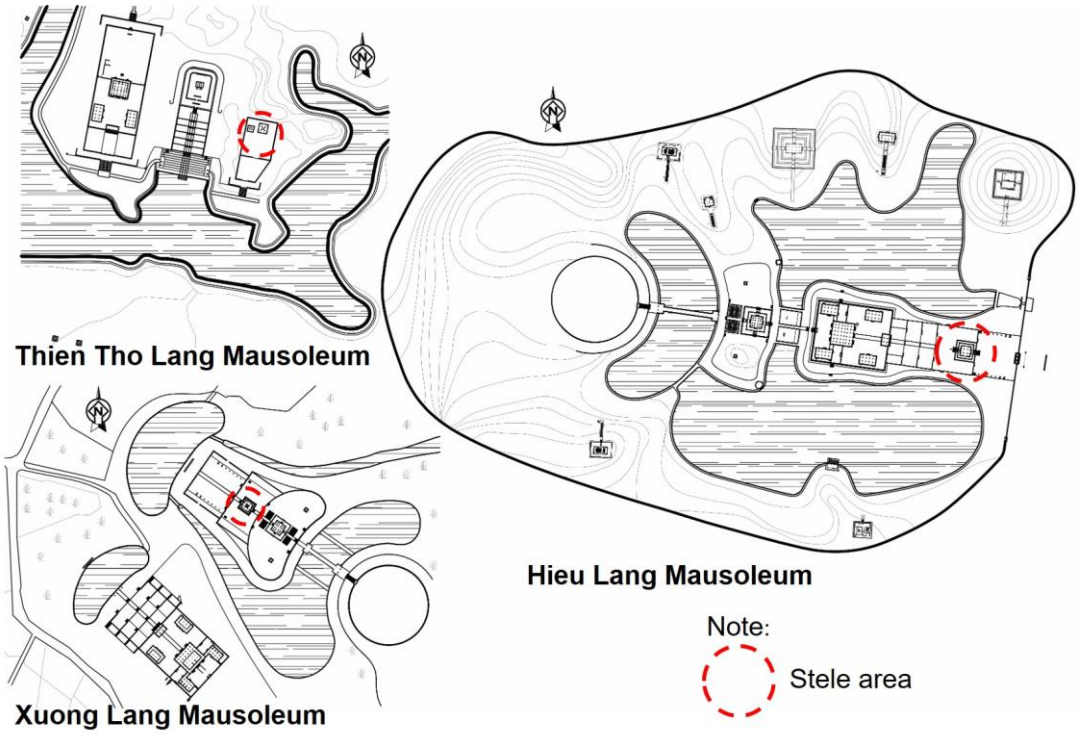


Figure 33: The stele area location of the three mausoleums
Source: Adapted by Author in 2025 based on a drawing of Wasada Heritage Institute

Table 12. Stele Area Comparison of the Three Mausoleums

Stele Area		
Mausoleum of Emperor Gia Long (Thien Tho Lang)	**Mausoleum of Emperor Minh Mang (Hieu Lang)**	**Mausoleum of Emperor Thieu Tri (Xuong Lang)**
The Stele Hall area situated on the left-hand side of the central axis of the Tomb area.	The Stele Hall area positioned at the front of the spiritual axis.	The Stele Hall area located in front of the Tomb area.
Bi Dinh, the square stele hall	Bi Dinh, the square stele hall	Bi Dinh the square stele hall
A stone stele altar	A stone stele altar	A stone stele altar
-	Bai Dinh, a tiled lower courtyard.	Bai Dinh, a tiled courtyard
-	Dai Hong Mon, the main entrance.	-

Stele Area		
Mausoleum of Emperor Gia Long (Thien Tho Lang)	**Mausoleum of Emperor Minh Mang (Hieu Lang)**	**Mausoleum of Emperor Thieu Tri (Xuong Lang)**
-	Binh Phong, a brick front screen.	Binh Phong, a front screen.
-	-	Duc Hinh Lau, a pavilion
-	-	Tru Bieu, two landmark brick towers flanking the pavilion.
Ho Dai Lake, a long lake	-	Nhuan Trach Ho, a semicircular lake
-	La Thanh, outermost surrounding walls.	-
-	Ta Hong Mon and Huu Hong Mon, two smaller gates on the left and right.	-

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4.3.6.4 Others

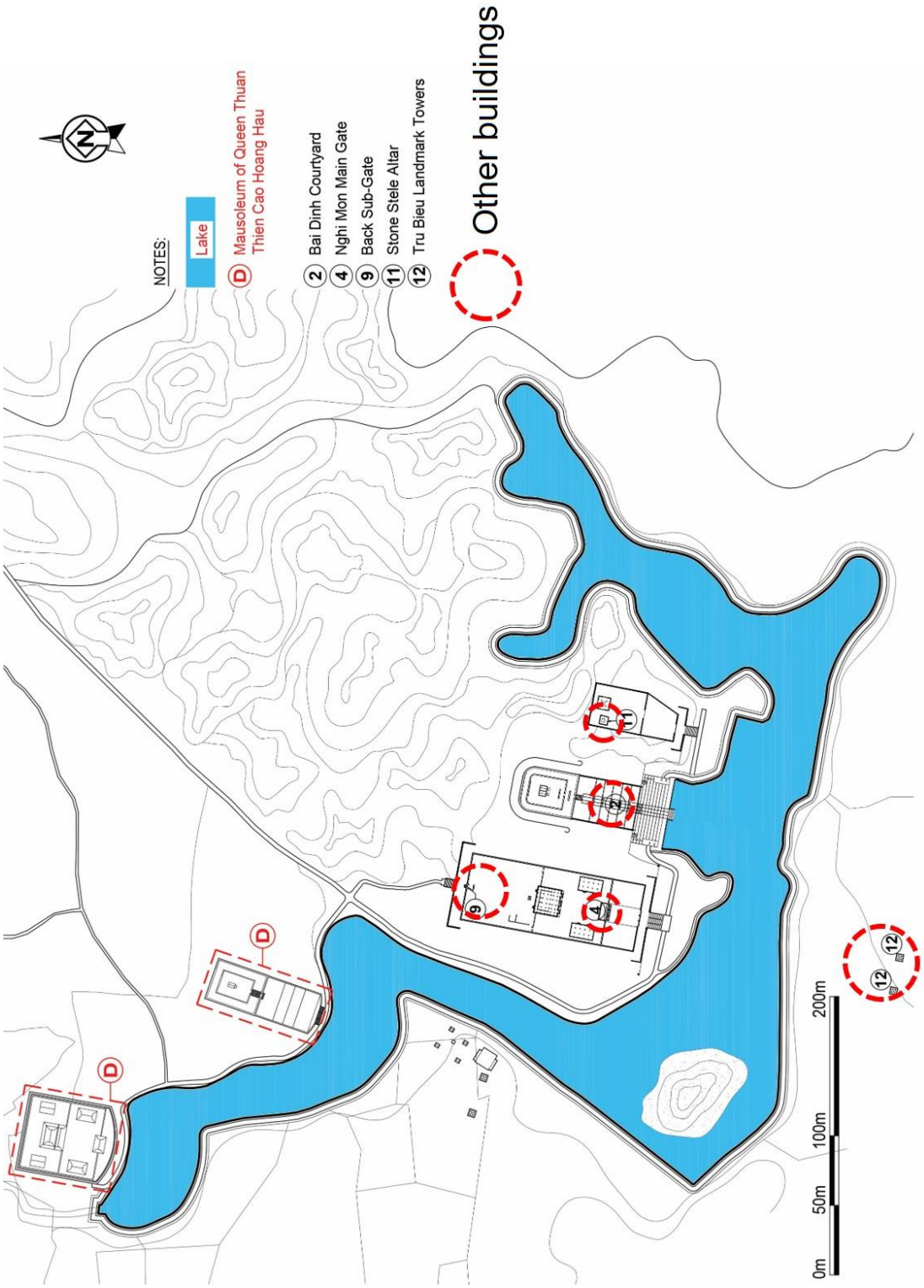


Figure 34: The location of other buildings at the mausoleum of Emperor Gia Long (Thien Tho Lang mausoleum)

Source: Adapted by Author in 2025 based on a drawing of Wasada Heritage Institute

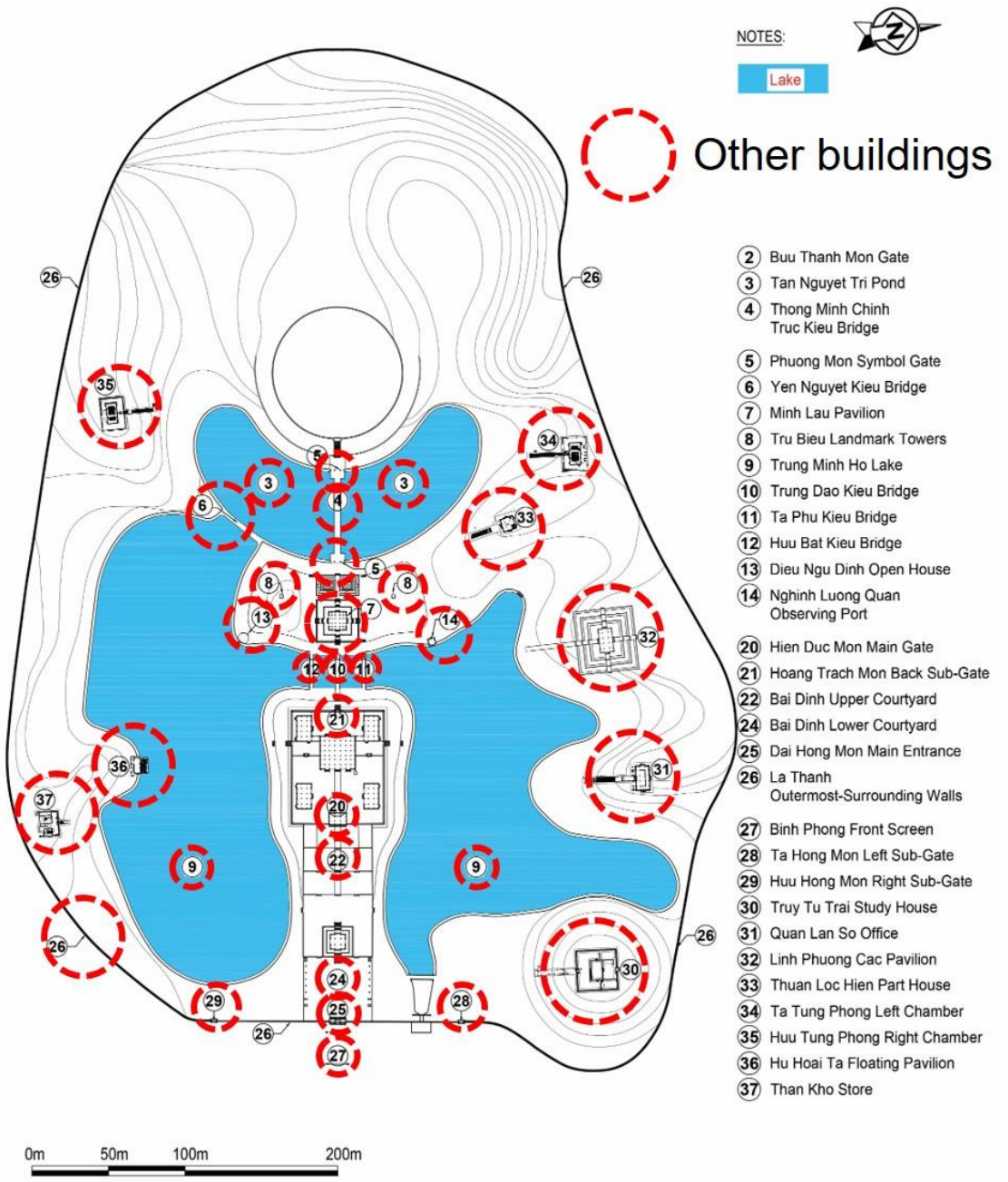


Figure 35: The location of other buildings at the mausoleum of Emperor Minh Mang (Hieu Lang mausoleum)

Source: Adapted by Author in 2025 based on a drawing of Wasada Heritage Institute

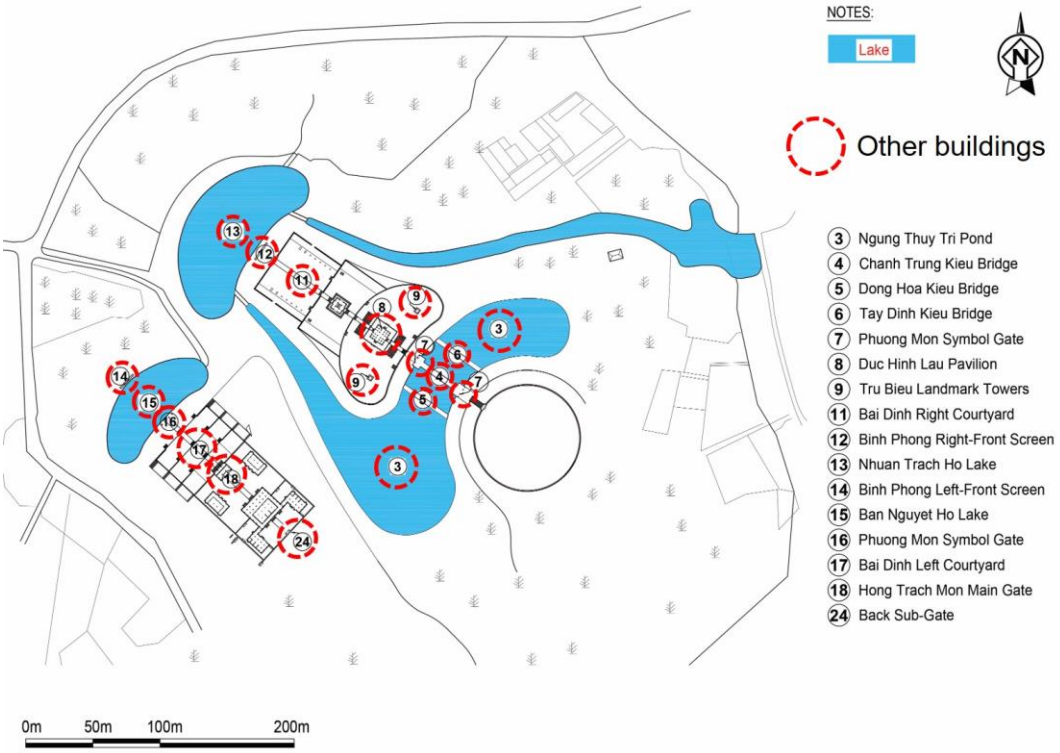


Figure 36: The location of other buildings at the mausoleum of Emperor Thieu Tri (Xuong Lang mausoleum)

Source: Adapted by Author in 2025 based on a drawing of Wasada Heritage Institute

Table 13. Comparison of the other structures of the three mausoleums

Others		
Mausoleum of Emperor Gia Long (Thien Tho Lang)	**Mausoleum of Emperor Minh Mang (Hieu Lang)**	**Mausoleum of Emperor Thieu Tri (Xuong Lang)**
- Tru Bieu, two landmark towers. - Mausoleum D for the emperor's family members. - A stepped courtyard.	- The central spatial area of Emperor Minh Mang's Mausoleum is surrounded by seven small hills, each of which once supported a building constructed sequentially. - Truy Tu Trai Hall on the Phuc Am Son Mountain. - Quan Lan So Office on the Dao Thong Son Mountain. - Linh Phuong Cac Pavilion on the Khai Thach Son Mountain.	- Historically, to the right of the grave and slightly to the rear was a pavilion named Hien Quang Cac, accompanied by a storage area called Than Kho.

	- Thuan Loc Hien Part House on the Duc Hoa Son Mountain. - Ta Tung Phong Chamber on the Tinh Son Mountain. - Huu Tung Phong Chamber on the Y Son Mountain in the southern area. - Hu Hoai Ta Floating Pavilion on the Tran Thuy Dao Peninsula.	

4.4 Architectural Types and Structure

Among the seven surviving emperors' mausoleums, Emperor Minh Mang's mausoleum best preserves these architectural types and structures, making it an ideal case study (Table 14, Figures 37-79). Additionally, one building from Emperor Tu Duc's mausoleum (Figures 63-64) and two structures from Emperor Gia Long's mausoleum (Figures 75-79) were selected to illustrate. All buildings listed in Table 14 are aligned along the mausoleums' spiritual-central axes and roofed with yellow glazed tiles, with pairs of symmetrically arranged buildings roofed in green glazed tiles. While some buildings collapsed and survived only in historical photos (Figures 40, 49, 50, 53, 55, 58, 60, 61, 76, 77, 78), others were restored between 2000 and 2022.

The most common architectural features of the buildings in the early Nguyen Dynasty emperors' mausoleums include wooden frame structures, tiled roofs, and foundations made of brick or stone. These features embody Hue's distinct architectural language and exhibit a consistent style. The mausoleums are typically designed with horizontal layouts rather than vertical, and the site plans follow the principle of axial symmetry, with one, two, or three axes. Progressing along the central axis, the ground level rises gradually. The three main components (A, B, and C) are located on hills, with symbolic buildings set atop high, two or three-tiered podiums, open on all four sides. These structures are placed within a striking natural landscape, harmoniously

integrating water, greenery, and architectural elements, balancing nature and human craftsmanship, stillness and movement, reality and illusion, and material and spiritual realms. This approach results in a unique architectural style distinct from the imperial mausoleums of other Asian countries.

The principal architecture of a mausoleum includes a main temple, sub-temple, sub-house, stele hall, pavilion, and main gate. They are case studies from the Mausoleum of Emperor Minh Mang.

4.4.1 Main Temple

In each mausoleum area, the main temple, known as Chinh Tam (正寢), is situated at the center of the worship area. This temple serves as a sacred space for worship, provides a residence for the soul, and hosts essential ritual ceremonies dedicated to the Emperor and the Queen (Figures 37-41). The architecture of the main temple embodies the style of twin-ridge beam buildings, comprising two main structures: the Tien Dien front hall (前殿) and the Chinh Dien main hall (正殿). Both halls rest on a shared foundation and are interconnected by a structure called Thua Luu (承流), which supports the gutter above. This architectural design exemplifies the highest level of imperial craftsmanship from Vietnam's Nguyen Dynasty (Figures 37-40).

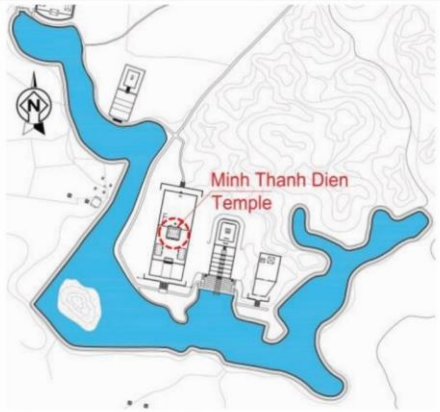
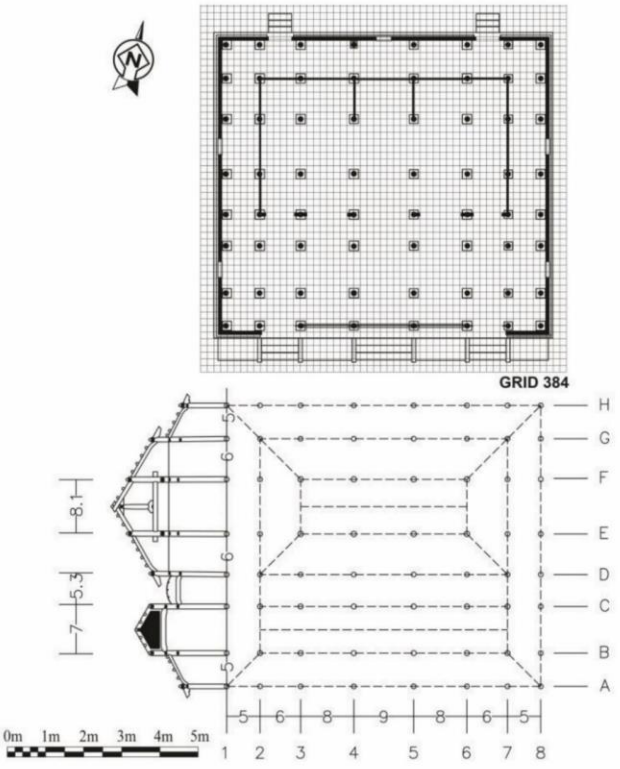
Name of Building: Minh Thanh Dien Temple	Function: Worship for the Soul of Emperor Gia Long and Queen
Year of Construction: 1814-1820 Restoreation: 1992, 2020	Type/Level: Doubble-Rigde Beams Imperial Temple
Site map	***Drawings of Floor Plan-Section***
 *Source: HMCC*	
Exterior photo	
 *Source: Author (2020)*	
Interior photo	
 *Source: Author (2020)*	- Front building: 5 compartments and 2 wings. - Back building: 3 compartments and 2 double wings - Floor area: 388,4 m^2 - Status: Exiting/ Date of investigation: July 25th 2020 - Reference resource: Waseda University, HMCC

Figure 37: Inventory of Minh Thanh Dien main temple of Emperor Gia Long's mausoleum

Source: Drawing of Waseda University and Hue Monuments Conservation Center and the Author's modifications

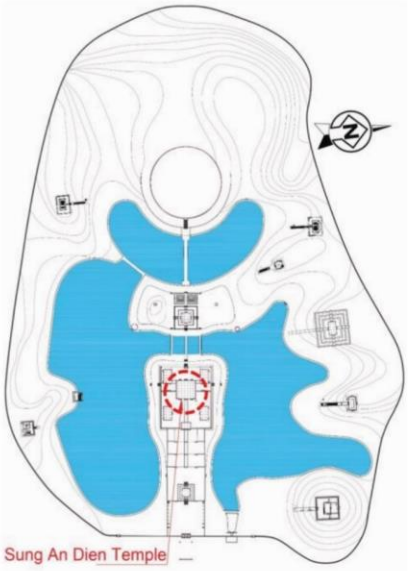
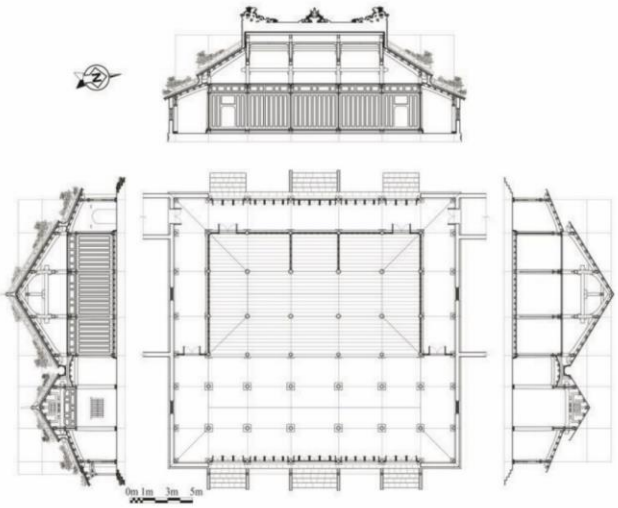
Name of Building: Sung An Dien Temple	Function: Worship for the Soul of Emperor Minh Mang and Queen
Year of Construction: 1840-1843 Restoreation: 1996	Type/Level: Doubble-Rigde Beams Imperial Temple
Site map	***Drawings of Floor Plan-Section***
 *Source: Waseda University*	
Exterior photo	
 *Source: Author (2020)*	
Interior photo	- Front building: 5 compartments and 2 wings - Back building: 3 compartments and 2 double wings - Floor area: 517,36 m^2 - Status: Exiting/ Date of investigation: July 25th 2020 - Reference resource: Waseda University, HMCC
 *Source: Author (2020)*	

Figure 38: Inventory of Sung An Dien main temple of Emperor Minh Mang's mausoleum

Source: Drawing of Waseda University and Hue Monuments Conservation Center and the Author's modifications



Figure 39: Sung An Dien main temple at Emperor Minh Mang's mausoleum
Source: Photo by Author (2020)



Figure 40: Sung An Dien Main Temple of Emperor Minh Mang's mausoleum was photographed in 1898
Source: https://gallica.bnf.fr/ark%3A/12148/btv1b531721390.item?utm#.
Accessed on October 10, 2025.

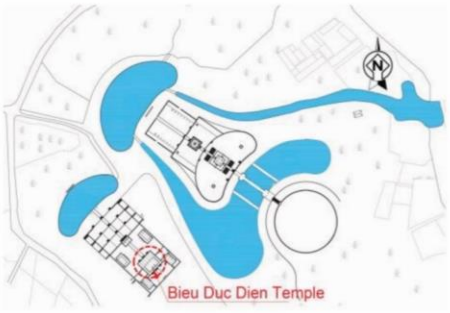
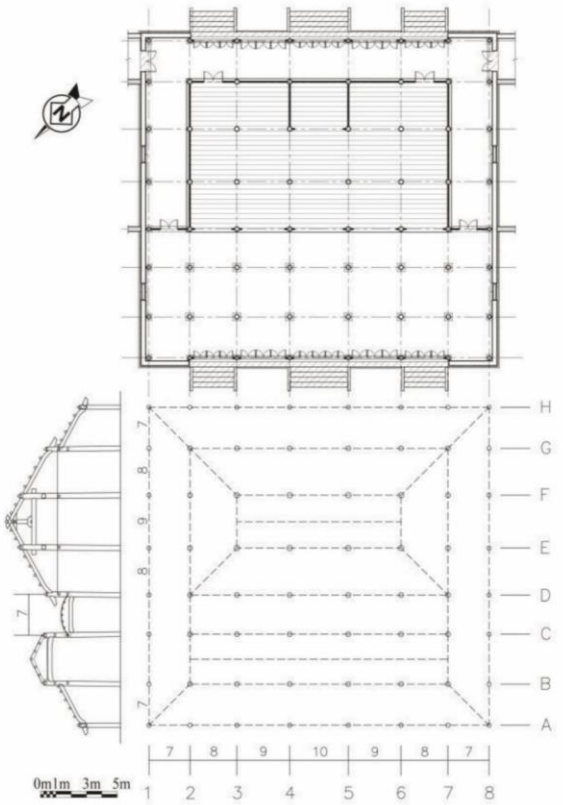
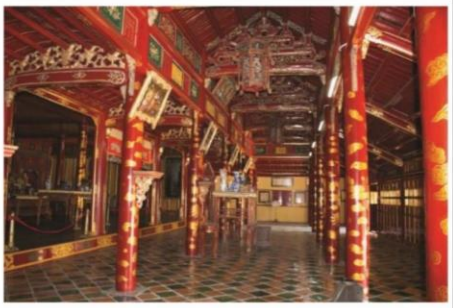
Name of Building: Bieu Duc Dien Temple	Function: Worship for the Soul of Emperor Thieu Tri and Queen
Year of Construction: 1848 Restoreation: 2006	Type/Level: Doubble-Rigde Beams Imperial Temple
Site map	***Drawings of Floor Plan-Section***
 *Source: Waseda University*	
Exterior photo	
 *Source: Author (2020)*	
Interior photo	- Front building: 5 compartments and 2 wings - Back building: 3 compartments and 2 double wings - Floor area: 519,47 m^2 - Status: Exiting/ Date of investigation: July 25th 2020 - Reference resource: Waseda University, HMCC
 *Source: Author (2020)*	

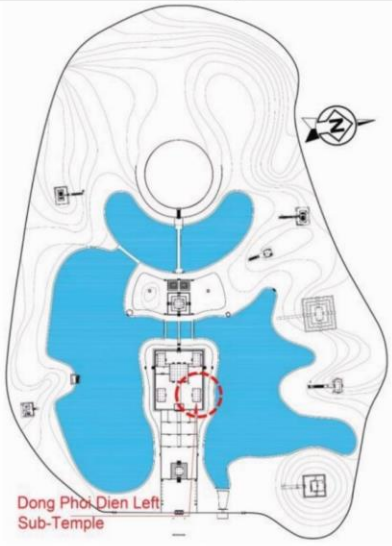
Figure 41: Inventory of Bieu Duc Dien Main Temple of Emperor Thieu Tri's Mausoleum

Source: Drawing of Waseda University, Hue Monuments Conservation Center, and the Author's modifications

4.4.2 Sub-temple and Sub-house

The Sub-Temples (Figures 42-44) and the Sub-Houses (Figures 45-46) differ only in name, function, and location; they share nearly identical architectural features, scale, and wooden structures. This style represents the most fundamental form of Nguyen imperial architecture, characterized by single-ridge beam buildings with a floor plan scaled to three compartments and two wings. The sub-temples are located on the front left and right sides of the main temple and are dedicated to the worship of the votive tablets of the emperor's courtiers from his reign. In contrast, the sub-houses on the back left and right sides of the main temple serve as storage spaces for worship items, ceremonial clothing, and ritual preparation held there. As affiliated structures, the sub-temples and sub-houses are always situated close to the main temple while maintaining relative independence.

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<table>
<tr><td>Name of Building: Dong Phoi Dien Left Sub-Temple</td><td>Function: Worshiping the mandarins or royals who made great contributions to the Minh Mang dynasty</td></tr>
<tr><td>Year of Construction: 1840-1843
Restoreation:</td><td>Type/Level:</td></tr>
<tr><td>Site map</td><td>Drawings of Floor Plan-Section</td></tr>
<tr><td> 

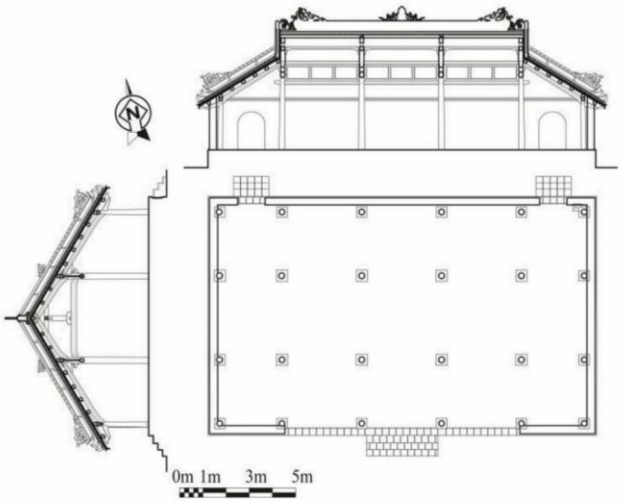
Source: Waseda University</td><td rowspan="2"> 
</td></tr>
<tr><td>Exterior photo</td></tr>
<tr><td> 
Source: Author (2023)</td><td rowspan="2">- Compartments: 3
- Wings: 2
- Floor area: 179,13 m^2
- Status: Exiting/ Date of investigation: July 25th 2020
- Reference resource: Waseda University, HMCC</td></tr>
<tr><td>Interior photo</td></tr>
<tr><td> 
Source: Author (2023)</td></tr>
</table>

Figure 42: Inventory of Dong Phoi Dien left sub-temple of Emperor Minh Mang's mausoleum

Source: Drawing of Waseda University and Hue Monuments Conservation Center and the Author's modifications

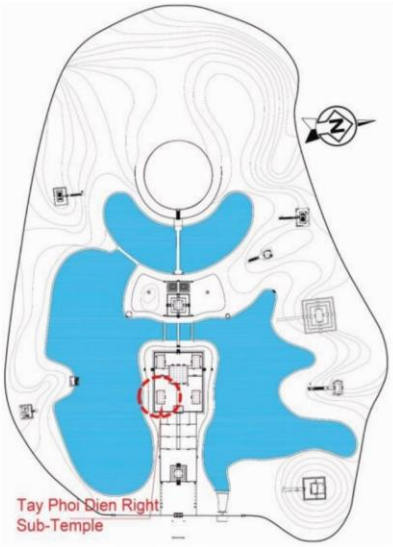
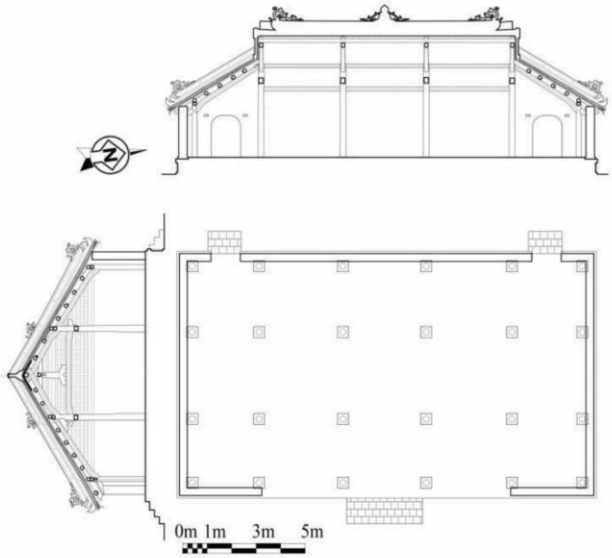
Name of Building: Tay Phoi Dien Right Sub-Temple	Function: Worship the mandarins who assisted Emperor Minh Mang
Year of Construction: 1840-1843 Restoreation:	Type/Level:
Site map	***Drawings of Floor Plan-Section***
 *Source: Waseda University*	
Exterior photo	
 *Source: Author (2023)*	
Interior photo	- Compartments: 3 - Wings: 2 - Floor area: 172,43 m^2 - Status: Exiting/ Date of investigation: July 25th 2020 - Reference resource: Waseda University, HMCC
 *Source: Author (2023)*	

Figure 43: Inventory of Tay Phoi Dien right sub-temple of Emperor Minh Mang's mausoleum

Source: Drawing of Waseda University and Hue Monuments Conservation Center and the Author's modifications

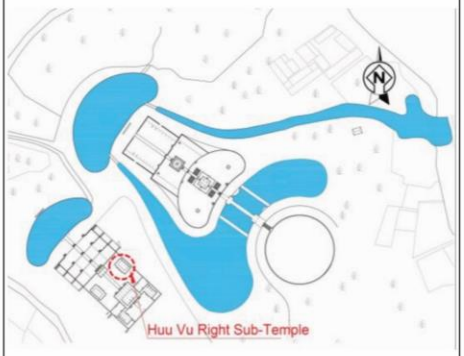
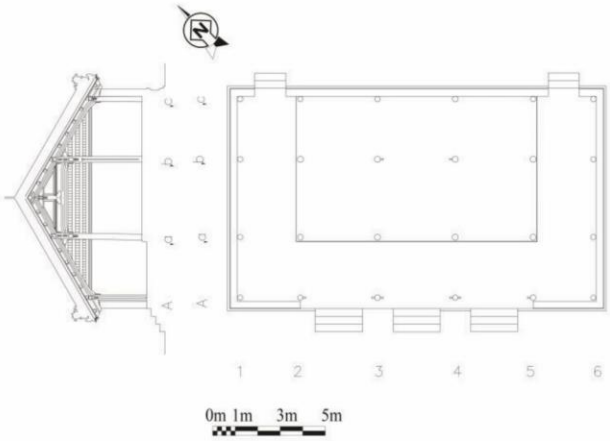
Name of Building: Huu Vu Right Sub-Temple	Function: Worship the mandarins who assisted Emperor Thieu Tri
Year of Construction: 1848 Restoreation:	Type/Level:
Site map	***Drawings of Floor Plan-Section***
 *Source: Waseda University*	
Exterior photo	
 *Source: Author (2020)*	- Compartments: 3 - Wings: 2 - Floor area: 168,28 m^2 - Status: Exiting/ Date of investigation: July 25th 2020 - Reference resource: Waseda University, HMCC

Figure 44: Inventory of Huu Vu right sub-temple of Emperor Thieu Tri's mausoleum
Source: Drawing of Waseda University, Hue Monuments Conservation Center and the Author's modifications

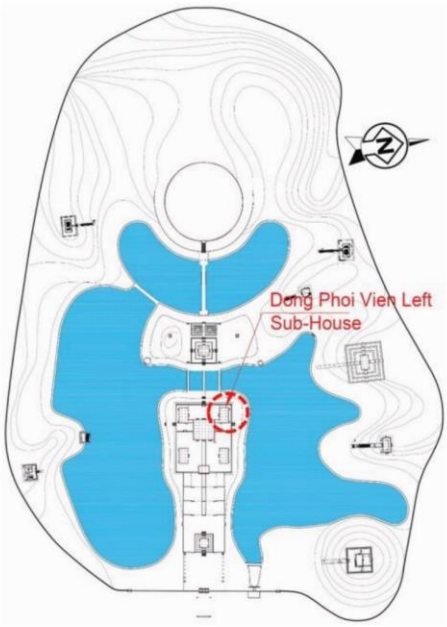
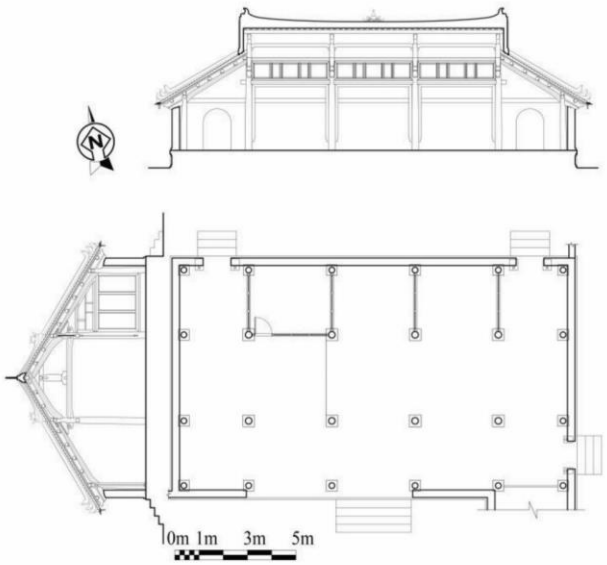
Name of Building: Dong Phoi Vien Left Sub-House	Function: The residential quarters designated for imperial consorts, eunuchs, and attendants following the Emperor Minh Mang's demise.
Year of Construction: 1840-1843 Restoreation:	Type/Level:
Site map	***Drawings of Floor Plan-Section***
 *Source: Waseda University*	
Exterior photo	
 *Source: Author (2023)*	- Compartments: 3 - Wings: 2 - Floor area: 168,87 m^2 - Status: Exiting/ Date of investigation: July 25th 2020 - Reference resource: Waseda University, HMCC

Figure 45: Inventory of Dong Phoi Vien left sub-house of Emperor Minh Mang's mausoleum

Source: Drawing of Waseda University, Hue Monuments Conservation Center and the Author's modifications

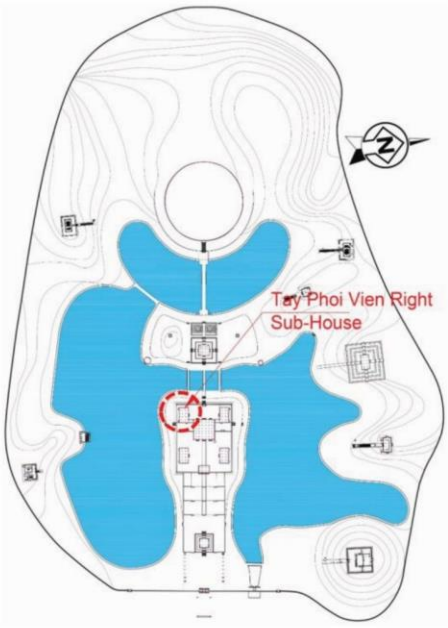
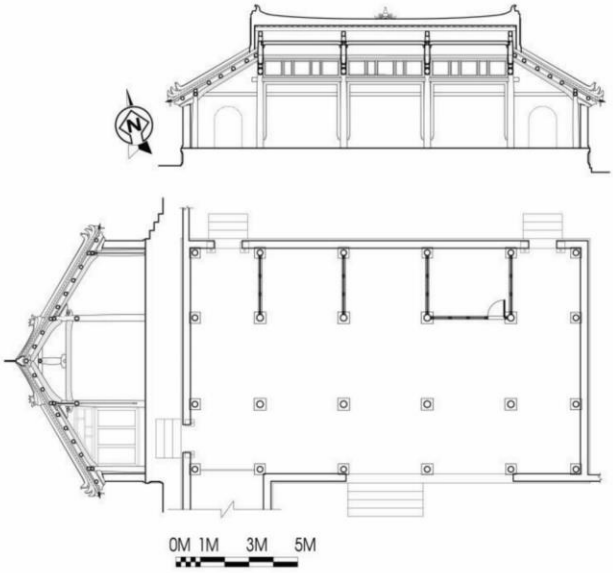
Name of Building: Tay Phoi Vien Right Sub-House	Function: The residential quarters designated for imperial consorts, eunuchs, and attendants following the Emperor Minh Mang's demise.
Year of Construction: 1840-1843 Restoreation:	Type/Level:
Site map	***Drawings of Floor Plan-Section***
 *Source: Waseda University*	
Exterior photo	
 *Source: Author (2023)*	- Compartments: 3 - Wings: 2 - Floor area: 168,87 m^2 - Status: Exiting/ Date of investigation: July 25th 2020 - Reference resource: Waseda University, HMCC

Figure 46: Inventory of Tay Phoi Vien right sub-house of Emperor Minh Mang's mausoleum

Source: Drawing of Waseda University, Hue Monuments Conservation Center and the Author's modifications

4.4.3 Stele Hall

This building type is consistent in architectural design, set on a two- or three-level foundation and oriented on four sides for ventilation, without doors. The floor plan is square and features a two-tiered roof, which is covered with yellow tube-glazed tiles as well as flat tiles. Inside, a large stone stele commemorates the emperor's achievements. Typically, the stele hall is located along the central axis of the mausoleum, either in front of the tomb area or near the entrance. In front of the stele hall, a tiled courtyard often includes two rows of stone statues representing mandarins, elephants, and horses. In the early Nguyen Dynasty, these buildings were constructed with wood and brick and roofed with tiles; however, later constructions used concrete, altering some architectural features (Figures 47-50).

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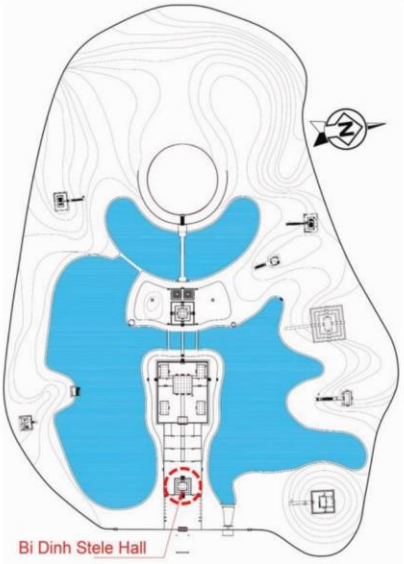
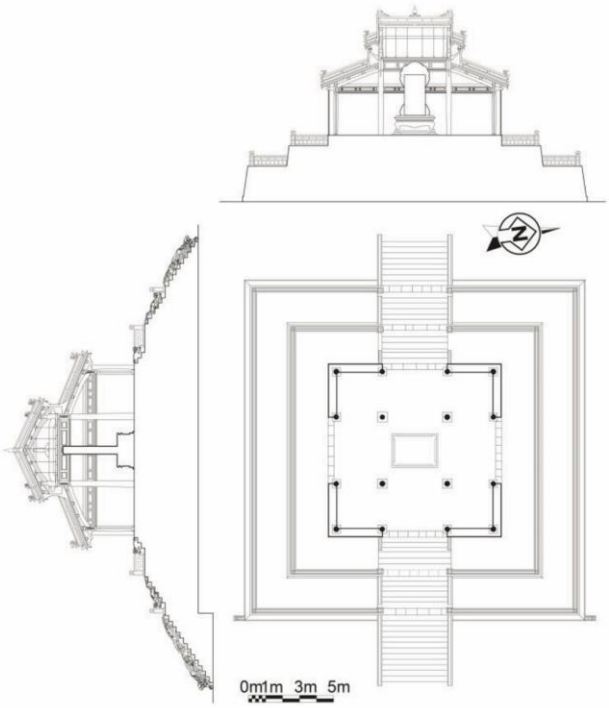
Name of Building: Bi Dinh Stele Hall	Function: Placing a stele to commemorate Emperor Minh Mang's merits
Year of Construction: 1840-1843 Restoreation:	Type/Level:
Site map	***Drawings of Floor Plan-Section***
 *Source: Waseda University*	
Exterior photo	
 *Source: Author (2020)*	
Interior photo	- Floor area: 403,21 m^2 - Status: Exiting/ Date of investigation: July 25th 2020 - Reference resource: Waseda University, HMCC
 *Source: Author (2020)*	

Figure 47: Inventory of Bi Dinh stele hall of Emperor Minh Mang's mausoleum
Source: Drawing of Waseda University and Hue Monuments Conservation Center and the Author's modifications



Figure 48: Bi Dinh stele hall, Emperor Minh Mang's mausoleum
Source: Photo by Author (2020)



Planche LXXVI. — Le pavillon de la Stèle, au Tombeau de Minh - Mạng : par devant, la grande cour d'honneur avec éléphant ; par derrière, la terrasse à gradins, la porte Hiển - Đức, le temple Sùng - Ân.
(Photographie communiquée par le Gouvernement Général).

Figure 49: Bi Dinh stele hall, Emperor Minh Mang's mausoleum
Source: Photo @ Bulletin des Amis du Vieux Hue, 1937

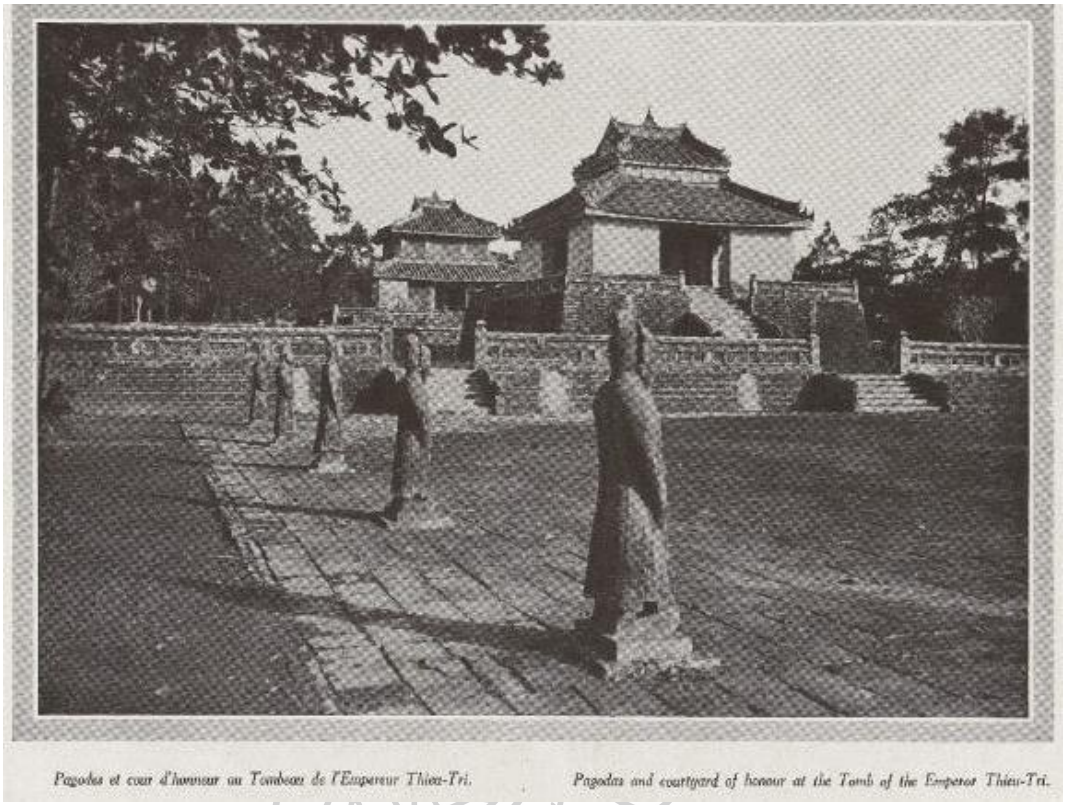


Figure 50: Bi Dinh stele hall seen from the Bai Đinh courtyard of Emperor Thieu Tri's mausoleum was photographed in 1919
https://humazur.univ-cotedazur.fr/iiif-img/12791/full/3015,/0/default.jpg.
Accessed on October 10, 2025.

4.4.4 Pavilions

This is a distinctive building type, set on a three-level foundation, commonly found in the emperor's mausoleums and featuring a square or rectangular floor plan. While these structures serve similar functions, they have notable distinctions. The building type known as Lau features a square floor plan, two stories, and a two-tiered roof covered with tube or flat tiles. Positioned on the main axis of the mausoleum, Lau serves as a prominent architectural highlight, providing a scenic viewpoint or a place for relaxation. In contrast, the building type, Cac, has a rectangular floor plan with two stories and a two-tiered roof, but it is positioned off the main axis. This structure is designed for a more intimate setting and serves as a space for rest, reading, or study. The mausoleum of Emperor Gia Long does not feature these building

types, while the mausoleums of Emperor Minh Mang and Emperor Thieu Tri include both Lau and Cac structures (Figures 51-53).

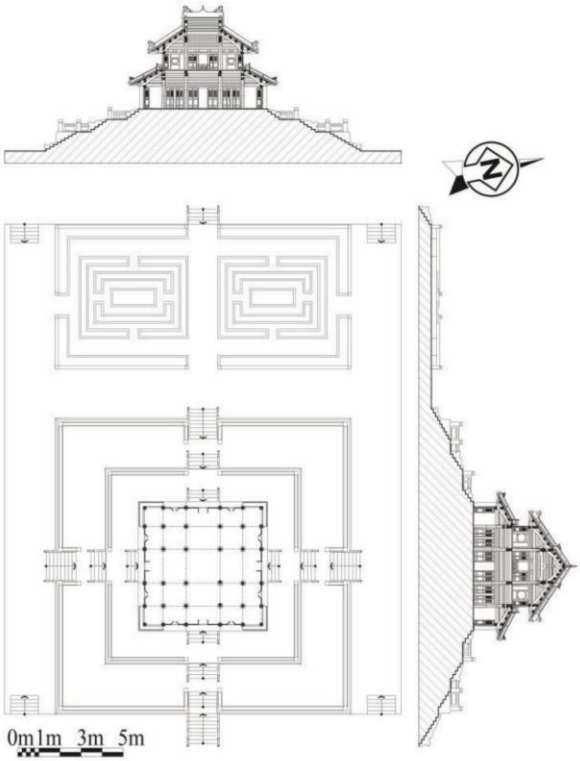
Name of Building: Minh Lau Pavilion	Function: a station of rest and reflection serving concurrently as a symbolic accent
Year of Construction: 1840-1843 Restoreation:	Type/Level:
Site map	***Drawings of Floor Plan-Section***
 *Source: Waseda University*	
Exterior photo  *Source: Author (2020)*	
Interior photo  *Source: Author (2020)*	- Floor area: 772,84 m^2 - Status: Exiting/ Date of investigation: July 25th 2020 - Reference resource: Waseda University, HMCC

Figure 51: Inventory of Minh Lau pavilion of Emperor Minh Mang's mausoleum
Source: Drawing of Waseda University, Hue Monuments Conservation Center and the Author's modifications

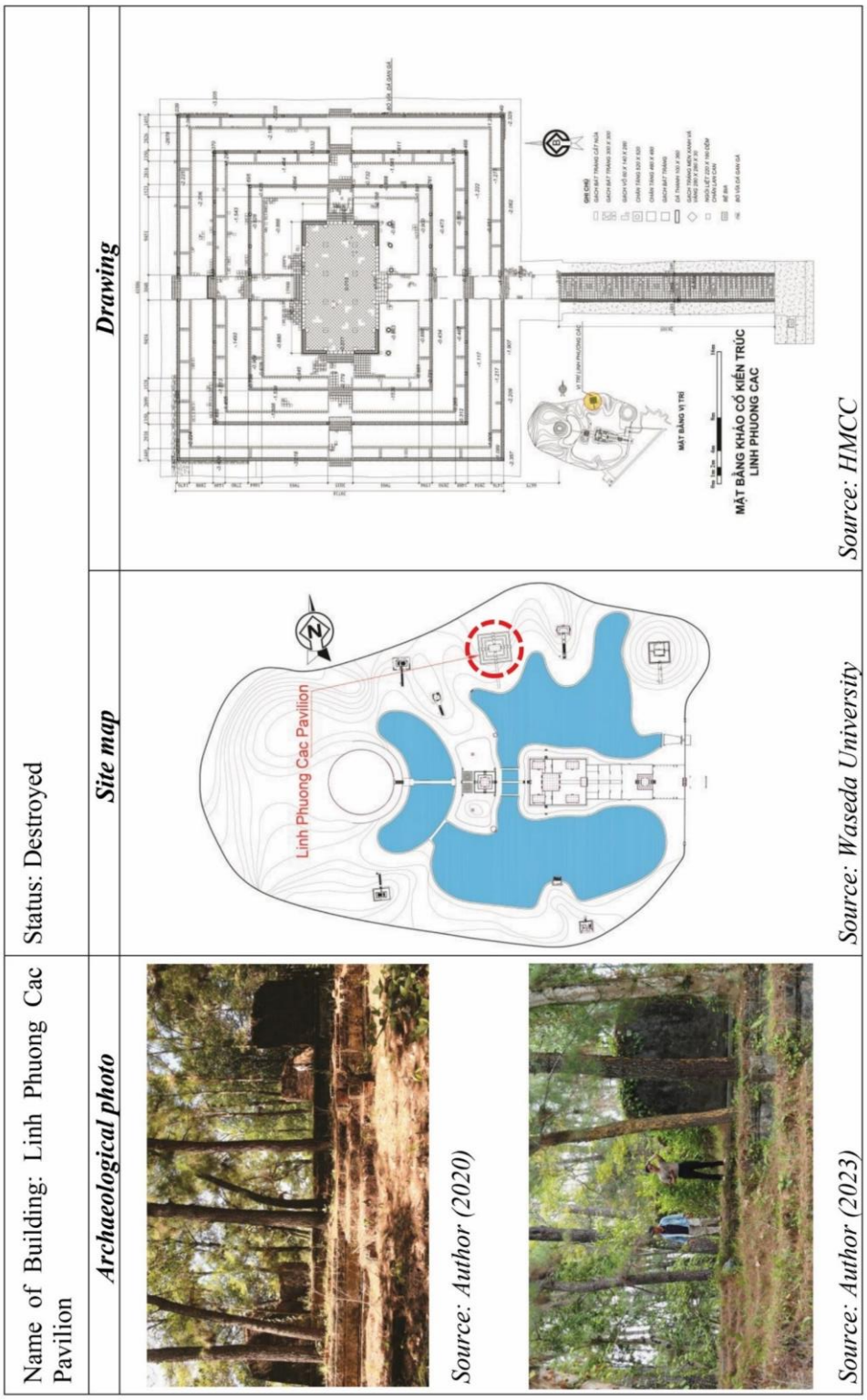


Figure 52: Inventory of Linh Phuong Cac pavilion, Emperor Minh Mang's mausoleum

Source: Drawing of Waseda University, Hue Monuments Conservation Center and the Author's modifications



Figure 53: An old photo of Linh Phuong Cac pavilion, Emperor Minh Mang's mausoleum
Source: https://collection.efeo.fr/ws/web/app/collection/record/249014. Accessed on October 20, 2024

4.4.5 Main Gate

The main gate, serving as the primary entrance to the worship temple area of each mausoleum, features a rectangular floor plan with three entrances and is therefore referred to as Tam Quan. The central compartment features two stories with stairs leading upward. Serving as both an entrance and a spiritual symbol, the main gate's architectural design, spatial layout, and wooden structure are almost identical across mausoleums. This gate style was once prominent in Hue Imperial City during the early Nguyen Dynasty, prior to Western cultural influences in Vietnam (Figures 54-55).

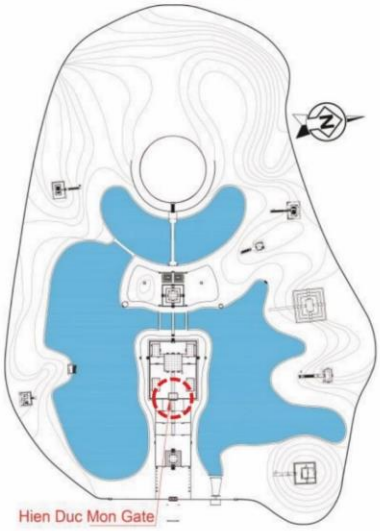
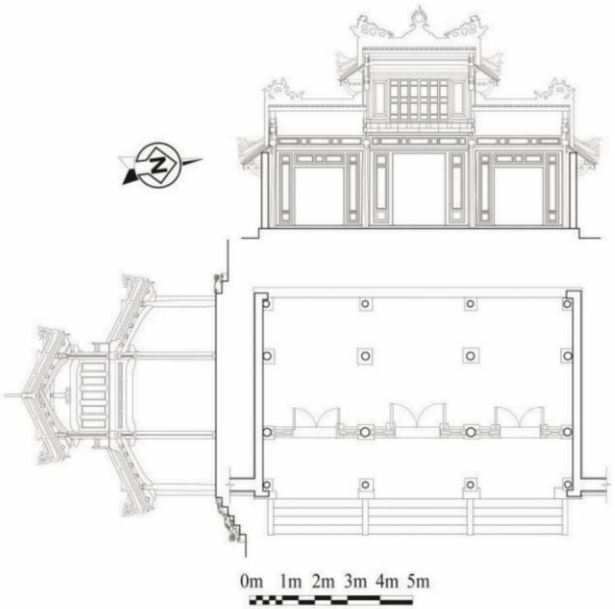
Name of Building: Hien Duc Mon Gate	Function: Main gate to the worship area of Emperor's Mausoleum
Year of Construction: 1840-1843 Restoreation:	Type/Level:
Site map	***Drawings of Floor Plan-Section***
 *Source: Waseda University*	
Exterior photo	
 *Source: Author (2020)*	
Interior photo	- Floor area: 74,78 m^2 - Status: Exiting/ Date of investigation: July 25th 2020 - Reference resource: Waseda University, HMCC
 *Source: Author (2020)*	

Figure 54: Inventory of Hien Duc Mon gate of Emperor Minh Mang's mausoleum
Source: Drawing of Waseda University, Hue Monuments Conservation Center and the Author's modifications



Figure 55: The Nghi Mon (main gate) of Emperor Gia Long's mausoleum was photographed in 1898
Source: https://catalogue.bnf.fr/ark:/12148/cb45478188r.
Accessed on October 10, 2025.

4.4.6 Other Structures

In addition to the primary structures, the mausoleums include various auxiliary buildings (Figures 56-79), such as main entrance brick gate, symbolic bronze gate, bridge, open house, part house, floating pavilion, chamber, hall, store, study house, office, courtyard, landmark tower or stone statue. Although some auxiliary structures may occasionally be omitted or added, the fundamental functions and architectural concepts remain intact across the three case studies examined in this study.

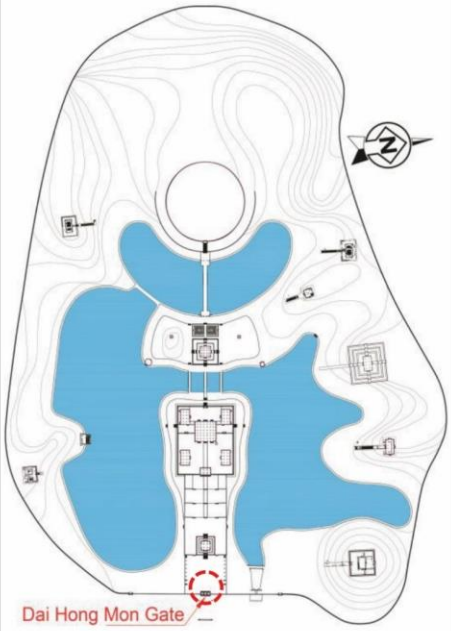
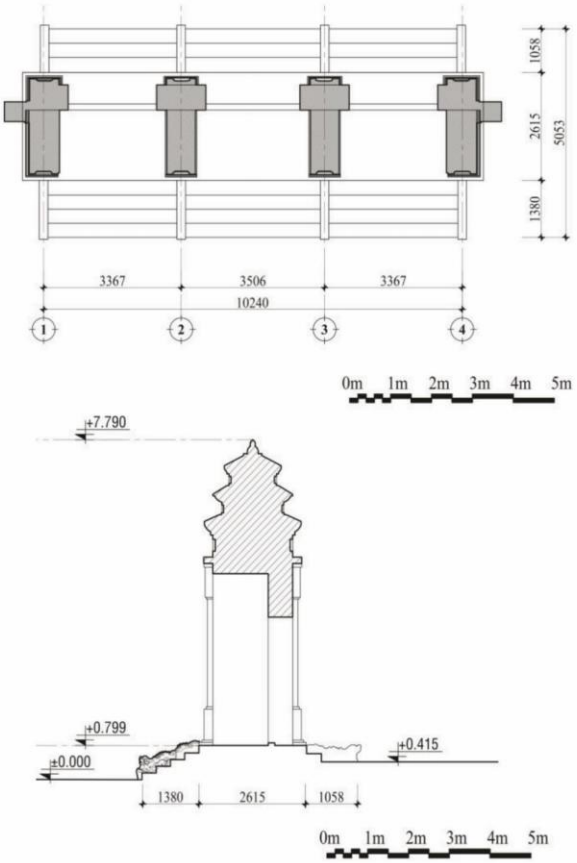
Name of Building: Dai Hong Mon Gate	Function: The main entrance to Emperor Minh Mang's Mausoleum
Year of Construction: 1840 -1843 Restoreation:	Type/Level: Triple-arched gate
Site map	***Drawing of Floor Plan-Section***
 *Source: Waseda University*	
Exterior photo	
 *Source: Author (2020)*	- Floor area: 51,74 m^2 - Status: Exiting/ Date of investigation: July 25th 2020 - Reference resource: Waseda University, HMCC

Figure 56: Inventory of Dai Hong Mon gate of Emperor Minh Mang's mausoleum
Source: Drawing of Waseda University, Hue Monuments Conservation Center and the Author's modifications

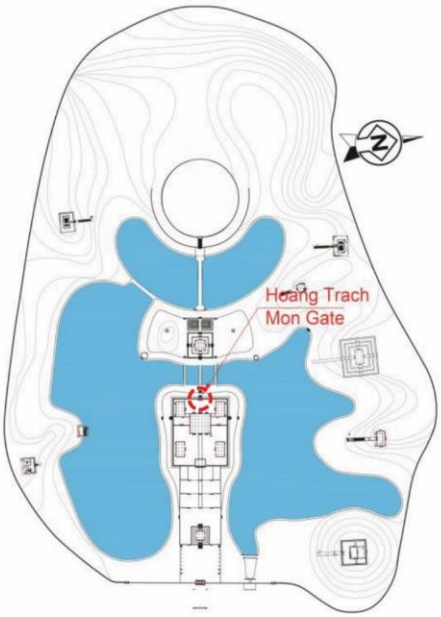
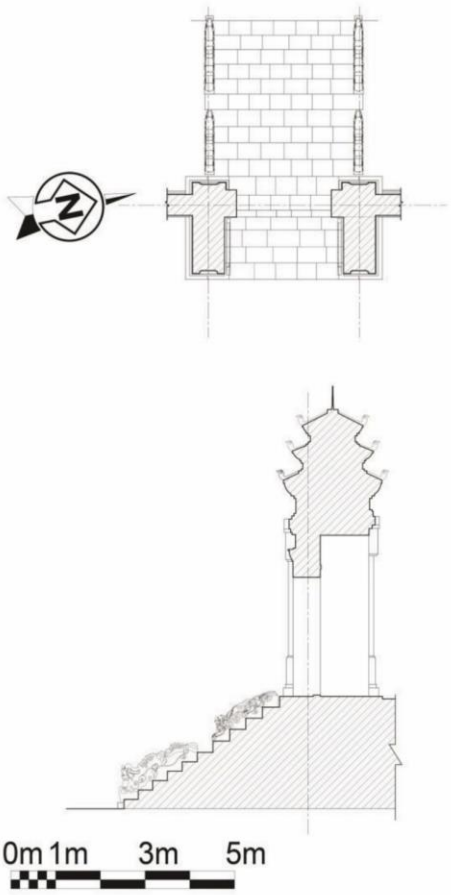
Name of Building: Hoang Trach Mon Gate	Function: Terminal gate of the worship area
Year of Construction: 1840-1843 Restoreation:	Type/Level:
Site map	***Drawings of Floor Plan-Section***
 *Source: Waseda University*	
Exterior photo	
 *Source: Author (2020)*	- Floor area: 10.12 m^2 - Status: Exiting/ Date of investigation: July 25th 2020 - Reference resource: Waseda University, HMCC

Figure 57: Inventory of Hoang Trach Mon gate of Emperor Minh Mang's mausoleum
Source: Drawing of Waseda University, Hue Monuments Conservation Center and the Author's modifications



Figure 58: A view across the gardens toward the Hoang Trach Mon gate of Emperor Minh Mang's mausoleum was photographed in 1930
Source: https://humazur.univ-cotedazur.fr/iiif-img/12162/full/3686,/0/default.jpg. Accessed on October 10, 2025.



Figure 59: Phuong Mon symbol gate and Thong Minh Chinh Truc Kieu bridge, Emperor Minh Mang's mausoleum
Source: Photo by Author

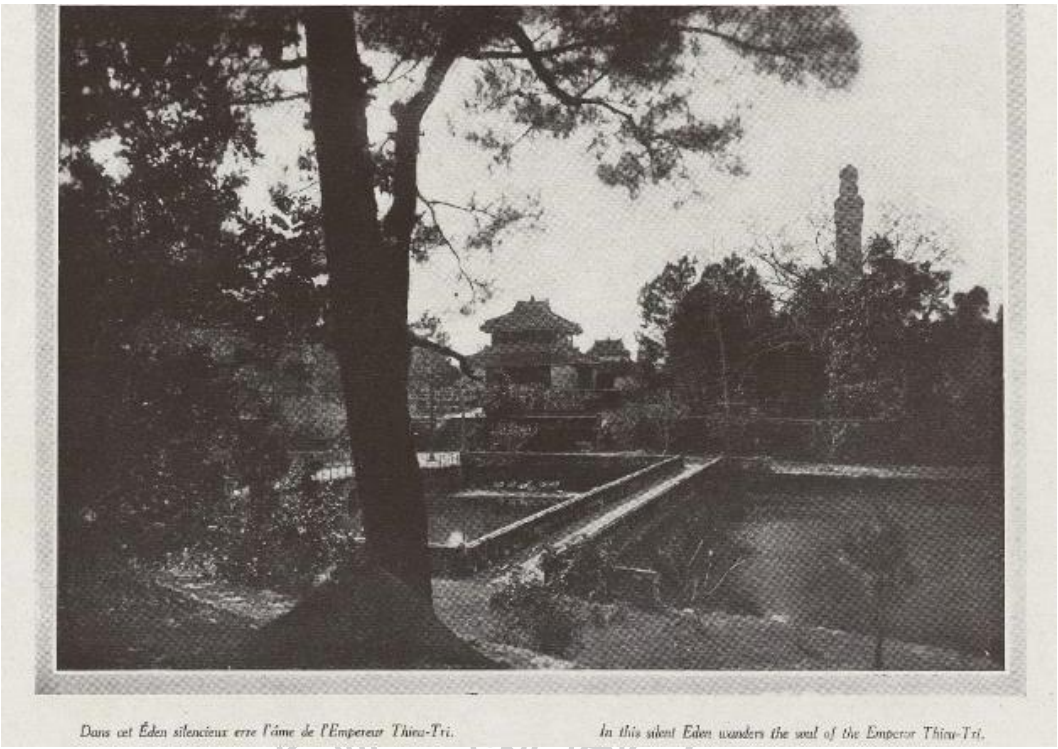


Figure 60: Tay Dinh Kieu bridge of Emperor Thieu Tri's mausoleum was photographed in 1919
Source: https://humazur.univ-cotedazur.fr/iiif-img/12792/full/3009,/0/default.jpg. Accessed on October 10, 2025.



Figure 61: Dieu Ngu Dinh open house (collapsed building), Emperor Minh Mang's mausoleum
Source: Photo @ Bulletin des Amis du Vieux Hue, 1937

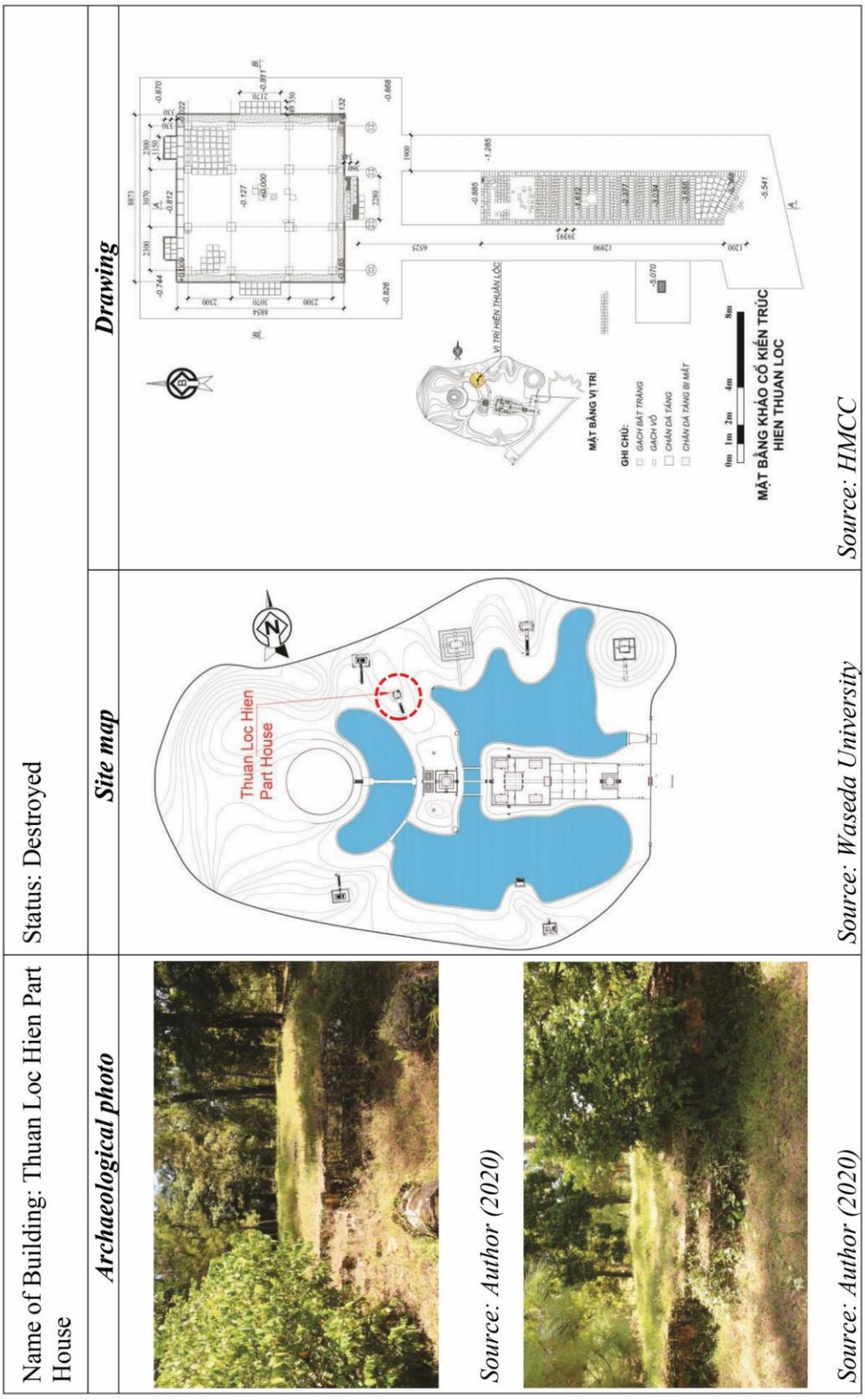


Figure 62: Thuan Loc Hien part house of Emperor Minh Mang's mausoleum
Source: Drawing of Waseda University, Hue Monuments Conservation Center, and the Author's modifications



Figure 63: Du Khiem Ta floating pavilion of Emperor Tu Duc's mausoleum
Source: Photo by Author (2020)



Figure 64: Xung Khiem Ta floating pavilion of Emperor Tu Duc's mausoleum
Source: Photo by Author (2020)

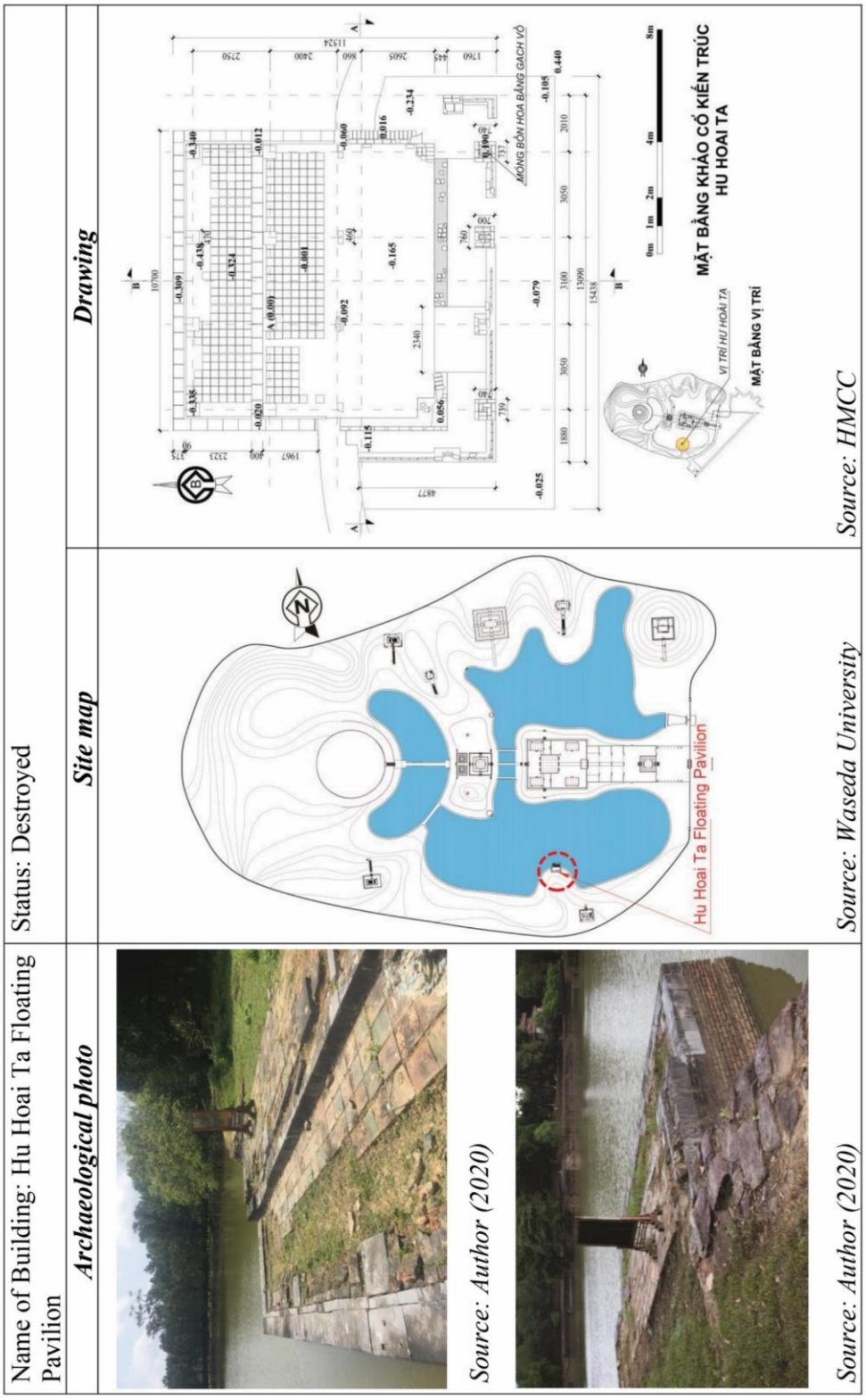


Figure 65: Inventory of Hu Hoai Ta floating pavilion of Emperor Minh Mang's mausoleum
Source: Drawing of Waseda University, Hue Monuments Conservation Center, and the Author's modifications

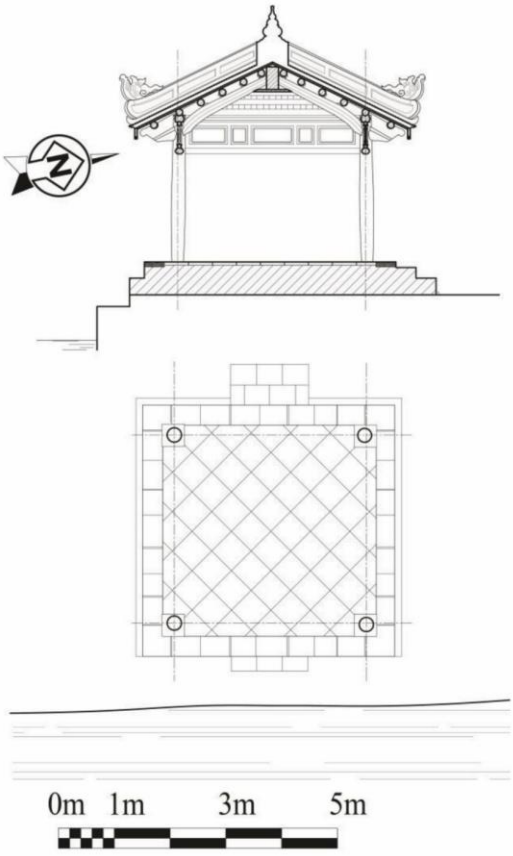
Name of Building: Nghinh Luong Quan Pavilion	Function: A resting place for contemplating the landscape at Trừng Minh Ho Lake
Year of Construction: 1840-1843 Restoreation:	Type/Level:
Site map	***Drawings of Floor Plan-Section***
 *Source: Waseda University*	
Exterior photo	
 *Source: Author (2020)*	- Floor area: 20.39 m^2 - Status: Exiting/ Date of investigation: July 25th 2020 - Reference resource: Waseda University, HMCC

Figure 66: Inventory of Nghinh Luong Quan pavilion of Emperor Minh Mang's mausoleum

Source: Drawing of Waseda University, Hue Monuments Conservation Center, and the Author's modifications

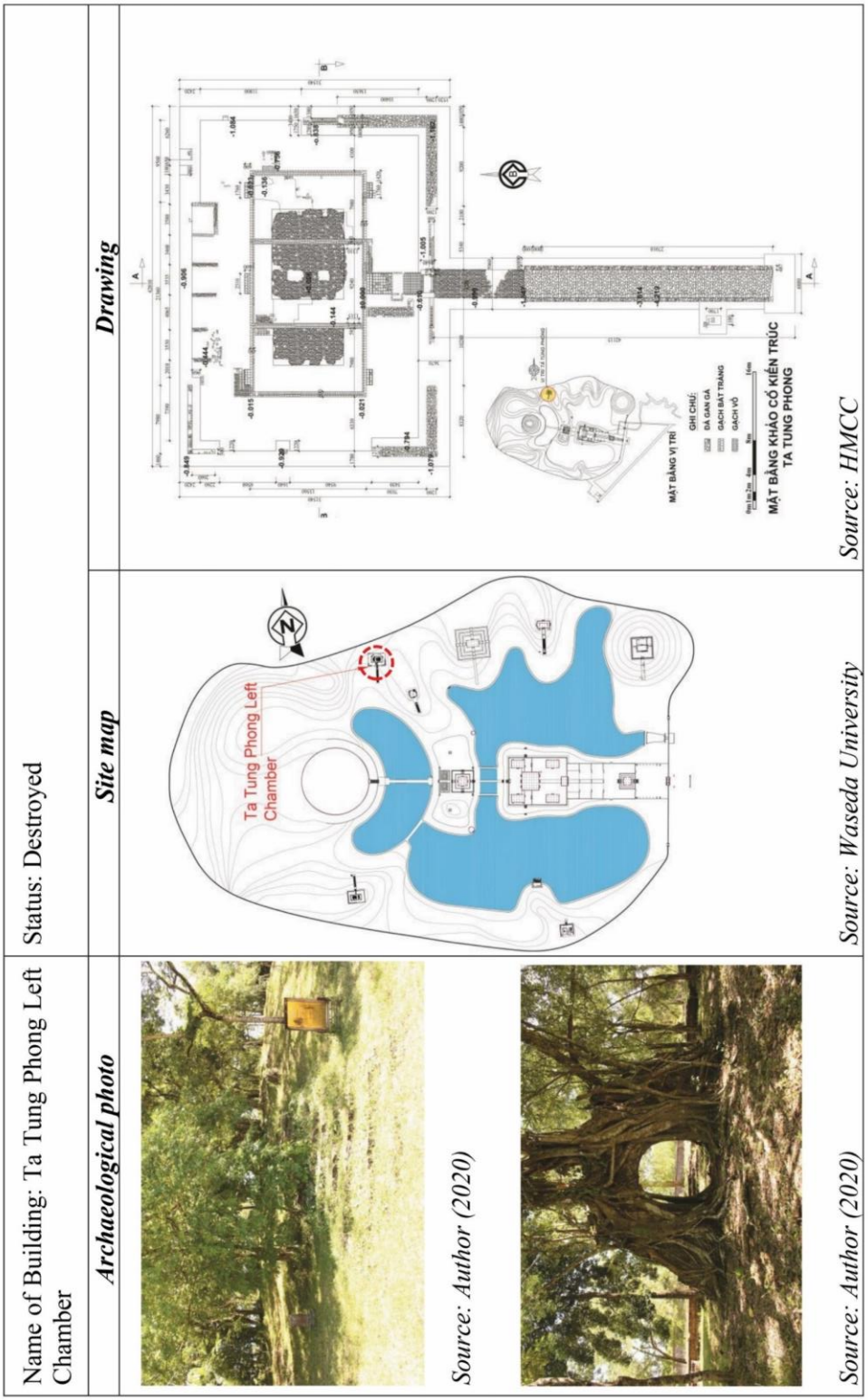


Figure 67: Inventory of Ta Tung Phong left chamber of Emperor Minh Mang's mausoleum
Source: Drawing of Waseda University, Hue Monuments Conservation Center, and the Author's modifications

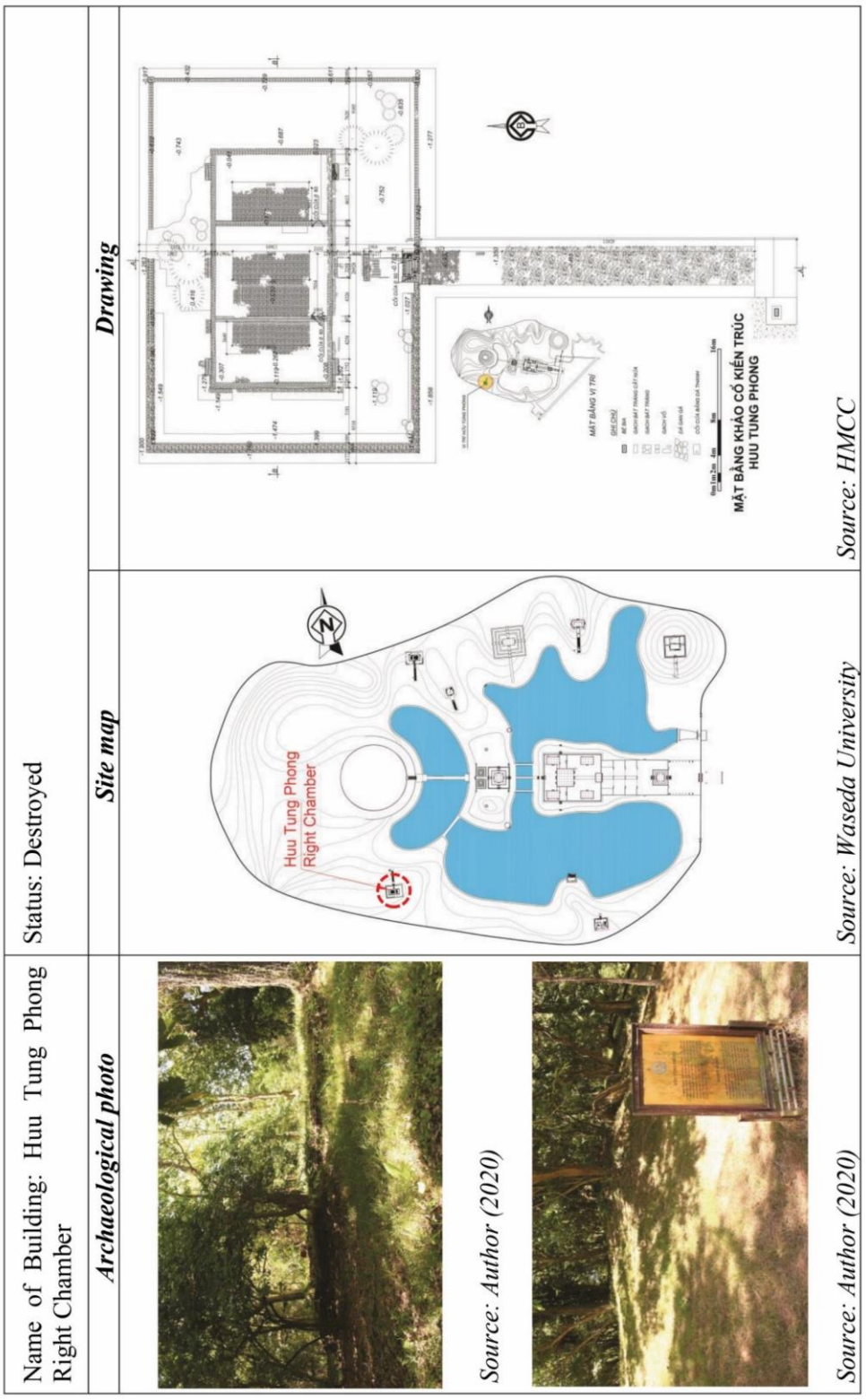


Figure 68: Inventory of Huu Tung Phong right chamber of Emperor Minh Mang's mausoleum
Source: Drawing of Waseda University, Hue Monuments Conservation Center, and the Author's modifications

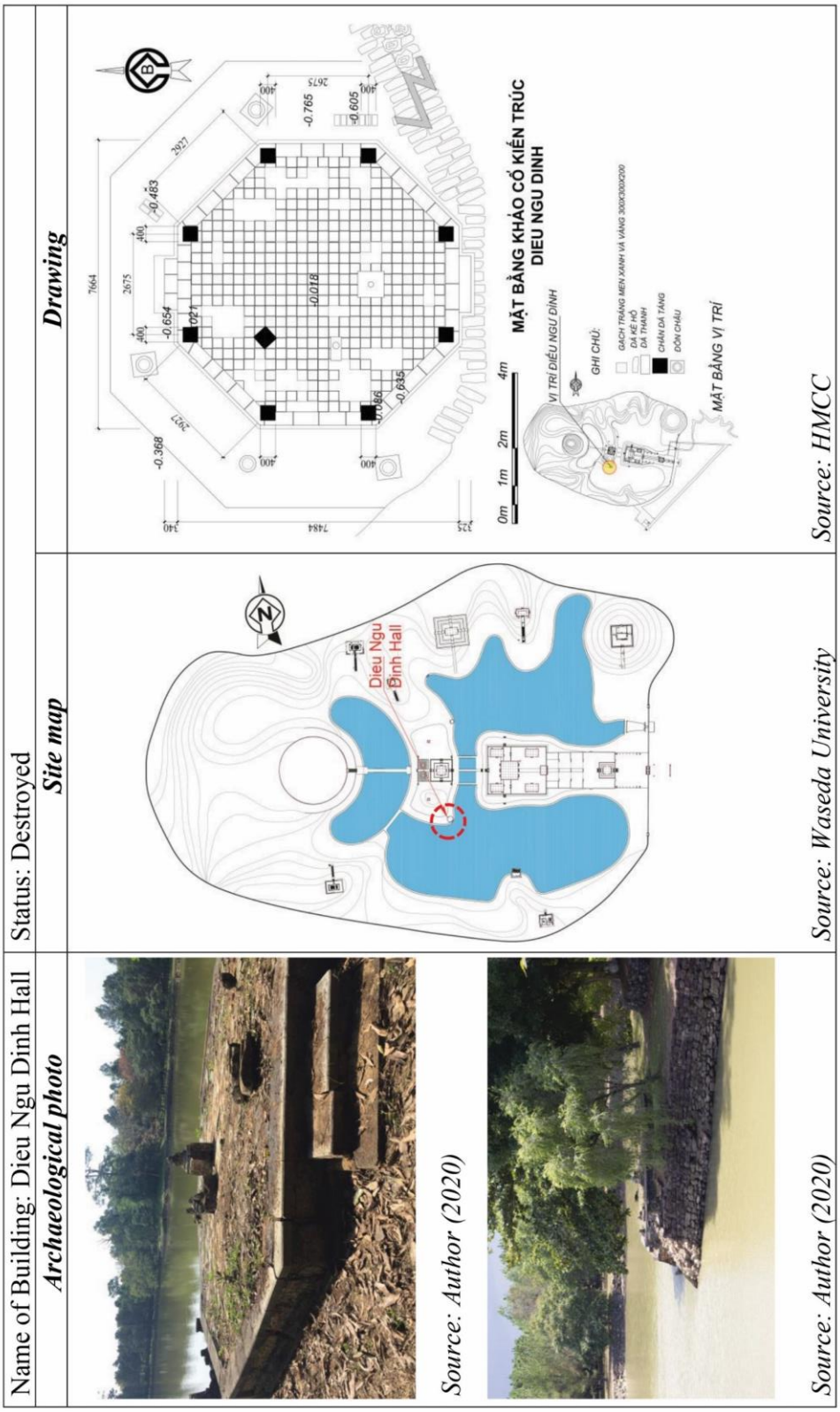


Figure 69: Inventory of Dieu Ngu Dinh Hall of Emperor Minh Mang's mausoleum
Source: Drawing of Waseda University, Hue Monuments Conservation Center, and the Author's modifications

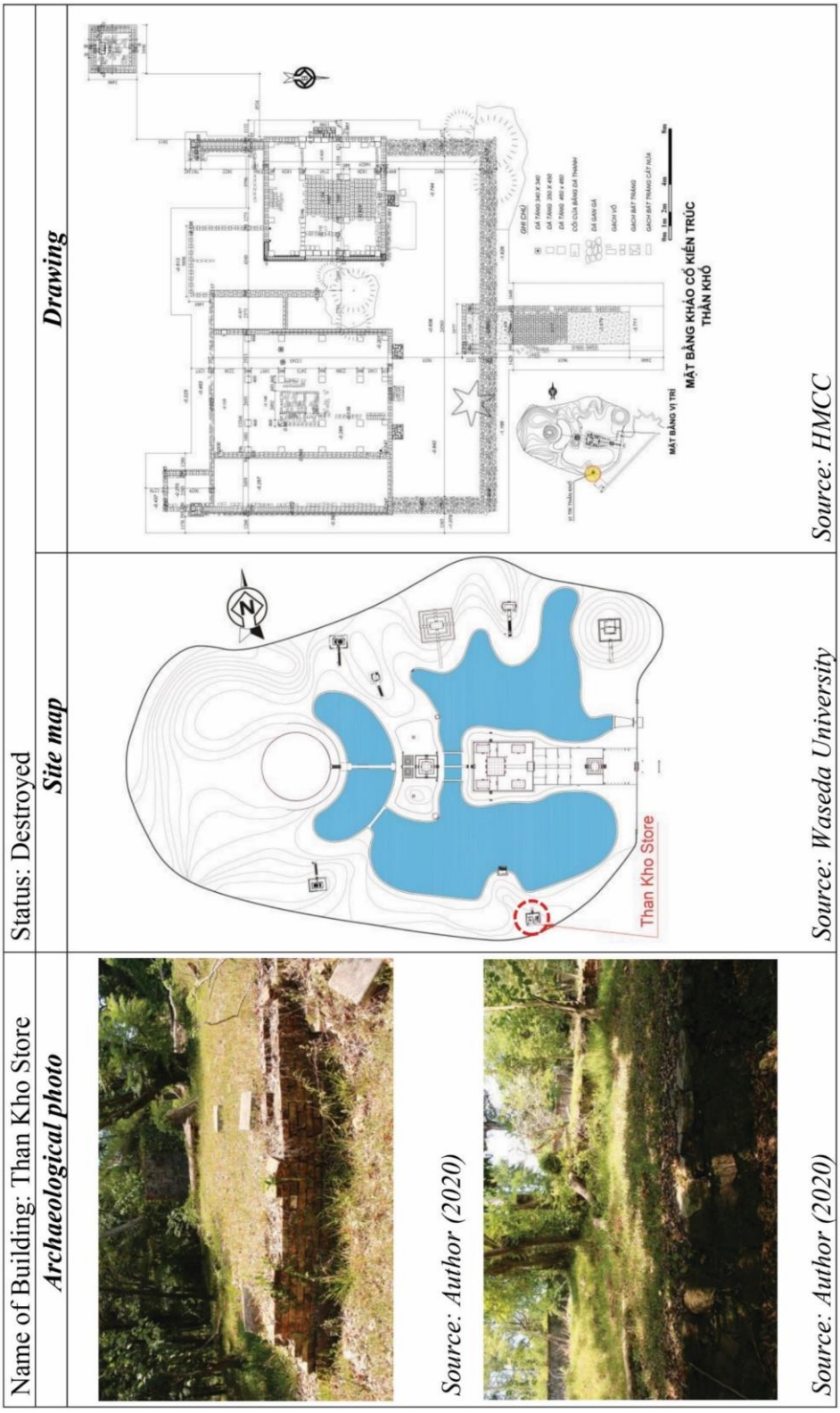


Figure 70: Inventory of Than Kho store of Emperor Minh Mang's mausoleum
Source: Drawing of Waseda University, Hue Monuments Conservation Center, and the Author's modifications

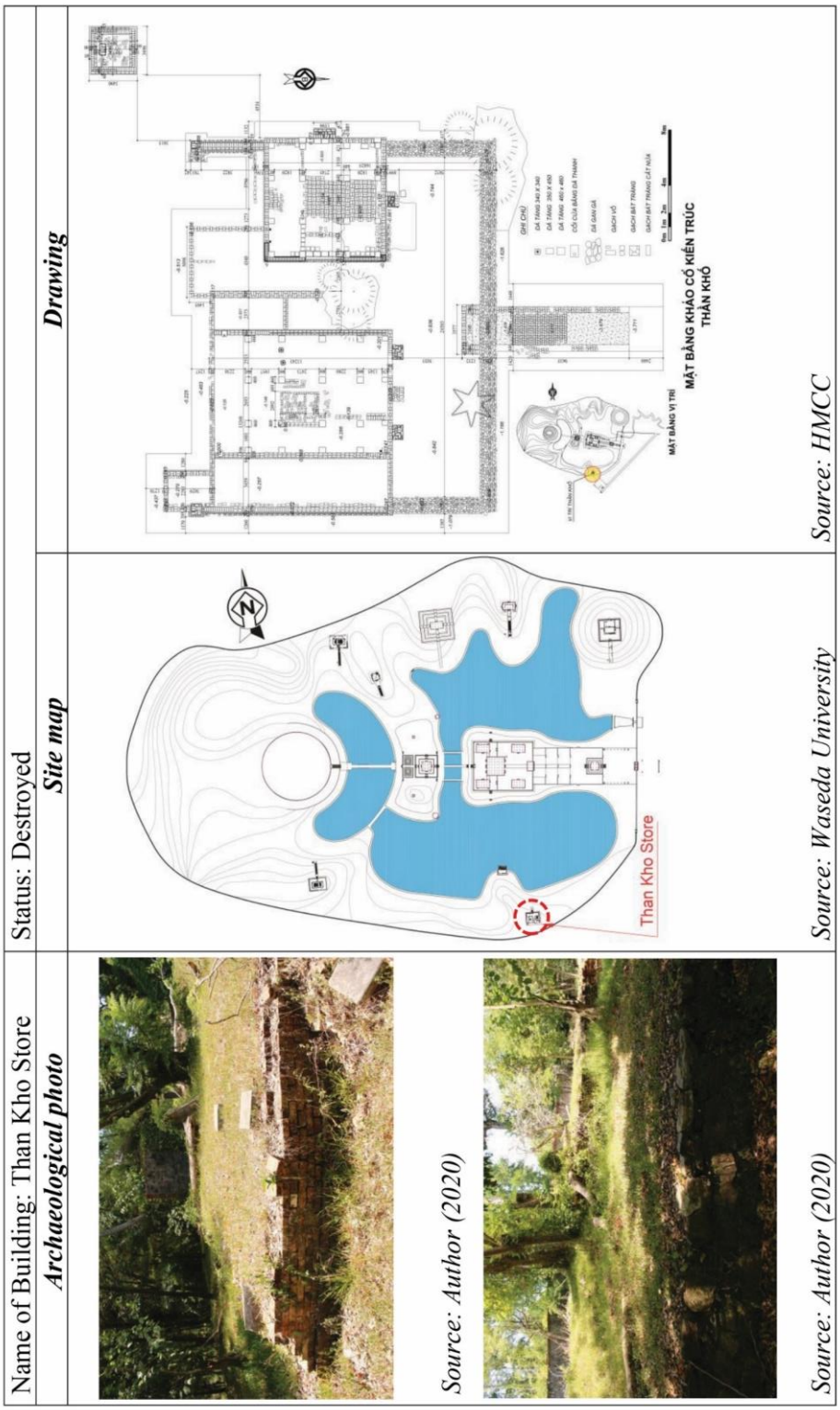


Figure 71: Inventory of Truy Tu Trai Stydy House of Emperor Minh Mang's mausoleum
Source: Drawing of Waseda University, Hue Monuments Conservation Center, and the Author's modifications

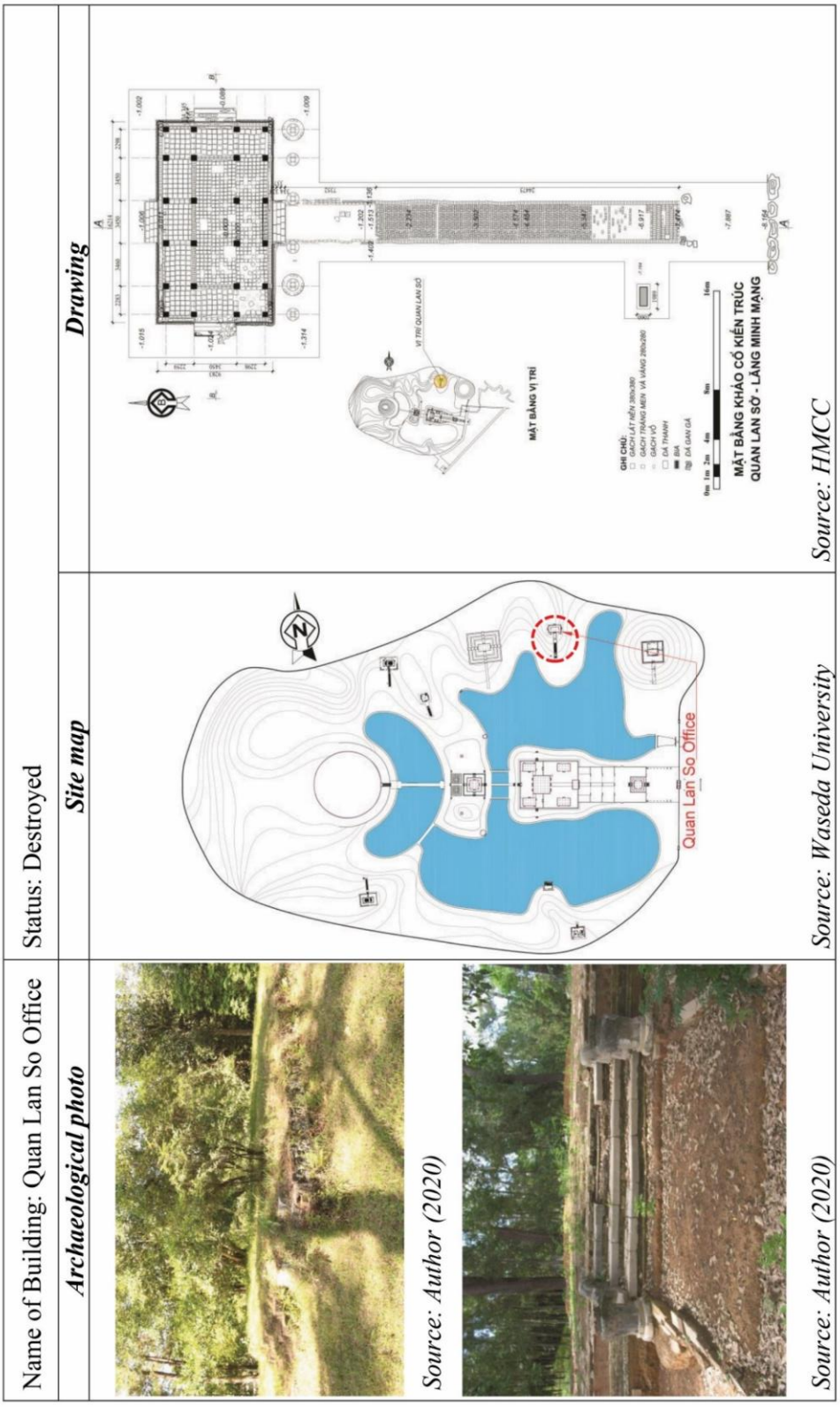


Figure 72: Inventory of Quan Lan So Office of Emperor Minh Mang's mausoleum
Source: Drawing of Waseda University, Hue Monuments Conservation Center, and the Author's modifications

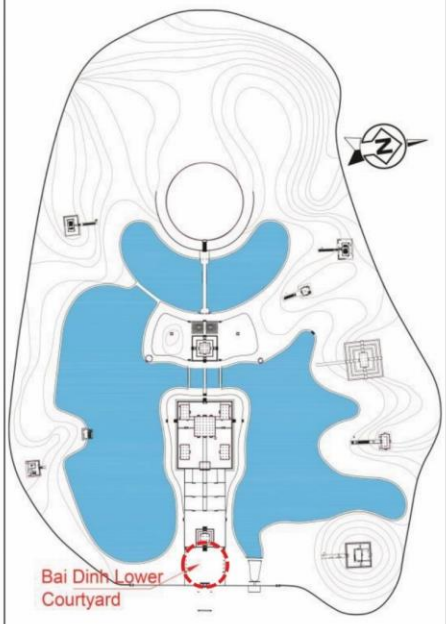
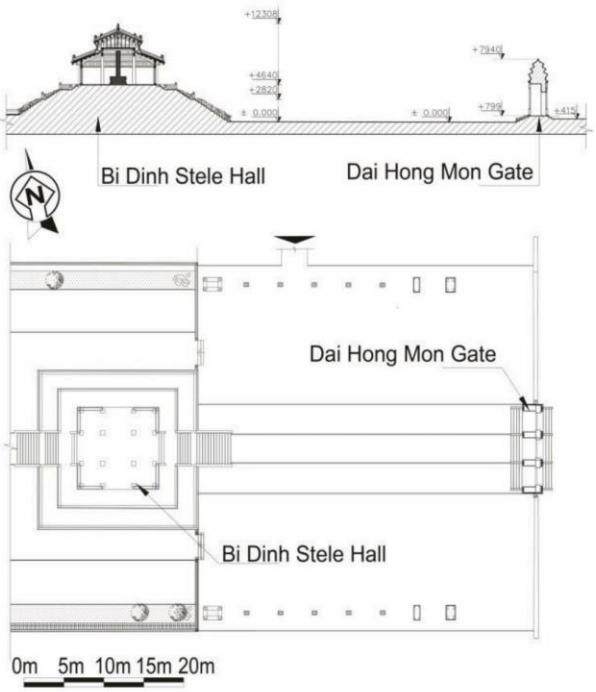
Name of Building: Bai Dinh Lower Courtyard	Function: Ceremonial courtyard for rites of homage
Year of Construction: 1840-1843 Restoreation:	Type/Level:
Site map	***Drawings of Floor Plan-Section***
 *Source: Waseda University*	
Exterior photo	
 *Source: Author (2020)*	- Floor area: 1.926,12 m^2 - Status: Exiting/ Date of investigation: July 25th 2020 - Reference resource: Waseda University, HMCC

Figure 73: Inventory of Bai Dinh lower courtyard of Emperor Minh Mang's mausoleum

Source: Drawing of Waseda University, Hue Monuments Conservation Center, and the Author's modifications

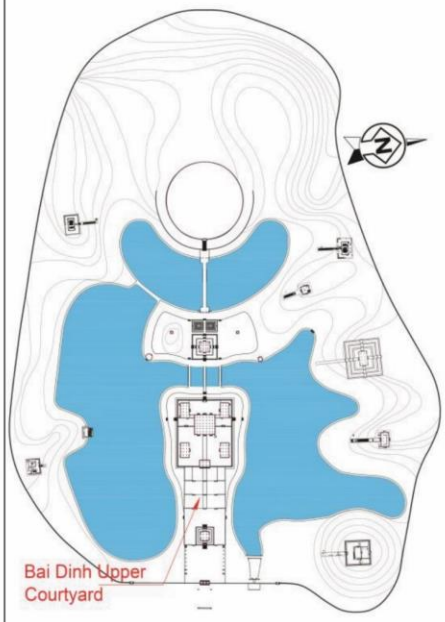
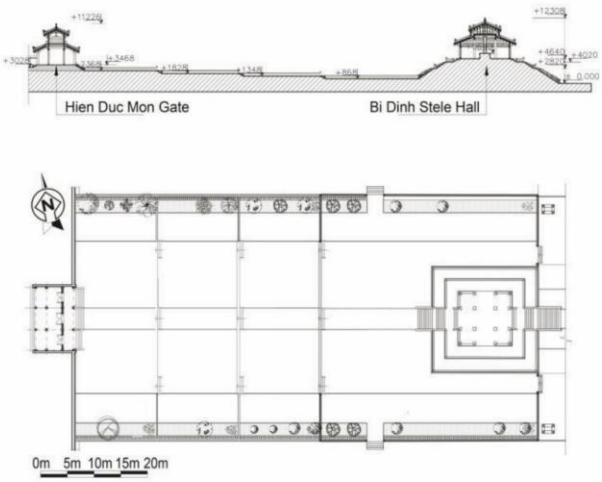
Name of Building: Bai Dinh Upper Courtyard	Function: Ceremonial Courtyard
Year of Construction: 1840-1843 Restoreation:	Type/Level:
Site map	***Drawings of Floor Plan-Section***
 *Source: Waseda University*	
Exterior photo	
 *Source: Author (2020)*	- Floor area: 3.089,43 m^2 - Status: Exiting/ Date of investigation: July 25th 2020 - Reference resource: Waseda University, HMCC

Figure 74: Inventory of Bai Dinh upper courtyard of Emperor Minh Mang's mausoleum

Source: Drawing of Waseda University, Hue Monuments Conservation Center, and the Author's modifications



Figure 75: Stone statues in the Bai Dinh courtyard, Emperor Gia Long's mausoleum
Source: Photo by Author (2020)

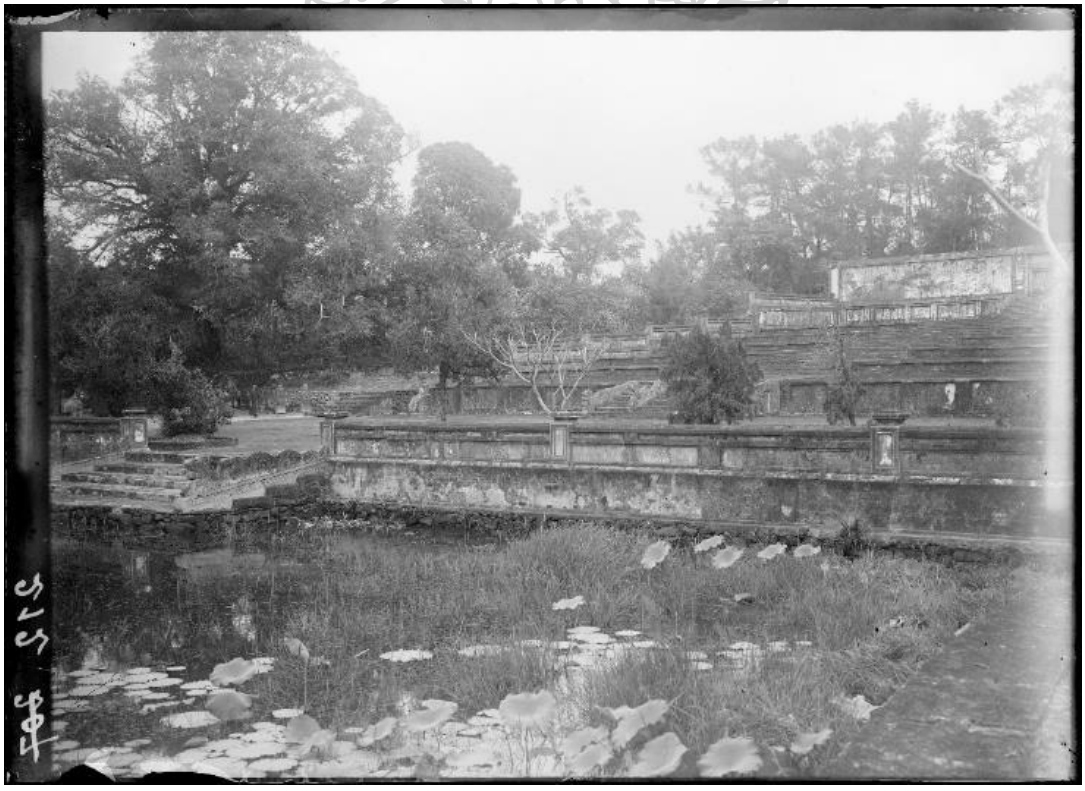
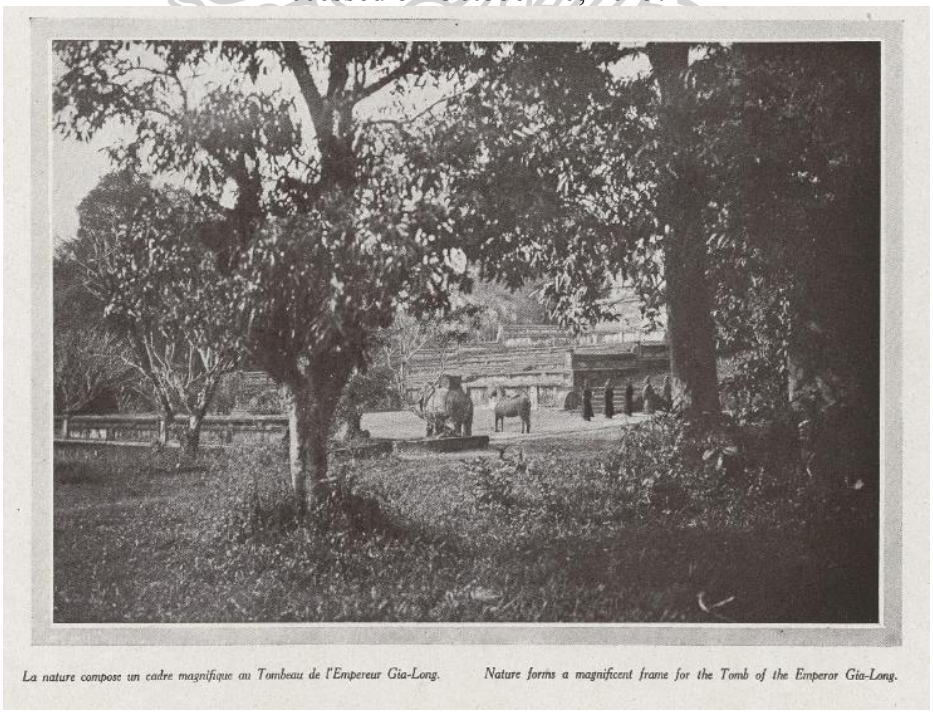


Figure 76: Bai Dinh Courtyard of Emperor Gia Long's mausoleum was photographed in 1898
Source: https://gallica.bnf.fr/ark:/12148/btv1b530131322/.
Accessed on October 10, 2025.



Un aspect du grand escalier d'honneur conduisant au Tombeau de l'Empereur Gia-Long. *A view of the great staircase of honour leading to the Tomb of the Emperor Gia-Long.*

Figure 77: Bai Dinh Courtyard of Emperor Gia Long's mausoleum was photographed in 1919
Source: https://humazur.univ-cotedazur.fr/iiif-img/12787/full/3029,/0/default.jpg. Accessed on October 10, 2025.



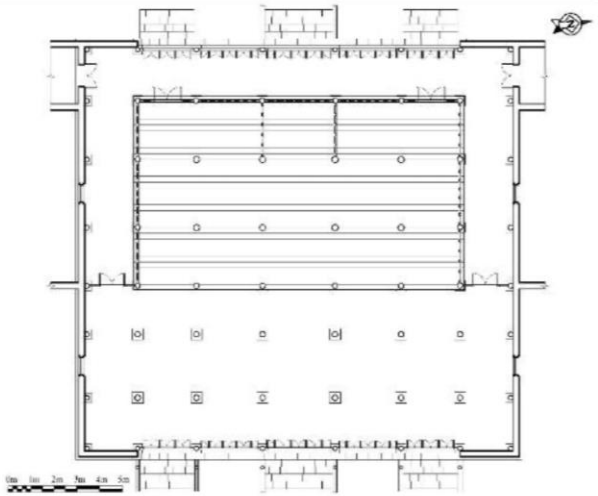
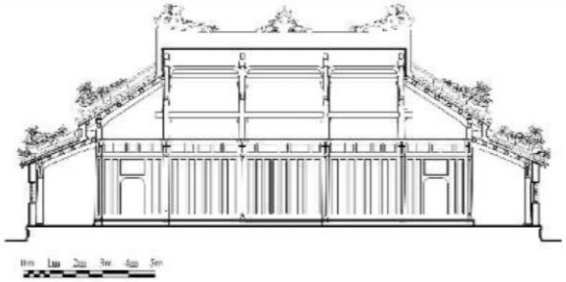
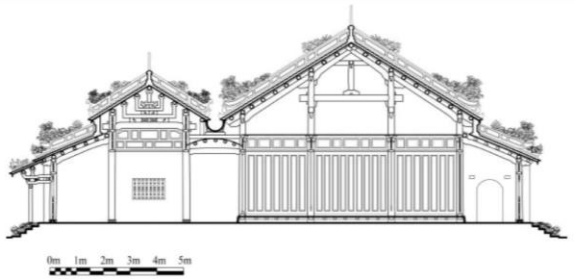
La nature compose un cadre magnifique au Tombeau de l'Empereur Gia-Long. *Nature forms a magnificent frame for the Tomb of the Emperor Gia-Long.*

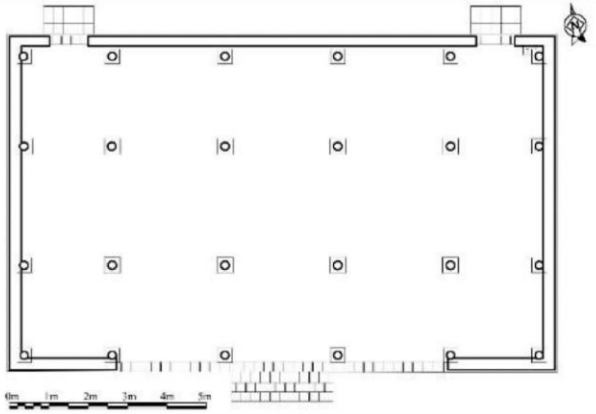
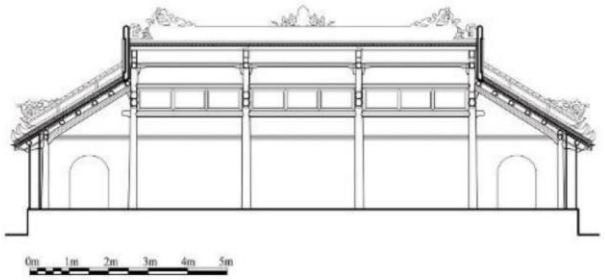
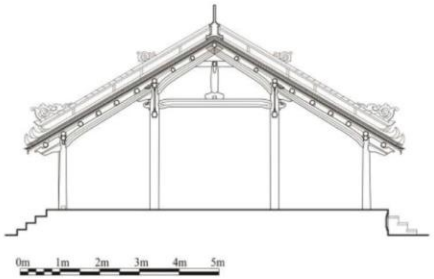
Figure 78: One view of the Bai Dinh Courtyard of Emperor Gia Long's mausoleum was photographed in 1919
Source: https://humazur.univ-cotedazur.fr/iiif-img/12786/full/2990,/0/default.jpg. Accessed on October 10, 2025.

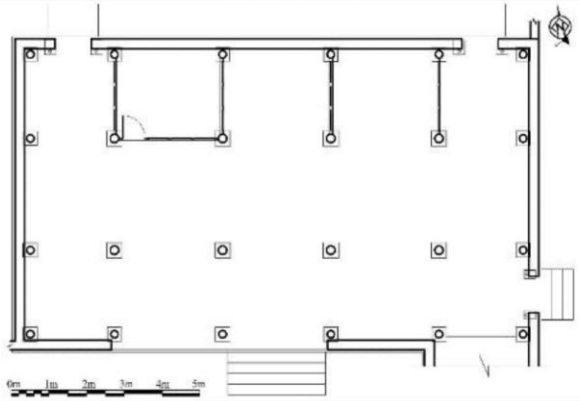
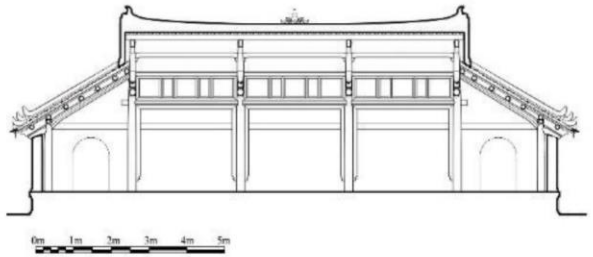
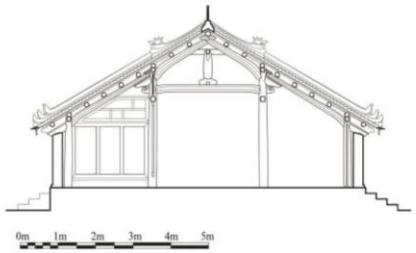


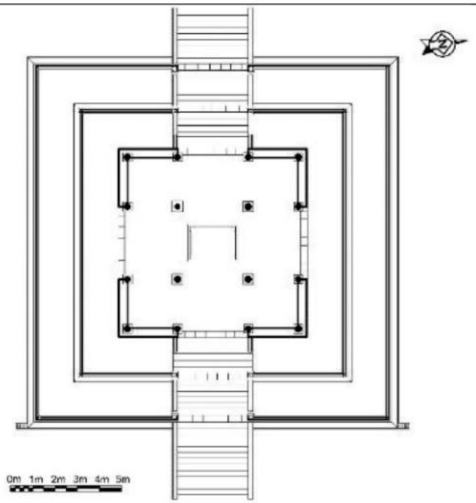
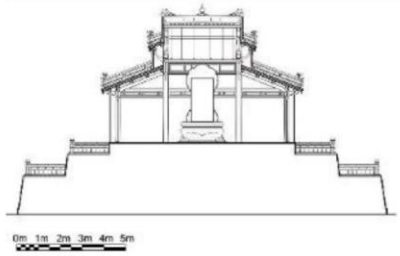
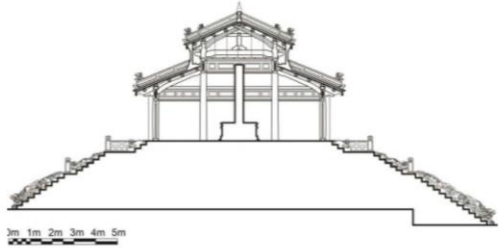
Figure 79: Tru Bieu landmark towers, Emperor Gia Long's mausoleum
Source: Photo by Author (2020)

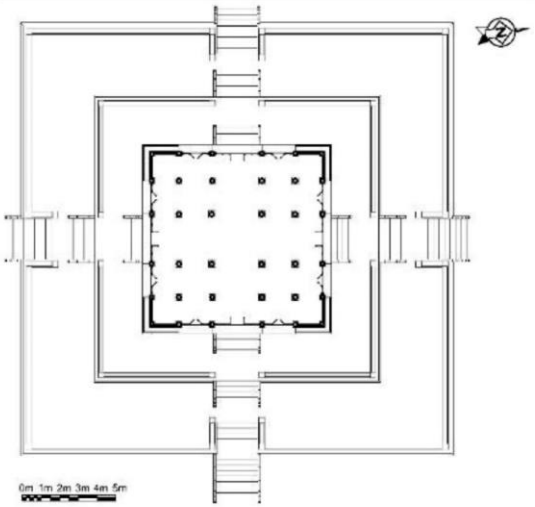
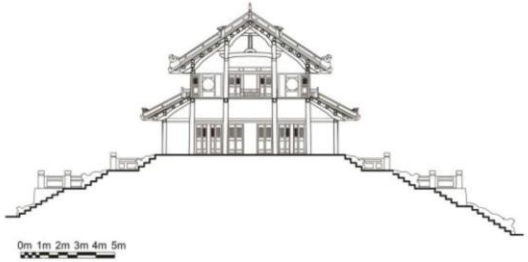
Table 14. Building types and structures, case studies at Emperor Minh Mang's mausoleum

No.	Building Types	Drawings
1	**Main Temple** (Sung An Dien Main Temple) - Twin-ridge beam buildings: Tien Dien front hall and the Chinh Dien main hall. - Resting on a shared foundation and interconnected by a structure, Thua Luu, to support a gutter.	**Floor Plan**  **Longitudinal Section**  **Cross-Section** 

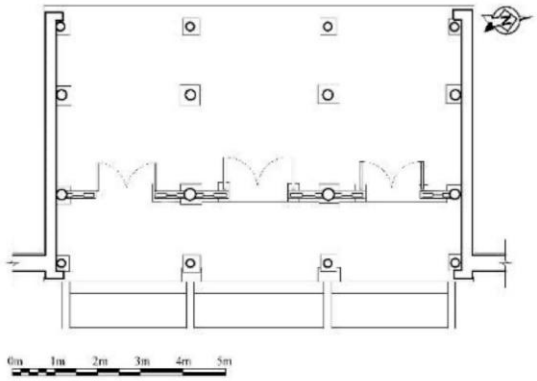
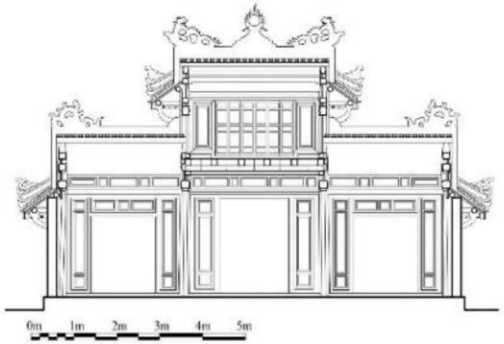
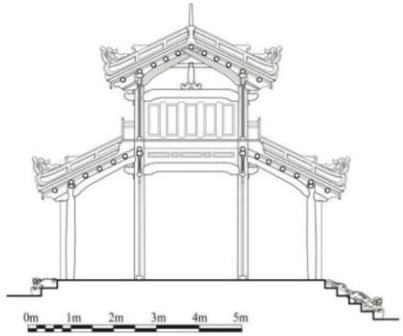
No.	Building Types	Drawings
2	**Sub-Temple** (Dong Phoi Dien Left Sub-Temple) - Single-ridge beam building with three compartments and two wings. - Located on the front left and right sides of the main temple and dedicated to worshipping the votive tablets of the emperor's courtiers	**Floor Plan**  **Longitudinal Section**  **Cross-Section** 

No.	Building Types	Drawings
3	**Sub-House** (Dong Phoi Vien Left Sub-House) - Located on the main temple's back, left, and right sides. - Serving as storage for worship items and preparation for rituals held at the main temple.	**Floor Plan**  **Longitudinal Section**  **Cross-Section** 

No.	Building Types	Drawings
4	**Stele Hall** (Bi Dinh Stele Hall) - A square plan, featuring a two-tier roof - Constructed on a two- or three-level foundation and open to four sides - Enshrining a large stone stele - Located along the central axis of the mausoleum, either in front of the tomb area or near the entrance.	**Floor Plan**  **Longitudinal Section**  **Cross-Section** 

No.	Building Types	Drawings
5	**Pavilion** (Minh Lau Pavilion) - Having a square or rectangular floor plan. - Built on a three-level foundation on the main axis of the mausoleum.	**Floor Plan**  **Longitudinal Section**  **Cross-Section** 

<table>
<tr><th>No.</th><th>Building Types</th><th colspan="2">Drawings</th></tr>
<tr><td rowspan="4">6</td><td rowspan="4">Main Gate
(Hien Duc Mon Main Gate)

- A rectangular floor plan with three entrances.
- The central compartment features two stories with stairs.
- Serving as an entrance and a spiritual symbol.</td><td colspan="2">Floor Plan</td></tr>
<tr><td colspan="2">  </td></tr>
<tr><td>Longitudinal Section</td><td>Cross-Section</td></tr>
<tr><td>  </td><td>  </td></tr>
</table>

4.5 Conclusion

This study examines the layout and architectural features of the imperial mausoleums of the first three emperors of the Nguyen Dynasty - Gia Long, Minh Mang, and Thieu Tri - to explore the development of a distinctive typology of royal funerary architecture in nineteenth-century Vietnam. These mausoleums represent a synthesis of indigenous Vietnamese traditions and refined East Asian architectural principles shaped by the period's unique sociopolitical and cultural context.

The mausoleums were meticulously designed along a Than Dao axis (sacred axis), integrating natural landscapes with carefully composed architectural elements. Gia Long's mausoleum emphasizes a profound harmony between humans and nature, characterized by open spatial arrangements and minimal artificial intervention. Minh Mang's mausoleum reflects a high degree of symmetrical planning and spatial hierarchy, consistent with the ideals of Confucian moral and political order. Although simpler in form, Thieu Tri's mausoleum maintains a coherent relationship between ritual structures and the natural environment, signalling a transitional phase that blends tradition with emerging transformations.

Key architectural components - including the main temple, sub-temples, sub-house, stele hall, pavilions, main gates, and others - not only structure the spatial experience but also articulate expressions of imperial authority, religious belief, and artistic value (Table 14). Collectively, these mausoleums reveal a sophisticated level of technical mastery, aesthetic balance, and a profound engagement with Feng Shui principles.

Chapter 5

Analysis of the Site Planning for the Mausoleums

This chapter analyses the site planning principles of the Nguyen Dynasty mausoleums, specifically those of Emperors Gia Long, Minh Mang, and Thieu Tri. It begins by exploring measurement systems used during the Nguyen Dynasty, emphasising the specialised Lu Ban Xich rule for royal mausoleum constructions. The chapter then outlines analytical methods and principles for dividing site layouts into systematic grid structures, facilitating a standardised analysis of spatial and architectural compositions. For each mausoleum, it systematically examines principles such as axis translation, deployment of primary construction units, proportional relationships, and grid-based spatial advancement. This comparative approach highlights both commonalities and unique features of the site planning strategies in the Nguyen Dynasty architecture.

5.1 Measurement units used in construction during the Nguyen Dynasty

5.1.1 Overview of the measurement unit system in the Nguyen Dynasty

In the fifth year of the Gia Long period (1806), the Nguyen Court implemented the Trung Binh Xich rule (average unit) for measurements. However, this ruler was slightly longer than others, leading to significant errors in field measurements. Therefore, in August of the ninth year of the Gia Long period (1810), Emperor Gia Long ordered the reintroduction of the Kinh Xich ruler, which had been developed during the Le Dynasty and rediscovered in Co Linh village, located in Gia Lam district of modern-day Hanoi. The emperor commissioned a new standard ruler made of bronze and distributed it throughout Vietnam. This information highlights that the Nguyen Dynasty reused the ruler from the Le Dynasty to create a new measurement standard

(The National Department of History of Nguyen Dynasty, 1972, p. 41). However, the length of the measurement unit was not specified.

The book “Investigation on the Land register documents of Nguyen Dynasty,” authored by Nguyen Dinh Dau (Nguyen, 1997, p. 4), provides fascinating insights into the measuring practices of that era. It reveals that the Quan Moc Xich ruler defines a foot as 424 mm, while the Quan Dien Xich field ruler measures a foot at 466 mm. Though the source of these measurements is not specified, the distinctions between the Quan Moc Xich and Quan Dien Xich units are intriguing and have been clarified further (Table 15).

Phan Thanh Hai's paper, “Measurement rules of the Nguyen Dynasty,” (Phan, 2003, pp. 319–327) defined a clearer understanding of the length unit commonly referred to as the Kinh Xich ruler during the Nguyen Dynasty's early period. It is stated that a foot approximates 424 mm to 425 mm, aligning perfectly with what was highlighted in the Quan Moc Xich. The paper also introduces us to two types of Lu Ban Xich rulers: one measuring a foot as 428 mm and the other as 388 mm, showcasing the diversity in measurement practices (Table 15).

Historical records indicate that the construction and planning units from the Nguyen Dynasty encompassed “Truong/Xich/Thon” (丈/尺/寸 or rod/feet/ inch), where 1 Truong equals 10 Xich, and 1 Xich equals 100 Thon. Presently, museums across Vietnam house 17 different measuring units from the Nguyen Dynasty (Table 16). Notably, the Lu Ban Xich ruler (with foot measurements of 298 mm and 382 mm) and the Quan Moc Xich ruler (approximately 424 mm per foot) were among the most frequently used in construction, highlighting the rich legacy of craftsmanship and precision during this remarkable historical period. (Figures 80-81) (Table 15).

Table 15. List of rulers for measurement in the Nguyen Dynasty

No.	Agency/ Researcher	Name of Ruler	Measuring
1	Nguyen Dinh Dau	Quan Moc Xich ruler	a foot = 424 mm
		Quan Dien Xich field	a foot = 466 mm
2	Phan Thanh Hai	Kinh Xich ruler	A foot approximates 424 mm to 425 mm
		Two types of Lu Ban Xich rulers	a foot = 428 mm a foot = 388 mm
3	Historic Museum of Vietnam	Two types of Lu Ban Xich rulers	a foot = 298 mm a foot = 382 mm
		Quan Moc Xich ruler	a foot = 424 mm

Table 16. Statistical table of the rules of the Nguyen Dynasty

No.	Name of the Rules		Dimention/Feet			Sources
	Vietnamese	Chinese	mm/Feet	Fraction	mm/Inch	
1	Chu Nguyen Xich	周元尺	559	0.8	70	Museum of Hue Royal Fine Art
2	Chu Nguyên Xich	周元尺	286	1	28.6	Historic Museum of Viet Nam
3	Kinh Xich	経尺	402	1	40.2	Museum of Hue Royal Fine Art
4	Phung Xich	縫尺	596	1	59.6	Museum of Hue Royal Fine Art
5	Lu Ban Xích	魯班尺	382	1	38.2	Historic Museum of Viet Nam
6	Lu Ban Xích	魯班尺	298	0.8	37	Historic Museum of Viet Nam
7	Bac Tuc Phung Xich	北俗縫尺	400	1	40	Historic Museum of Viet Nam
8	Do Dien Xich	度田尺	402	1	40.2	Historic Museum of Viet Nam
9	Quan Dien Xich	官田尺	320	0.8	40	Historic Museum of Viet Nam
10	Quan Phung Xich	官縫尺	636	1	63.6	Historic Museum of Viet Nam
11	Quan Phung Xích	官縫尺	642	1	64.2	Historic Museum of Viet Nam
12	Quan Moc Xich	官木尺	426	1	42.6	Historic Museum of Viet Nam
13	Quan Moc Xich	官木尺	422	1	42.2	Historic Museum of Viet Nam
14	Quan Moc Xich	官木尺	421	1	42.1	Historic Museum of Viet Nam
15	Quan Moc Xich	官木尺	419	1	41.9	Historic Museum of Viet Nam
16	Tay Xich	西尺	1000	1	100	Historic Museum of Viet Nam
17	Nam Xich	南尺	1000	2.5	40	Historic Museum of Viet Nam



Figure 80: Official rules of the Nguyen Dynasty displayed in the museums
Source: Historic Museum of Vietnam

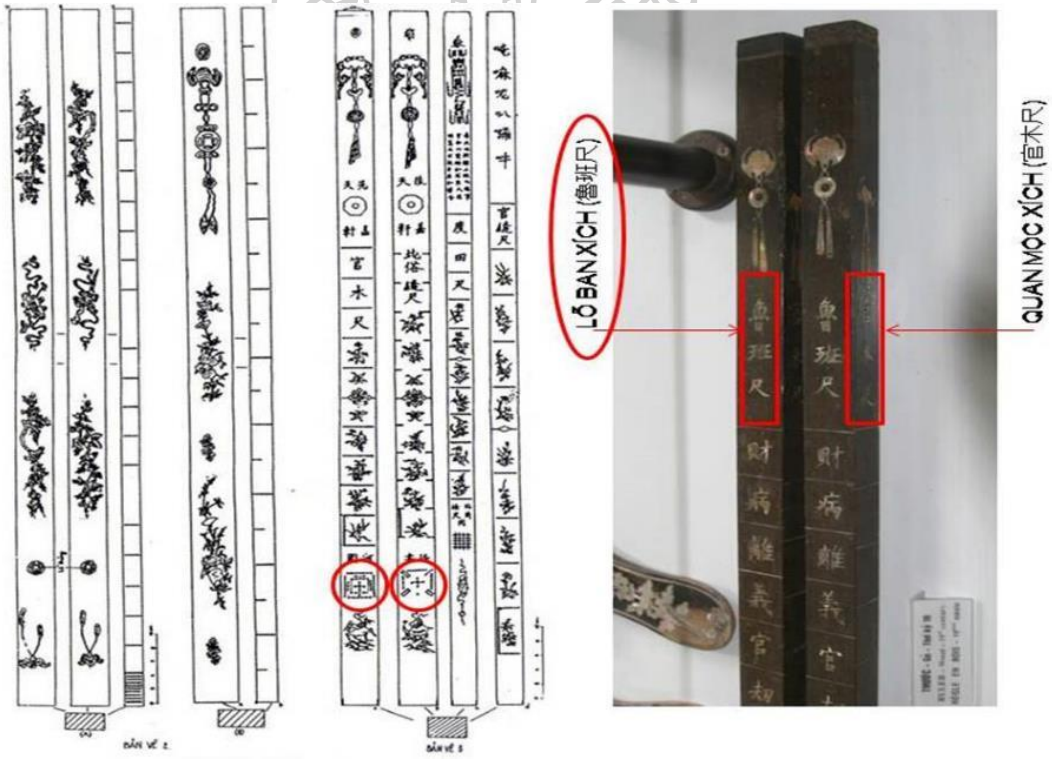


Figure 81: Official rules of the Nguyen Dynasty displayed in the museums (continued)
Source: Historic Museum of Vietnam

The text discusses three types of rulers commonly used in construction and site planning during the Nguyen Dynasty: the Lu Ban Xich rule (魯班尺), the Quan Moc Xich rule (官木尺), and the Quan Dien Xich rule (官田尺). Notably, the Lu Ban Xich rule is characterized by multiple units of varying lengths and a significant range of measurement, with one foot equivalent to approximately 298 mm to 424 mm.

5.1.2 The Lu Ban Xich Rule of the Nguyen Dynasty in the construction of the mausoleums

The "Han-Nom" literature titled “南方名物備考” (Name of the Things of the Southern Country), published in 1902 during the Thanh Thai period, states the following (Dang, 1902, pp. 18a, lines 13–14):

One foot of the Dien Xich ruler (田尺, Ruler A) is equivalent to 1.1 feet of the Moc Xich ruler (木尺, Ruler B). Additionally, 1 foot of the Kinh Xich ruler (徑尺, Ruler C) is equal to 0.9 feet of the Moc Xich ruler used in the north. Furthermore, 1 meter using the Western standard equates to 2.35 feet of the Moc Xich ruler from the Nguyen Dynasty.

In mathematical terms:

- Ruler A = Ruler B × 1.1.

- Ruler C = Ruler B × 0.9 xich;

- 1 meter (1m = 1000mm) = Ruler B × 2.35.

From these equations, we find that Ruler B measures approximately 426mm (since 1000 mm ÷ 2.35 = 425.5mm), Ruler A measures about 468mm (425mm × 1.1 = 468.05mm), and Ruler C measures around 383mm (425mm × 0.9 = 382.5mm).

Moreover, other historical documents record the following measurements:

- The foundation of the Can Chanh Dien main palace is 2 Xich (feet) and 3 Thon (inch) high, “勤政殿基高二尺三寸” (indicating the platform height equals 2.3 units), with an actual height of 985mm ÷ 2.3 units = 428mm/unit for the Can Chanh Dien main palace, which served as the workplace for the Emperors and the Cabinet of the Nguyen Dynasty, dedicated to daily life.

- The foundation platform of the Trieu To Mieu main shrine is 2 Xich high, “肇祖廟基高二尺” (indicating the platform height equals 2.0 units), with an actual height of 765mm ÷ 2.0 units = 382mm/unit for the Trieu To Mieu main shrine, a site for worshiping the Nguyen royal ancestors, dedicated to the afterlife (National history of the Nguyen Dynasty, Kham Dinh Dai Nam Hoi Dien Su Le, Cong Ministry (Chinese characters: 欽定大南會典事例続編, 工部), Vol. 205, 208; Van Hoa Tung Thu, Dai Nam Nhat Thong Chi, Kinh Su Section (Chinese characters: 大南一統志, 京師), Vol.1).

It can be observed that three rulers were used for land measurement, construction, and site planning during the Nguyen Dynasty. These rulers include Ruler A (1 foot = 466 to 468 mm), Ruler B (1 foot = 424 to 426 mm), and Ruler C (1 foot = 382 to 383 mm). The ratio among their measurements can be expressed as 466 ÷ 424 ÷ 382 (or 468 ÷ 426 ÷ 383), simplifying to 11 ÷ 10 ÷ 9.

Table 17. List of rules for measuring in the Nguyen Dynasty

No.	List of Ruler	Measuring
1	Ruler A (Dien Xich ruler)	1 foot = 466 to 468 mm
2	Ruler B (Moc Xich ruler)	1 foot = 424 to 426 mm
3	Ruler C (Kinh Xich ruler)	1 foot = 382 to 383 mm
466 ÷ 424 ÷ 382 or 468 ÷ 426 ÷ 383 simplifying to 11 ÷ 10 ÷ 9		

To further verify these findings, we analyzed another case involving the Thach That (Stone Grave) in the mausoleum of Emperor Gia Long. The actual

measured horizontal size of the stone grave is 7740 mm. When using the value of 1 foot from Ruler C (382 mm), this size equates to 20 units of Ruler C. Conversely, when using the value of 1 foot from Ruler B (424 mm), it equals 18 units of Ruler B.

In large-scale construction planning, even numbers are typically preferred because they facilitate calculations more easily than odd numbers. Moreover, in Vietnamese culture, there is a belief that the principles governing the living and the dead are the same, albeit differing in spatial dimensions. Consequently, buildings such as palaces, which are located in living and working areas (Yang), are dedicated to life, while shrines and temples situated in worship areas and mausoleums (Yin) are dedicated to the deceased. Although these structures follow the same pattern and form, their scales vary accordingly, necessitating different measurement units for design purposes.

It can be inferred that the ruler used for the planning and construction of the imperial mausoleums was Ruler C, which measures approximately 382mm to 383mm per foot. This ruler was developed from Ruler A and Ruler B, based on the proportional relationship mentioned earlier (11:10:9).

To analyze the site planning principles of the first three imperial mausoleums of the early Nguyen Dynasty, we will adopt a measurement unit of 1 unit = 382mm (Ruler C). Additionally, we will use a decimal system to expand this unit into a rod-grid system, where 1 rod equals 10 units (or 3820mm). This approach will facilitate analysis over larger area scales.

5.2 Overview of the analyzing method and grid system division for staff planning

Drawing on historical sources from the Nguyen Dynasty and research conducted by specialists in Nguyen Dynasty architecture, such as Dr. Le Vinh An and Dr. Phan Thanh Hai, this study demonstrates that the tomb complexes of the Nguyen Dynasty were designed using a clear grid system. Consequently,

this research employs the principle of grid division to systematically and comprehensively analyze three significant tombs of the Nguyen Dynasty: those of Emperors Gia Long, Minh Mang, and Thieu Tri.

The research method involves identifying the central axes that traverse key areas, thereby forming the overall spatial structure of each tomb complex. From these axes, a fundamental grid unit with standardized dimensions of 3820 x 3820 mm - referred to as the "rod-grid system" (where 1 rod equals 3820 mm) - is utilized to analyze the spatial structure, planning characteristics, and spatial relationships within each tomb complex.

By examining the planned layout, this study aims to uncover the rules for arranging architectural features within the mausoleum and to clarify the proportional relationships and spatial connections between the architectural components and the surrounding landscape within each tomb complex (Table 18).

Table 18. Comparison of the three mausoleums

Mausoleums	**Rod-Grid System**	**Buu Thanh tomb area**	**Tam Dien worship temple area**	**Bi Dinh stele hall area**
Thien Tho Lang of Emperor Gia Long	50 rods in width x 40 rods in length	The main axis is identified at the center of Thach That (WE0).	The main axis is located at the center of the Minh Thanh Dien main temple (W10).	The main axis is situated at the Bi Dinh stele hall (E9).
Hieu Lang of Emperor Minh Mang	22 rods in width x 130 rods in length	The main axis is the central spatial axis of the area, stretching from the West (backside) to the East (frontside), and it passes through the	The main axis is located at the center of the Sung An Dien main temple.	The main axis is situated at the Bi Dinh stele hall.

		center of the Tomb area.		
Xuong Lang of Emperor Thieu Tri	71 rods in width x 79 rods in length	The main axis is identified at the center of Tomb area.	The main axis is located at the center of the Bieu Duc Dien main temple.	The main axis is situated at The Bi Dinh stele hall.

5.3 Site planning principle of Emperor Gia Long's mausoleum

According to historical documents from the Nguyen Dynasty regarding Emperor Gia Long's mausoleum, the main area consists of three parts: the Buu Thanh tomb area, the Tam Dien worship temple area, and the Bi Dinh stele hall area. These three sections are situated within a plot of land measuring 50 rods in width and 40 rods in length.

At the center of the Buu Thanh tomb area are two stone graves built parallel to each other, known as Thach That, which serve as the burial sites for Emperor Gia Long and his main wife, Queen Thua Thien. To the right of the tomb area (when viewed from inside to outside) lies the Tam Dien worship temple area, which features the Minh Thanh Dien main temple, dedicated to honoring the Emperor and the Queen. On the left side is the Bi Dinh stele hall area, which houses the Thanh Duc Than Cong stone stele, commemorating the background and achievements of the emperors.

Construction is likely to commence from the Buu Thanh tomb area, where the stone graves are located, as this site holds the most significance for the mausoleum's construction. The design will follow a rod-grid system, with 1 rod equating to 3820 mm (the rod of the Ruler C). The starting point for this grid will be the central axis of the Thach That stone graves, from which measurements will extend to the right and left sides of the tomb area accordingly. The results of this analysis are summarized as follows.

5.3.1 Principle of the three parallel axes translation

The Mausoleum complex comprises three main areas: the Bao Thanh tomb area, the Tam Dien worship temple area, and the Bi Dinh stele hall area, all oriented along a North-South axis, with all structures facing south. For analytical purposes, the main axis of each area has been established as follows (Figure. 82):

- The main axis of the Bao Thanh tomb area (A) is identified at the center of Thach That (WE0).

- The main axis of the Tam Dien worship temple area (B) is located at the center of the Minh Thanh Dien main temple (W10).

- The main axis of the Bi Dinh stele hall area (C) is situated at the Bi Dinh stele hall (E9).

In the North-South direction, the distance from the central axis of Thach That (A) to the central axis of the Minh Thanh Dien Temple (B) and from that axis to that of the Bi Dinh stele hall (C) is each of 4 rods. The total distance from the central axis of Thach That (A) to the outermost front edge of all three areas measures 24 rods.

In the East-West direction, the distance from the central axis of Thach That (A) to the central axis of the Minh Thanh Dien Temple (B) (toward the west) is 20 rods, while the distance to the central axis of the Bi Dinh Stele Hall (C) (toward the east) is 18 rods.

The principal structures of the Mausoleum complex—Thach That, Minh Thanh Dien Temple, and Bi Dinh Stele Hall—serve as central reference points for each of the three areas and are evenly spaced at 4 rods intervals along the North-South axis. This hierarchical arrangement establishes the basis for the overall spatial planning of the complex through the principle of the three parallel axes.

5.3.2 Principle of deploying the primary construction unit

The Bao Thanh Tomb area, which consists of three concentric walls, is located within a square measuring 12 rods on each side. At the center of this square is Thach That, which contains two stone tombs. Each tomb has a width of 9 feet, precisely matching the width (measured in the east-west direction) of the central bay in Minh Thanh Dien Temple, the main architectural feature of the Tam Dien worship area. This alignment in dimensions highlights the intentional design relationship between Thach That (representing the burial section) and Minh Thanh Dien Temple (representing the worship section).

From this, we can infer that the dimensions of the tomb area, where the physical body is buried, served as the primary basis for the spatial layout of the worship area, which is dedicated to the soul. According to Eastern Yi philosophy, the number 9 symbolizes the Emperor (Son of Heaven) and is intrinsically connected to the heavens.

The central bay of Minh Thanh Dien Temple measures 9 feet in width and 8.1 feet in depth. The overall dimensions of the platform are 51 feet in width and 45.9 feet in depth. These measurements create a whole-number ratio of 10:9.

Additionally, along the East-West axis, the distance from the central axis of Thach That to the center of Minh Thanh Dien Temple is 20 rods, while the distance from the same central axis to the center of the Bi Dinh Stele Hall is 18 rods, again resulting in a 10:9 ratio. This proportion corresponds exactly to the length ratio between two measuring instruments, Ruler A and Ruler B.

Therefore, the 10:9 ratio was established based on the dimensions of these measuring instruments and was consistently applied in determining the dimensions of both the central bay and the overall platform of Minh Thanh Dien Temple. This ratio serves as the foundational basis for shaping the general layout of the entire architectural complex.

5.3.3 Principle of the proportional relationship between the components

The outer width of the worshipping area, measured along the East-West axis, is determined to be 16 rods. To establish a more rational gross width for the architectural space, this measurement was reduced by 20%, which means a 10% reduction from each side. As a result, the final gross width is 12.8 rods. This balanced reduction on both sides reflects the principle of symmetrical spatial organization, a characteristic commonly seen in Nguyen Dynasty tomb architecture. Additionally, it illustrates a “linear narrowing” strategy that creates a gradual transition from the broader external areas to the inner sanctum.

Within the defined gross width boundary, the clear span—defined as the actual internal width measured between the inner edges of the Minh Thanh Dien Main Temple, which corresponds to the forecourt in front of the temple—measures 12.4 rods, or 124 feet.

When this measurement of 124 feet is divided in half, it results in 62 feet, which is the distance between the Ta Tung Tu Left Sub-Temple and the Huu Tung Tu Right Sub-Temple (the two buildings located in front of the Minh Thanh Dien Main Temple). If the size of 62 feet is divided in half, it will be equal to 31 feet, which is equal to the horizontal size (clear span) of Nghi Mon Gate (the main gate of the Tam Dien area).

Although the Bi Dinh Stele Hall area also faces south, the main axis of its steps is only 16 rods from the axis of the Bao Thanh Tomb. However, the width (East-West) of the railing in the Bi Dinh Stele Hall area is aligned with the other two areas, measuring 8 rods in width and 16 rods in length, which is twice the width. Thus, this demonstrates the principle of a 1/2 ratio.

The East–West distance between the inner and outer wall layers of the Bao Thanh Tomb (measured from either the inner or outer edge) is approximately two-thirds the width of the outermost wall. The distances

between the inner and outer edges of the successive wall layers, as well as the radii of their curves, are consistently planned according to a fixed proportional relationship of 2:3. This ratio can be illustrated using a rod-grid system, in which each side of a square unit measures 12 rods and is divided into 18 equal parts. In this reference system, dividing 12 by 12 yields a ratio of 1:1, while dividing 12 by 18 results in a ratio of 2:3.

When comparing the spatial scales of each area along the East-West axis, the width of the Tam Dien area (worship temple area) measures 16 rods (calculated as the distance between the two outermost balustrades), the Bao Thanh Tomb measures 12 rods (based on the distance between the two outermost walls of the Buu Thanh Tomb), and the Bi Đinh Stele Hall area measures 8 rods (also based on the outermost balustrades).

Expressing these horizontal dimensions as a ratio (16:12:8) yields whole-number proportions equivalent to 4:3:2.

Similarly, along the North-South axis, the planned lengths (including staircases) of the Tam Dien, Bao Thanh, and Bi Đinh areas are 41.5 rods, 31.1 rods, and 20.6 rods, respectively. When these figures are proportionally compared, they likewise approximate the ratio of 4:3:2.

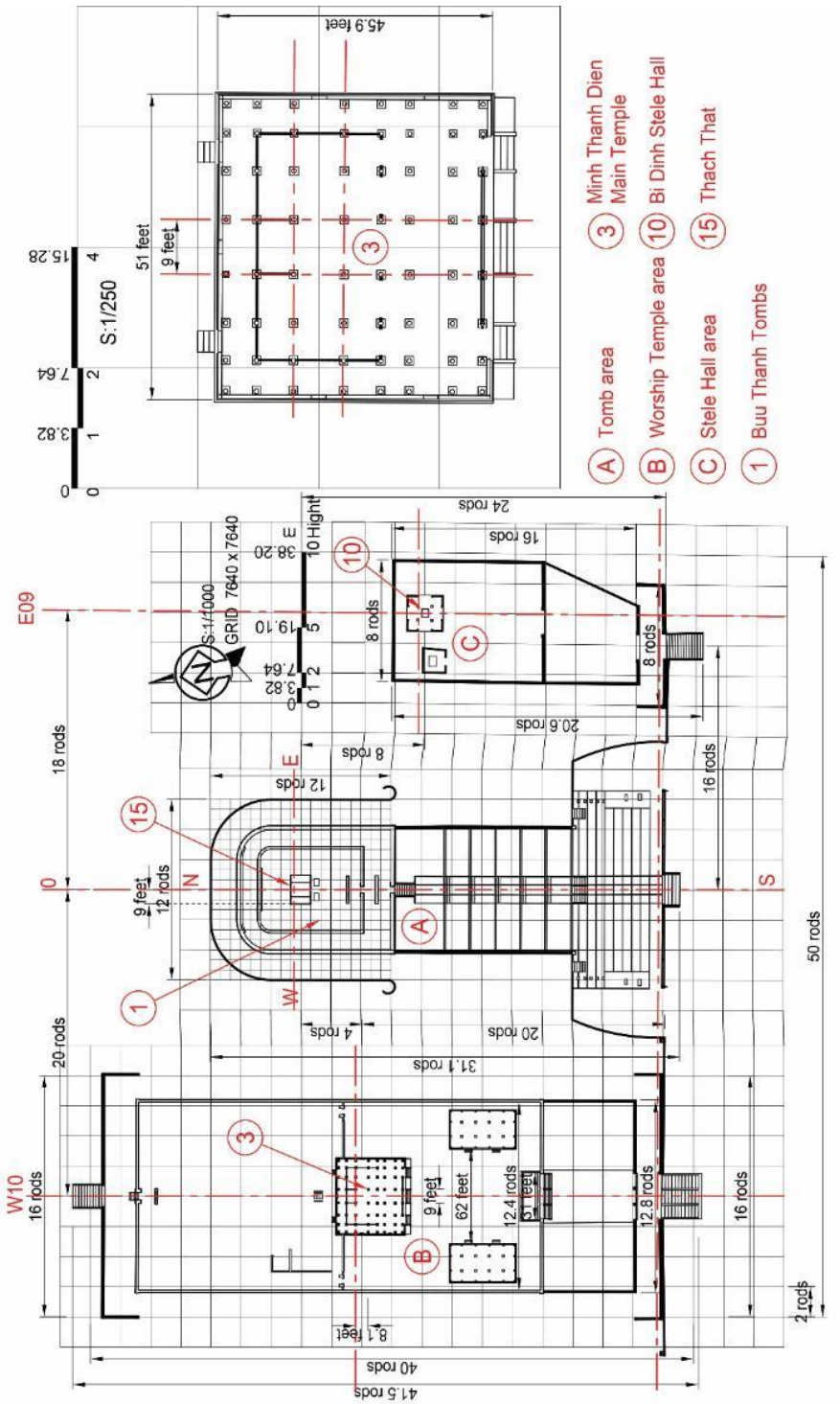


Figure 82: The grid-rod analysis map encompasses the entire A, B, and C spatial areas of the Mausoleum. This grid system is utilized in the planning process to analyze and determine the relationships between the various construction elements within the central spatial area, based on the principle of proportional relationships among the components.

Source: Adapted by Author and Le Vinh An in 2021 based on a drawing of Waseda Heritage Institute

5.4 Site planning principle of Emperor Minh Mang's mausoleum

Like Emperor Gia Long's mausoleum, sources of Nguyen Dynasty describe Emperor Minh Mang's mausoleum, starting with the Buu Thanh Tomb. This location is significant because it houses the coffin of Emperor Minh Mang. The mausoleum is oriented along the Than Dao axis, which runs approximately from west to east, serving as the central axis of the site.

From this central axis, the layout extends to both the left and right sides. The Bieu Tru landmark towers (henceforth referred to as the Landmark towers) are highlighted as important features that define the spatial structure of the area. The main elements are arranged sequentially from West (back side) to East (front side), including (Figures 83-85):

1. Buu Thanh Tomb (the Grave)

2. Buu Thanh Mon Gate (the Entrance to the Grave)

3. Tam Tai Son Mountains - which includes the Minh Lau Pavilion (the Pavilion)

4. Bieu Tru Landmark Towers - situated on Thanh Son Mountain to the left and Binh Son Mountain to the right

5. Phung Than Son Mountain - home to the Tam Dien area (the Worship area), consisting of:

   5.1 Sung An Dien Temple (the Main temple)

   5.2 Hien Duc Mon Gate (the Main gate of the Tam Dien area)

6. Bai Dinh Upper Courtyard (the Praying courtyard)

7. Trung Dai Podium - which includes the Bi Dinh Stele Hall (the Stele Hall)

8. Bai Dinh Lower Courtyard (the Flanking courtyard)

9. Dai Hong Mon Gate (the Front gate)

This arrangement emphasizes the symmetry and significance of each component within the mausoleum's complex.

This information provides a useful suggestion for determining the basis axes and the rod-grid system (with a value of 1 rod = 3820mm) for conducting the analysis. On the one hand, the rod-grid is deployed along the axis line passing through the center-to-center of the Landmark towers (henceforth, the axis of the Landmark towers, representing the North-South direction) and parallel to the Central axis (representing the East-West direction). On the other hand, the rods are developed from the Central axis along the axis of the Landmark towers. The analysis results are assumed below.

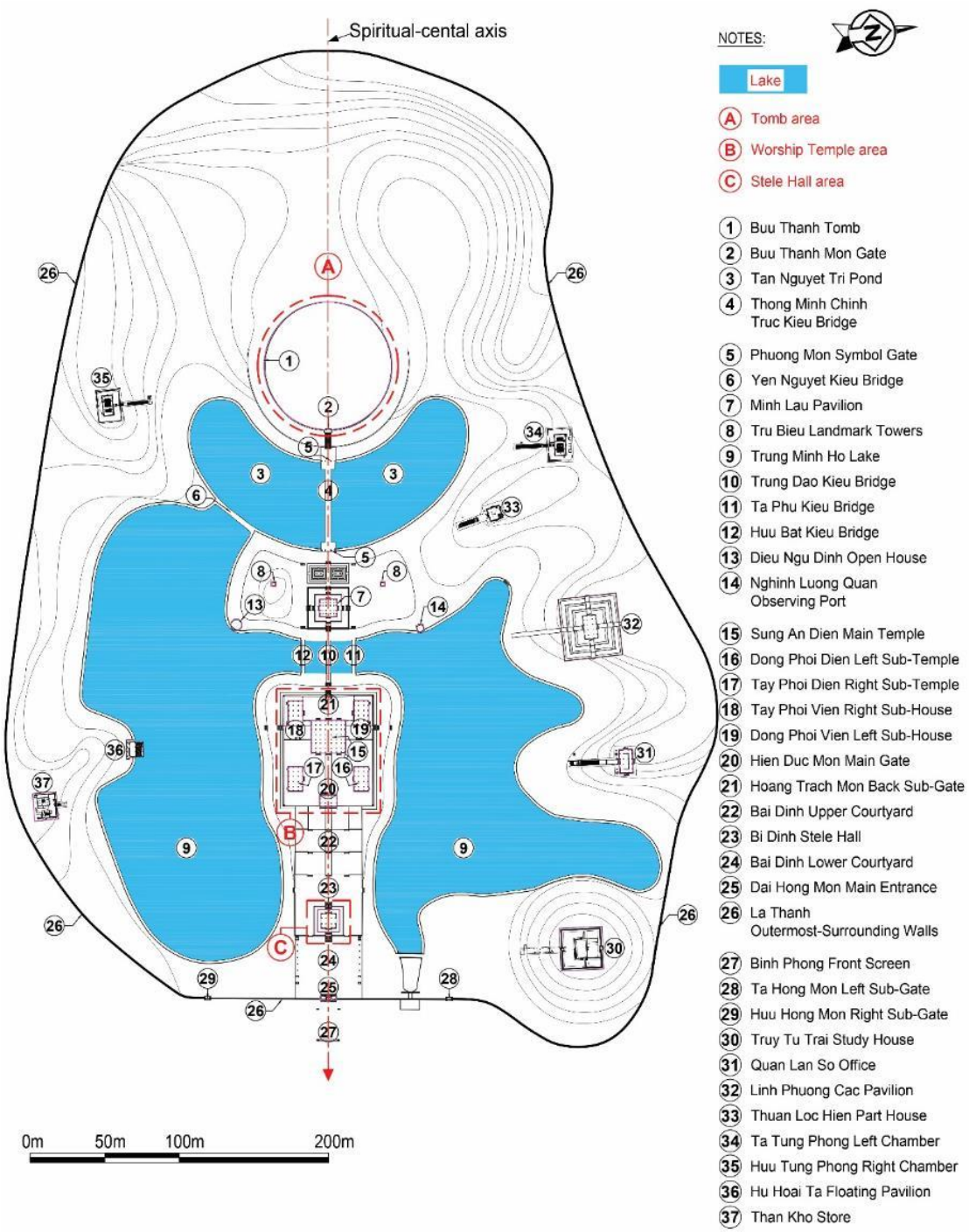


Figure 83: Site plan of the Emperor Minh Mang's mausoleum
Source: Adapted by Author in 2025 based on a drawing of Waseda Heritage Institute

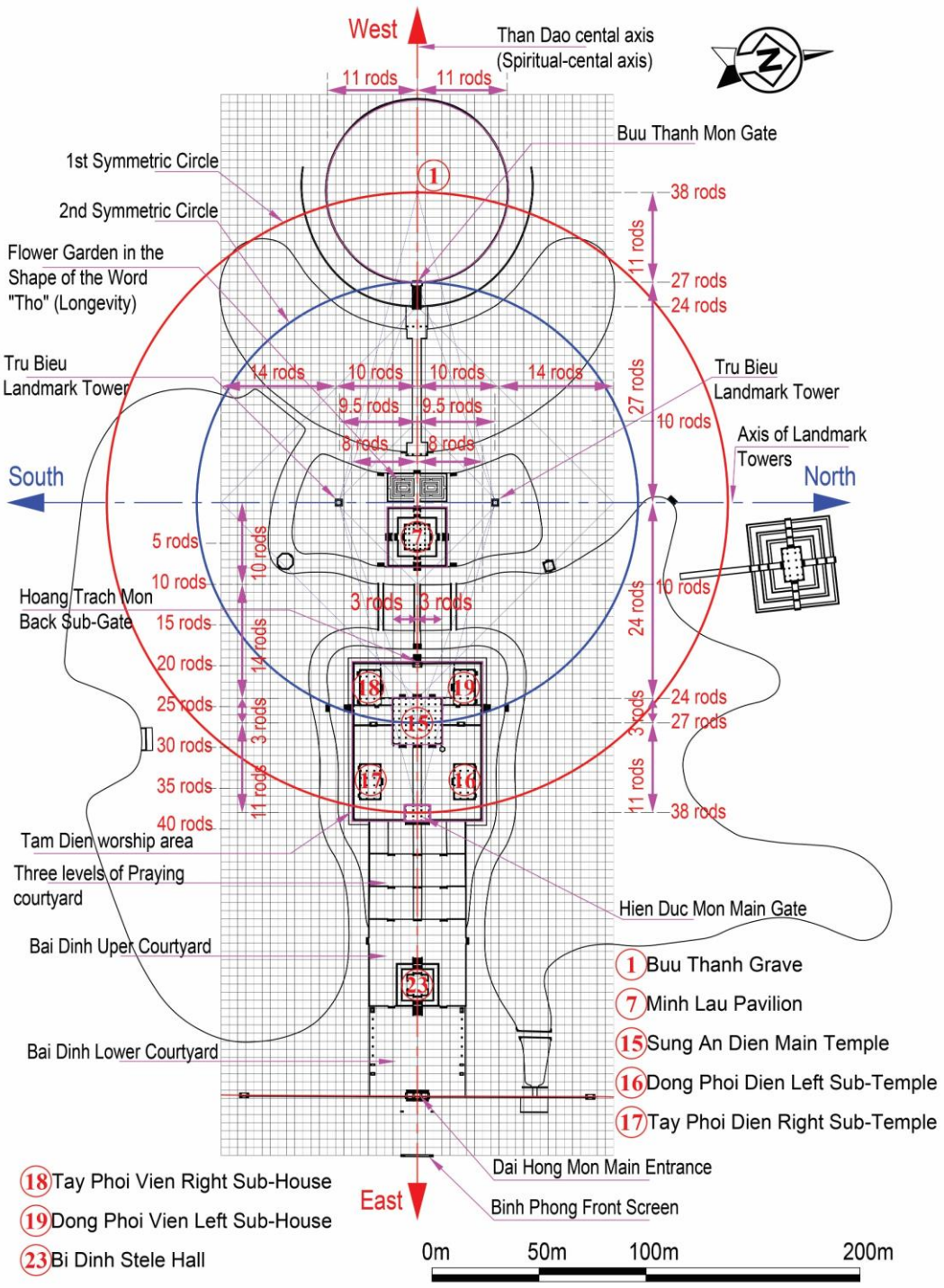


Figure 84: The grid-rod analysis map encompasses the entire central spatial area of the Mausoleum. This grid system is used in the plan to analyze and identify the relationships among the various construction elements within the central area, adhering to the principle of symmetry along both the Central and Landmark Tower axes.

Source: Adapted by Author and Le Vinh An in 2021 based on a drawing of Waseda Heritage Institute

5.4.1 Symmetric principle across the Central and Landmark-towers axes

The central axis of the mausoleum, referred to as the "Than Dao" axis, is oriented east-west, facing East. This orientation was determined based on measurement results from the UNESCO World Cultural Heritage Institute and Waseda University in Tokyo, Japan, conducted between 2006 and 2008. By counting the rods developed from the Central axis towards its left and right sides, the position of the two Landmark towers can be determined. The center-to-center distance between the two Landmark towers is found to be 19 rods, with one located on the Thanh Son left-mountain and the other on the Binh Son right-mountain of the Tam Tai Son mountain.[14] This configuration establishes the Landmark-tower axis in the North-South direction.

The 8th rod from the central axis on both sides marks the edges of the worship area, indicating that the width of this area spans 16 rods. In the same way, the 3rd rod corresponds to the left and right edges of the foundation of the main temple, establishing a width of 6 rods for the foundation.

The 11th rod marks the northern and southern boundaries of the Grave, which has a diameter of 22 rods.

According to the East-West direction, the distance from the Landmark-tower axis to the Buu Thanh Mon gate, located to the West, is equivalent to the distance from that axis to the center of the Sung An Dien main temple, which measures 27 rods. As a result, the Buu Thanh Mon gate and the center of the Sung An Dien main temple are symmetrically placed with respect to the Landmark-tower axis, forming the second symmetric circle. The Sung An Dien main temple serves as a place of worship for the emperor's soul (Figures 84-85).

Likewise, the distance from the Landmark-tower axis to the center of the Buu Thanh grave corresponds to the distance from that axis to the center of the Hien Duc Mon main gate, which measures 38 rods. Consequently, the centers of

the Buu Thanh grave and the Hien Duc Mon main gate are symmetrical in relation to the Landmark-tower axis, forming the first symmetric circle. The Buu Thanh grave serves as the burial ground for Emperor Minh Mang's body (Figures 84-85).

The distance from the Landmark-tower axis to the eastern edge of the Grave is equal to the distance from that axis to the western edge of the foundation of the Main temple, both measuring 24 rods.

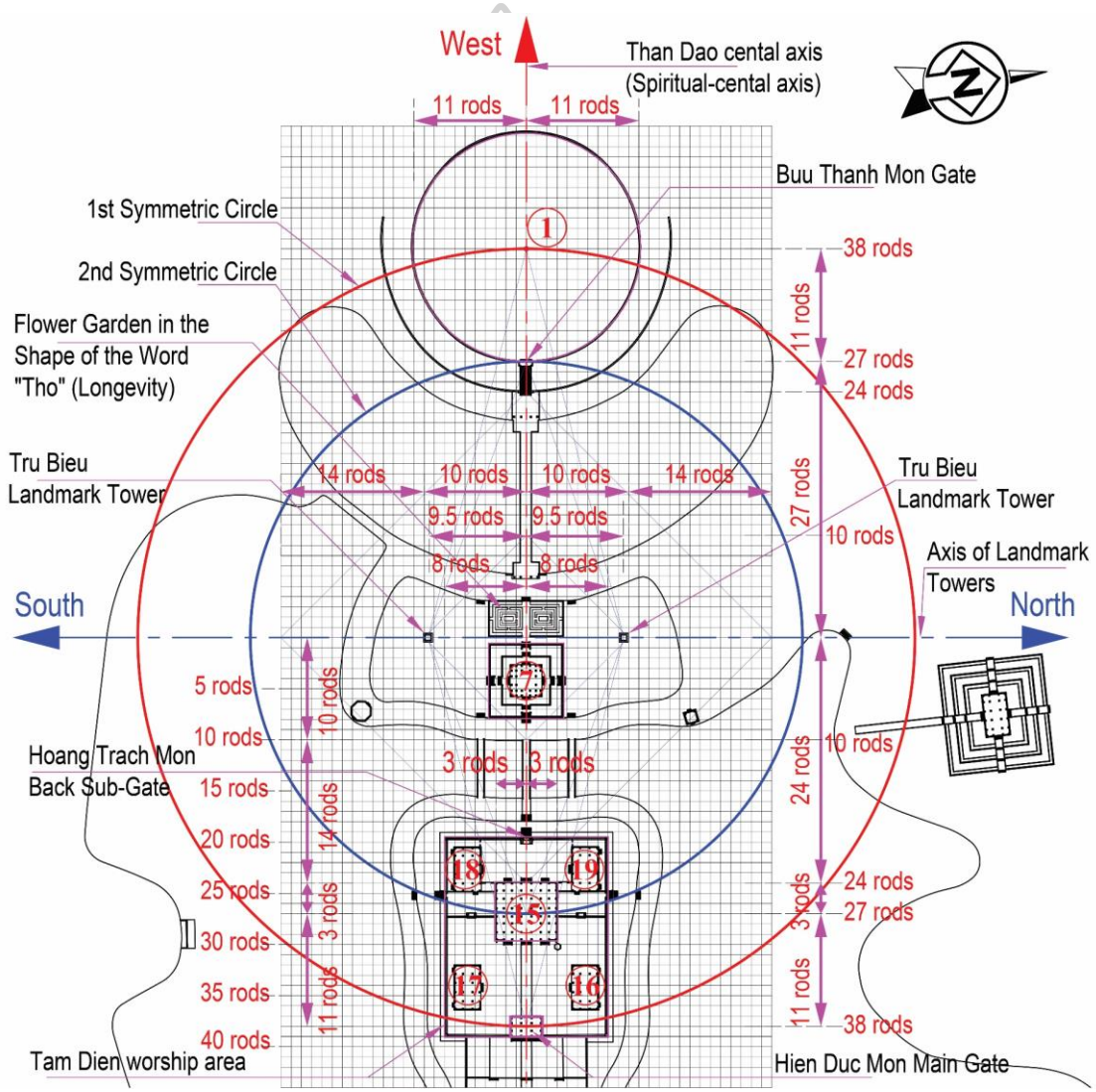


Figure 85: Excerpt from figure 84

Source: Adapted by Author and Le Vinh An in 2021 based on a drawing of Waseda Heritage Institute

Lastly, the distance from the central axis to the outer edge of the Landmark towers is the same as the distance from the Landmark tower axis to the eastern edge of the Minh Lau pavilion when approached from the east side, totaling 10 rods. (Figure 85).

The North-South Landmark Tower axis and the East-West Central axis serve as the fundamental guidelines for planning the main structures within the Mausoleum compound. This symmetrical planning approach in both the North-South and East-West directions highlights a deliberate and distinctive feature of the Mausoleum.

The careful execution of symmetrical planning is evident in several elements, including the Minh Lau Pavilion, which is situated between the Buu Thanh Mon gate and the central location of the Sung An Dien main temple, thereby creating the second symmetrical circle. Additionally, the Hien Duc Mon main gate and the central position of the Buu Thanh grave establish the first symmetric circle (Figure 85).

The areas situated along the Landmark-tower axis appear to embody a delicate balance between tangible and intangible aspects, between the physical and spiritual realms, and between the body and soul. The entrance to the worship area, known as the Hien Duc Mon main gate, where the emperor's soul is believed to reside, is harmoniously aligned with the place where the emperor's body is interred (Buu Thanh grave). Similarly, the entrance to the burial ground, referred to as Buu Thanh Mon gate, finds its balance with the site of the emperor's soul, represented by Sung An Dien main temple.

Therefore, if we consider the East-West Than Dao central line as the construction axis, the Landmark-tower axis in the North-South can be viewed as the axis of spirituality. This intentional design aims to establish a state of equilibrium between the corporeal and ethereal aspects of Emperor Minh Mang's existence as he returns to eternity. Such an expectation was shared

among the peoples of ancient Southeast Asia, reflecting their collective mindset.



Figure 86: From the viewpoint of the Minh Lau pavilion, facing East, the temple will be seen
Source: Photo by Author (2020)



Figure 87: From the viewpoint of the Minh Lau pavilion, facing West, the tomb will be see

Source: Photo by Author (2020)

5.4.2 Principle of Grid-rods advances equally along the Central axis

The important structures within the Mausoleum are arranged in a specific sequence, beginning at the West (back side) and extending towards the East (front side) along the Central axis. These structures align in an East-West direction. Additionally, other relevant structures symmetrically flank the Central axis on both the left and right sides. These include the Dong Phoi Dien Left Sub-Temple, Tay Phoi Dien Right Sub-Temple, Dong Phoi Vien Left Sub-House, and Tay Phoi Vien Right Sub-House. Together, these four component buildings, along with the Landmark towers and two rows of stone statues in the Flanking courtyard, form an integral part of the overall layout.

However, beyond the axis of the Landmark towers towards the eastern/front area of the mausoleum compound, the proportional relationships with the western area (back side) are no longer maintained. Instead, a square grid-rod system is employed in the eastern/front area, which consists of the following dimensions:

- The distance from the axis of the Landmark towers to the western border of the Worship area is equal to the length of the Worship area, measuring 19.5 rods. Therefore, the floor area of the Worship area is thus 16 rods (latitude) x 19.5 rods (longitude) (A).

- The square grid-rods from the eastern border of the Worship area to the Praying courtyard are divided into three levels, with each level spanning 4 rods (B). As a result, the dimensions of the Praying courtyard are 12 rods x 12 rods.

- The square grid-rods extend from the lowest level of the Praying courtyard to the eastern border of the Stele-hall (upper flanking courtyard), and from the Stele-hall to the Dai Hong Mon front gate (lower flanking courtyard), covering a distance of 11 rods (C). The dimensions of each courtyard are 12 rods x 11 rods. The distance from the Dai Hong Mon front gate to the outer front screen is 7 rods. (see Figure 88)

As a result, the areas extending from the axis of the Landmark-towers towards the Dai Hong Mon front gate exhibit a higher density of construction works, meticulously planned with strict architectural design. These areas were specifically dedicated to worshipping ceremonies for the Emperor and Queen on various occasions, including monthly rituals, lunar New Year celebrations, and the emperor's death anniversary ceremony (Figures 89-93).

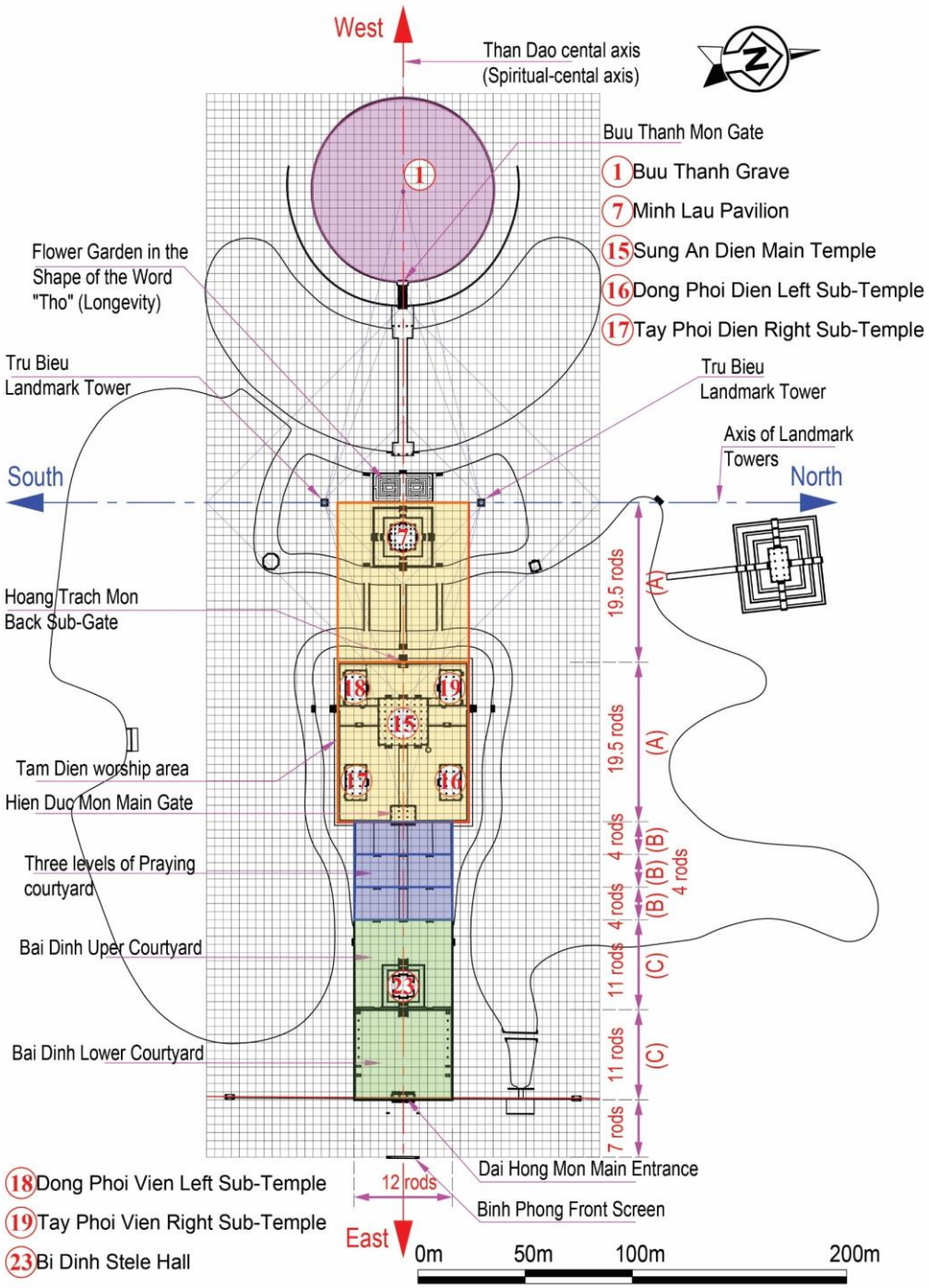


Figure 88: The map of grid-rods analysis focuses on the central spatial area, extending from the Minh Lau pavilion to the Dai Hong Mon front gate. A grid system is employed on the mausoleum to examine and determine the relationships between the construction elements within this section. This analysis is based on the principle of grid-rods, which advance uniformly along the central axis.

Source: Adapted by Author and Le Vinh An in 2021 based on a drawing of Waseda Heritage Institute

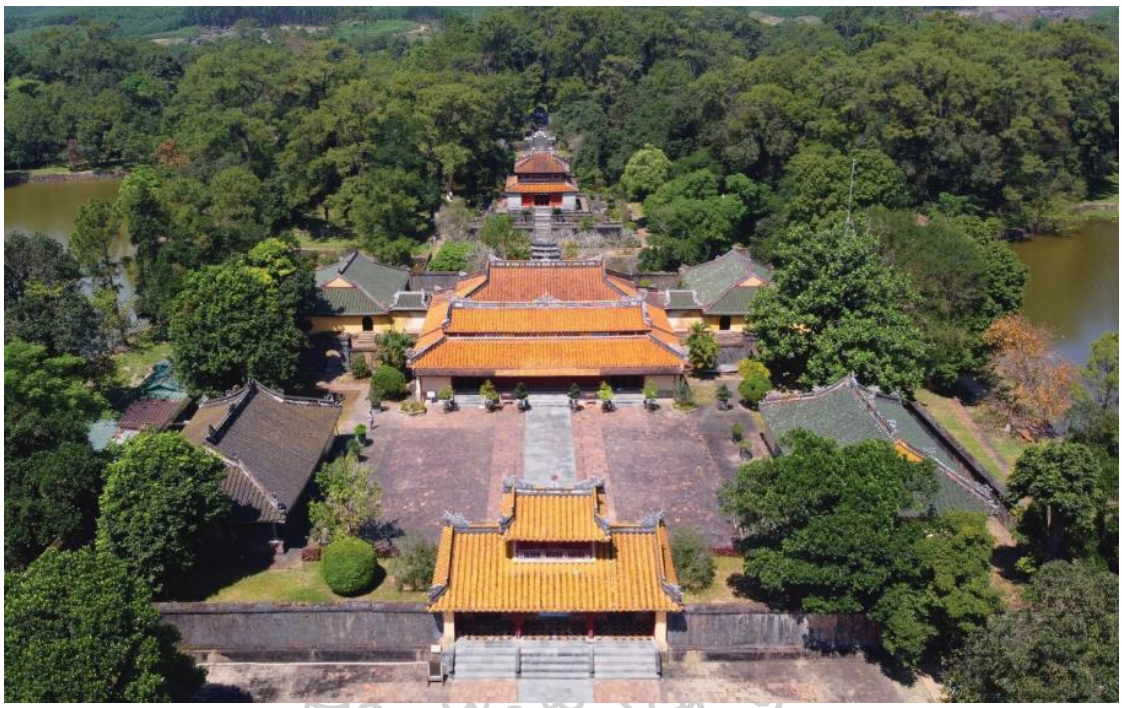


Figure 89: The Sung An Dien temple, situated at the heart of the temple area on the Than Dao axis, served as the main place of worship for the Emperor and Queen.
Source: Photo @ Vo Thanh, 2022 at https://vnexpress.net/lang-mo-vi-hoang-de-nhieu-con-nhat-su-viet-4444531.html. Accessed on October 8, 2025.



Figure 90: The Hoang Trach Mon gate is located on the Than Dao axis. In front of the gate stands the Sung An Dien temple (main temple), while behind it lies Trung Minh Ho Lake, crossed by the Trung Dao Kieu bridge, which leads toward the Minh Lau pavilion.
Source: Photo by Author (2020)



Figure 91: The Trung Dao Kieu bridge is located on the Than Dao axis, crossing Trung Minh Ho Lake, and is situated in front of the Hoang Duc Mon gate and behind the Minh Lau pavilion.

Source: Photo by Author (2020)



Figure 92: Bai Dinh upper courtyard is located on the Than Dao axis, situated in front of the Hien Duc Mon gate and behind the Bi Dinh stele hall. This was the designated place where ritual sacrifices were performed by mandarins.
Source: Photo by Author (2020)



Figure 93: Bai Dinh lower courtyard is located on the Than Dao axis, in front of the Bi Dinh stele hall and behind the Dai Hong Mon gate. It is a place adorned with statues of elephants and horses, mandarins, and soldiers standing in reverence.
Source: Photo by Author (2020)

5.4.3 Principle of Construction unit deploying in the Central partial area

The Sung An Dien Temple was intentionally designed as the main temple of the worship area. Its dimensions were planned to be 6 rods by 6 rods, aligned along the Central axis. The center of the temple corresponds to the Entrance, which is symmetrically aligned with the previously mentioned Landmark towers.

Even though the column grid of the Main temple does not align with the Grid-rods of site planning, it maintains a distinct relationship with the other component items of the Worship area, namely:

- The combined floor area of the five internal compartments of the Main temple (excluding 0.3 feet for column inclination at the bottom) equals that of the four component buildings, measuring 44 feet x 26 feet (D).

- Length of D, which is 44 feet, is also the distance from the central axis to the front edge of the foundations of the four component buildings. Additionally, the distance from the back edge of these foundations to the outer edge of the Worship area is approximately 10 feet, which is equivalent to 1 rod.

- Width of D, which is 26 feet, is also defined by the length of the foundation of the Stele hall. The foundations of the main gate and the pavilion both measure 31 feet (excluding 0.2 feet of column inclination at the bottom).

- The width of the Praying courtyard is the distance from the Main Gate to the center position of the Main temple, which is 12 rods. Consequently, the total floor area of the Praying courtyard is 12 rods x 12 rods.

Therefore, it can be identified that the central spatial areas of the Mausoleum were planned according to three basic principles: first, the principle of axis symmetry; second, the principle of grid advancement; and third, the principle of deploying construction units. Each principle was applied for a specific purpose, but all those principles were applied simultaneously in a

consistent and sequential manner from overall to detail. In particular, planning the location of the Buu Thanh grave and the Sung An Dien main temple symmetrically across the axis of the Tru Bieu landmark towers is the focus point from which to implement other planning principles (Figure 94).

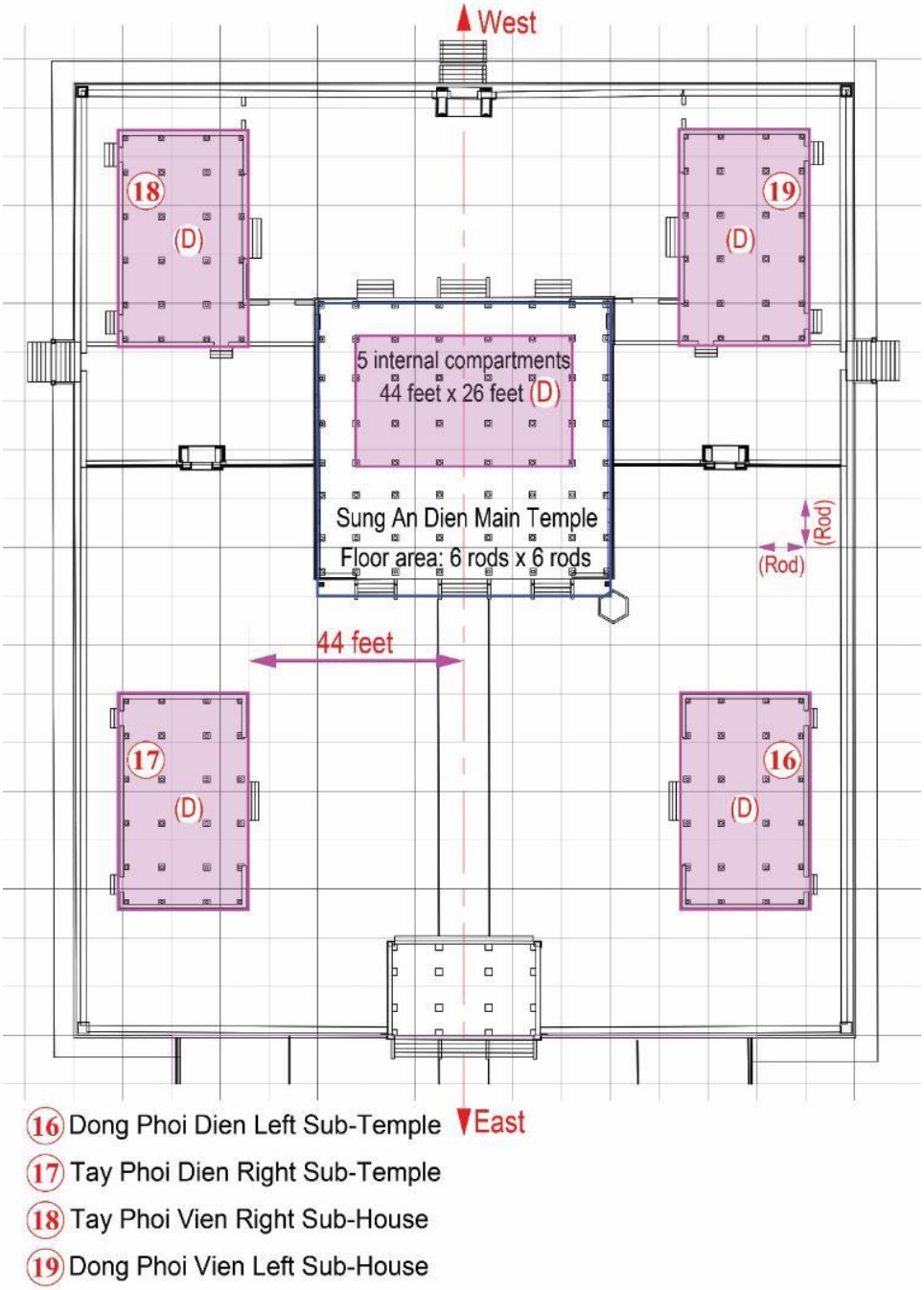


Figure 94: Grid-rods analyzing the worship area

Source: Adapted by Author and Le Vinh An in 2019 based on a drawing of Waseda Heritage Institute

5.4.4 Relations between the central area and other surrounding component buildings

The architecture located in the central spatial area along the Central axis was intentionally designed to follow a regular and symmetrical layout. This design approach incorporated geometric lines and utilized basic shapes, such as circles, squares, and rectangles. On the other hand, the architectural elements surrounding the central spatial area were crafted with irregular lines to create a softer and more harmonious composition with the natural landscape. These components, along with their proportional relationships, were measured in feet using a unit called "Xich," where 1 foot equals 382mm. This measurement system, combined with the decimal relation of the Grid-rods, ensured a cohesive and proportionate design across the entire Mausoleum.

The central spatial area is surrounded by seven small mountains (hills), each supporting a distinct building (Figure 95). These buildings were constructed sequentially as follows:

In the Northern area:

(1) Truy Tu Trai is located on Phuc Am Son mountain;

(2) Quan Lan So hall is on Dao Thong Son mountain;

(3) Linh Phuong Cac pavilion is on Khai Thach Son mountain;

(4) Thuan Loc Hien part-house is on Duc Hoa Son mountain;

(5) Ta Tung Phong chamber is on Tinh Son mountain.

In the Southern area:

(6) Huu Tung Phong chamber is situated on Y Son mountain

(7) Hu Hoai Ta floating pavilion is on Tran Thuy Dao peninsula.

While these seven buildings share a common characteristic of being located on artificial hills surrounding the Trung Minh Ho lake and facing the

central spatial area, they differ in scale and architectural features based on their classification and functions. The site plan of the Mausoleum adheres to two main design principles: first, the axes with functional subdivisions, inspired by traditional Vietnamese architecture, and second, an architectural landscape that harmonizes with the surrounding nature.

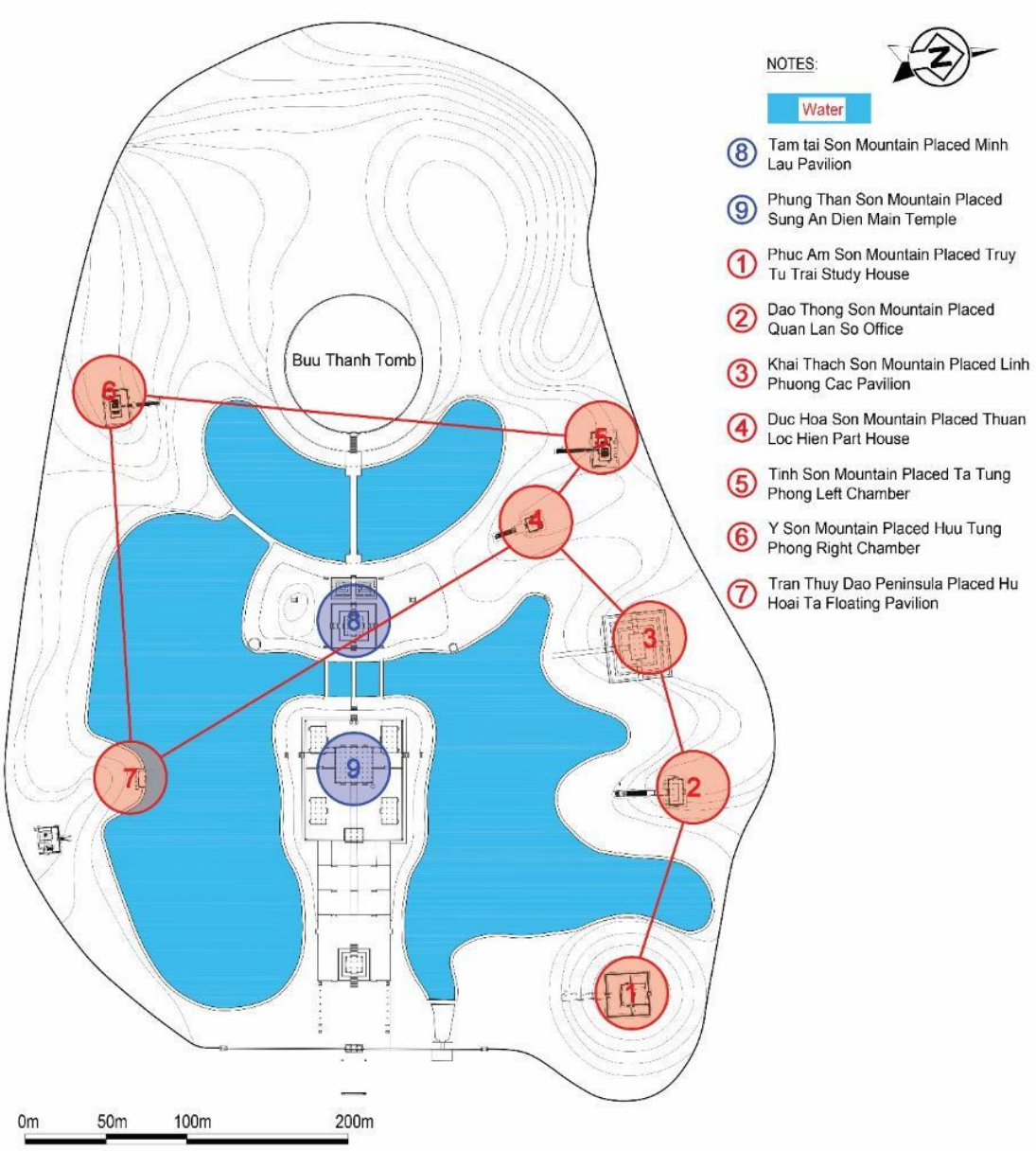


Figure 95: The plan illustrates the location of surrounding components, showing that the central area is encircled by seven small mountains (or hills), each featuring a unique building with distinct scales and architectural characteristics.
Source: Adapted by Author and Le Vinh An in 2019 based on a drawing of Waseda Heritage Institute

5.5 Site planning principle of Emperor Thieu Tri's mausoleum

As mentioned in Chapter 4 (Section 4.3.5), the Thieu Tri Mausoleum features a Worship Area (B) that is organized along a distinct axis. This area includes the following structures: Bieu Duc Dien Main Temple (Figure 28, number 19), Hong Trach Mon Main Gate (number 18), Huu Vu Right Sub-Temple (number 21), Ta Vu Left Sub-Temple (number 20), Ta Tung Vien Left Sub-House (number 23), and Huu Tung Vien Right Sub-House (number 22). In front of these buildings is a three-stepped Bai Dinh Left Courtyard (number 17). Positioned before the the Bai Dinh Left Courtyard is a crescent-shaped Ban Nguyet Ho Lake (number 15).

The Tombs area (A) and Stele Hall area (C) are arranged along the same axis, next to Area B. Area C is located in front and consists of Duc Hinh Lau Pavilion (number 8), Tru Bieu Landmark Towers (number 9), Bi Dinh Stele Hall (number 10), Bai Dinh Right Courtyard (number 11), and Nhuan Trach Ho Lake (number 13) located in front of the Bai Dinh Right Courtyard.

Area A is situated at the rear and includes Chinh Trung Kien Bridge (number 4), Dong Hoa Kieu Bridge (number 5), Tay Dinh Kieu Bridge (number 6), Ngung Thuy Tri Pond (number 3), Buu Thanh Mon Gate (number 2), and Buu Thanh Grave (number 1).

There appears to be no apparent relationship between the axis of Area B and the axes of Areas A and C, other than the fact that both axes are oriented towards Thuan Dao Mountain to the west and intersect at a point roughly 1.3 km from the center of the grave. In terms of the positional relationship between the architectural structures in these two areas, the analysis results indicate that:

5.5.1 Principle of the two parallel axes translation

The line that is perpendicular to the central axis of Areas A and C at the center point of the Stele Hall (Area C) will extend through the center point of Hong Trach Mon Gate (Area B). Similarly, the line passing through the center

point of Duc Hinh Lau Pavilion (Area C) will also reach the front center point of Bieu Duc Dien Temple (Area B).

In terms of construction planning, these two locations are crucial in determining the positions of the remaining structures in Area B. From a spiritual perspective, they serve as a spiritual gateway connecting the two realms of the living and the dead. Consequently, these intersecting focal points will provide the basis for analyzing the proportional relationships and positioning of the remaining structures.

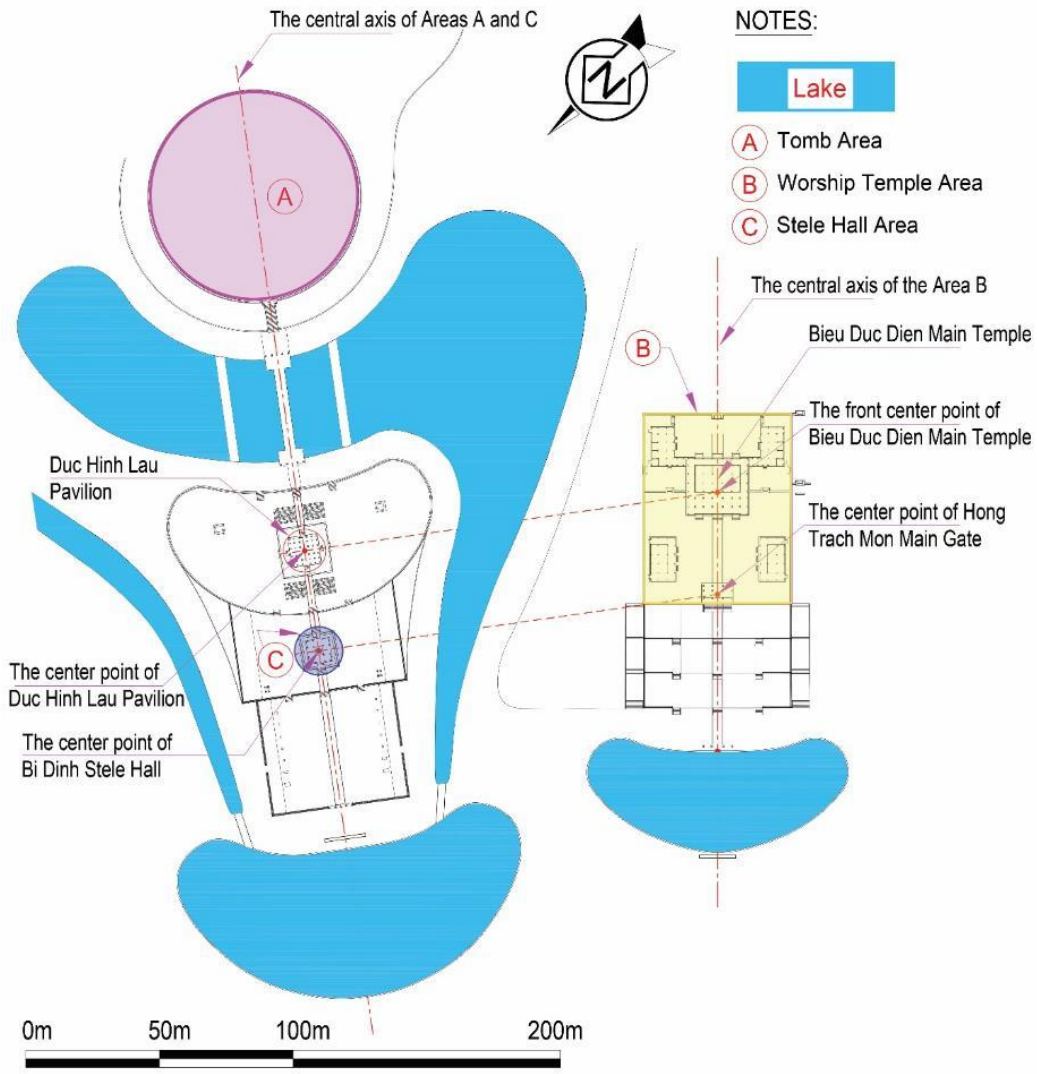


Figure 96: The relationship among the key elements of Areas A, B, and C in the site plan of Xuong Lang mausoleum.
Source: Adapted by Author in 2025 based on a drawing of Waseda Heritage Institute

5.5.2 Principle for deploying the primary construction unit

5.5.2.1 Area A and Area C

The center of Stele Hall will serve as the reference point for determining the location of the center of Hong Trach Mon Gate, or vice versa. Therefore, this point is chosen as the foundation for analysis. The results are as follows:

The distance from the center of Bi Dinh Stele Hall (Figure 97, number 10) to the outer boundary of Nhuan Trach Ho Lake (number 13) is equal to the distance from there to Buu Thanh Mon Gate (number 2). Thus, the Nhuan Trach Ho Lake is symmetrical to the Buu Thanh Mon Gate through the center of Bi Dinh Stele Hall.

Furthermore, the distance from the center of Tru Bieu Landmark Towers (number 9) to the Binh Phong Right-Front Screen (number 12) of the Bai Dinh Right Courtyard (number 11) is the same as the distance from there to the center of Buu Thanh Grave (number 1). Therefore, the Binh Phong Right-Front Screen in the Bai Dinh Right Courtyard is symmetrical to the center of the Grave through the central axis of Landmark Towers.

The diagonal of the floor plan (square) of Bi Dinh Stele Hall is denoted as "c," which serves as the basic size unit of Area A and C. Extending this "c" size towards the Bai Dinh Right Courtyard to the outer edge of Nhuan Trach Ho Lake measures 11c, and extending it towards the Grave to Buu Thanh Mon Gate also measures 11c. Consequently, if we calculate the total distance from the outer edge of Nhuan Trach Ho Lake to Buu Thanh Mon Gate, including the Bi Dinh Stele Hall platform, the total distance is 23c. Accordingly, the diameter of the Buu Thanh Grave is 7c, and the distance from the center of Bi Dinh Stelle Hall to the center of the Grave is 15c. With these basic dimensions, it is sufficient to determine the locations of the main components of Areas A and C. (Figure 98)

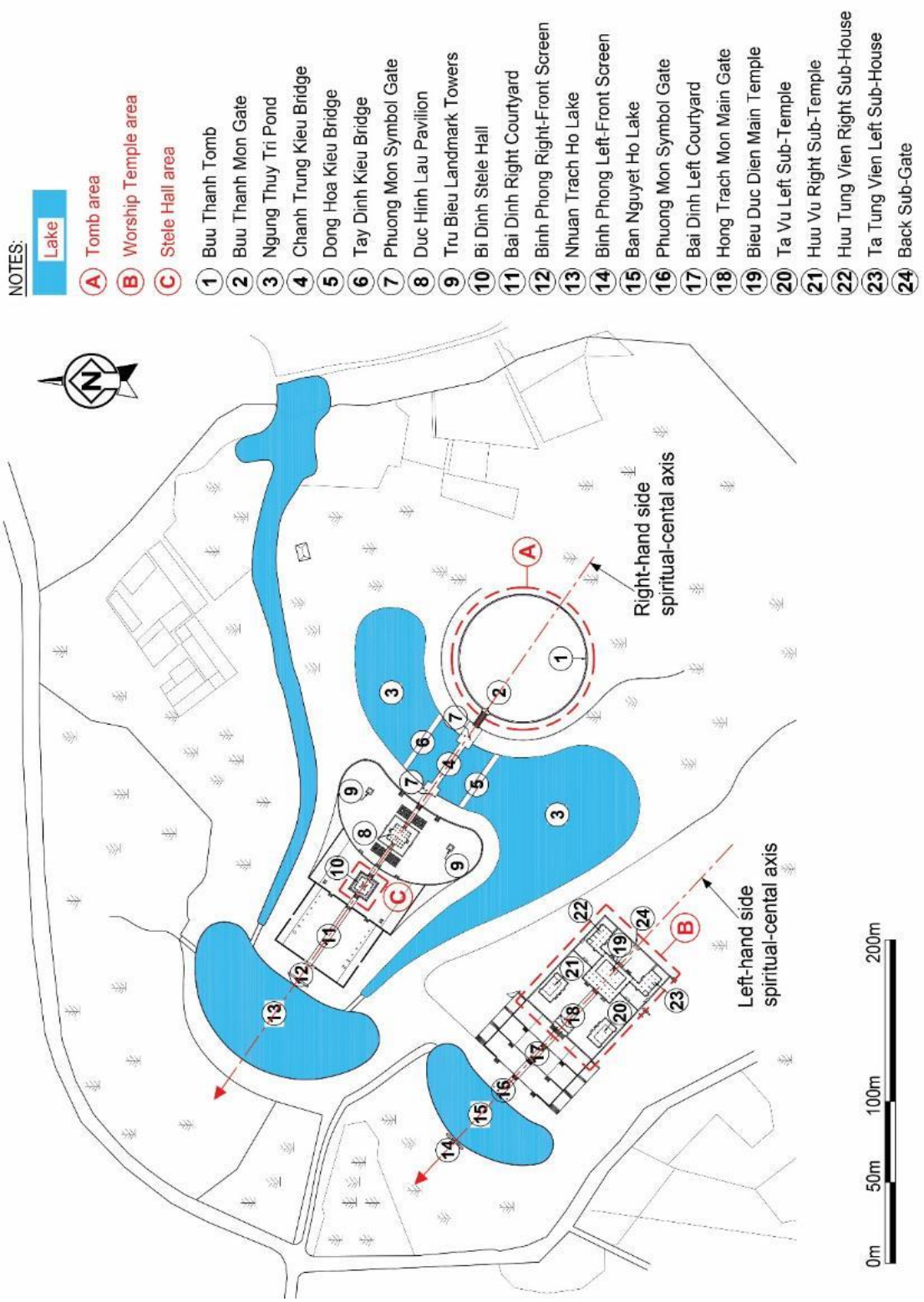


Figure 97: Site plan of the Emperor Thieu Tri's mausoleum

Source: Adapted by Author in 2025 based on a drawing of Waseda Heritage Institute

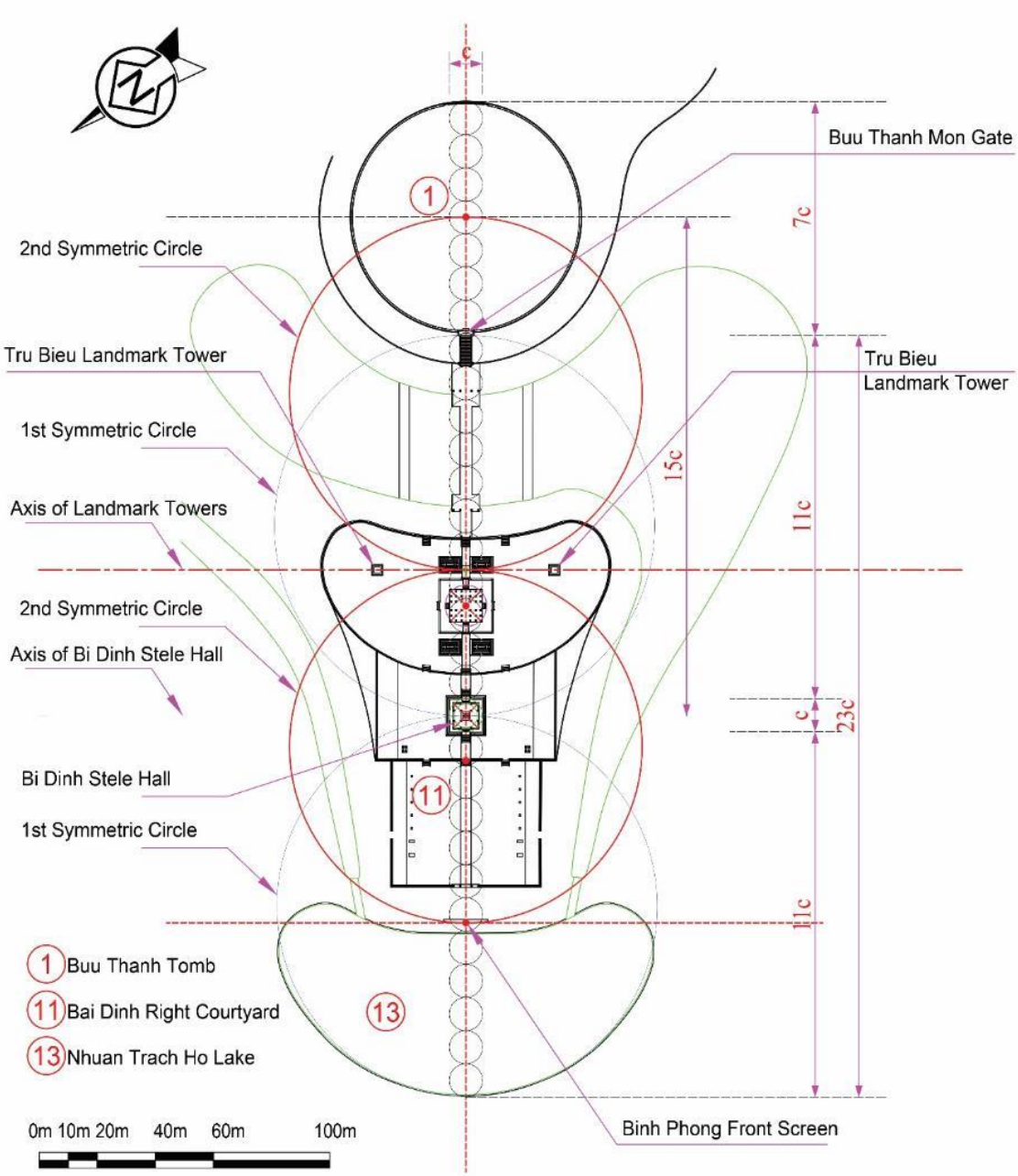


Figure 98: The relationship among the significant points of areas A, B, and C in the site plan of Xuong Lang mausoleum.
Source: Adapted by Author in 2025 based on a drawing of Waseda Heritage Institute

5.5.2.2 Area B

The center of Hong Trach Mon Gate (Figure 97, number 18) is determined by the intersection of the perpendicular line (relative to the axis of Areas A and C) at the center of Stele Hall. This gate will serve as the reference point for further analysis. The results are outlined below:

The Praying Courtyard Area: The longitudinal dimension (length) of the three column spans of Hong Trach Mon Gate is referred to as "b," which serves as the basic unit of measurement. This dimension "b" is extended towards Ban Nguyet Ho Lake (number 15) to the first, second, and third tiers of the courtyard (from top to bottom), measuring 2b, 4b, and 6b, respectively. The edge of the third tier of the courtyard to the western side of the lake is 8.5b. The distance from this edge to the Binh Phong Left – Front Screen on the eastern side of the lake is 6b. Therefore, the total distance from the center of Hong Trach Mon Gate to the Binh Phong Left – Front Screen at the western edge of the crescent-shaped pond is 15b (Figure 99).

The Worship Area: The longitudinal dimension (length) of the three central column spans of Bieu Duc Dien Temple is referred to as "B" and used as the basic measurement unit. This dimension "B" extends towards the front to the center of Hong Trach Mon Gate, measuring 4B, and extends towards the rear to the outer edge of the rear gate, measuring 2B. Consequently, the total depth of the Worship area is 7B (Figure 99).

With these basic dimensions, it is sufficient to determine the locations of the main components of Area B along the longitudinal axis. The proportional dimensions for the horizontal axis (North-South) will be determined by the grid system and will be presented subsequently.

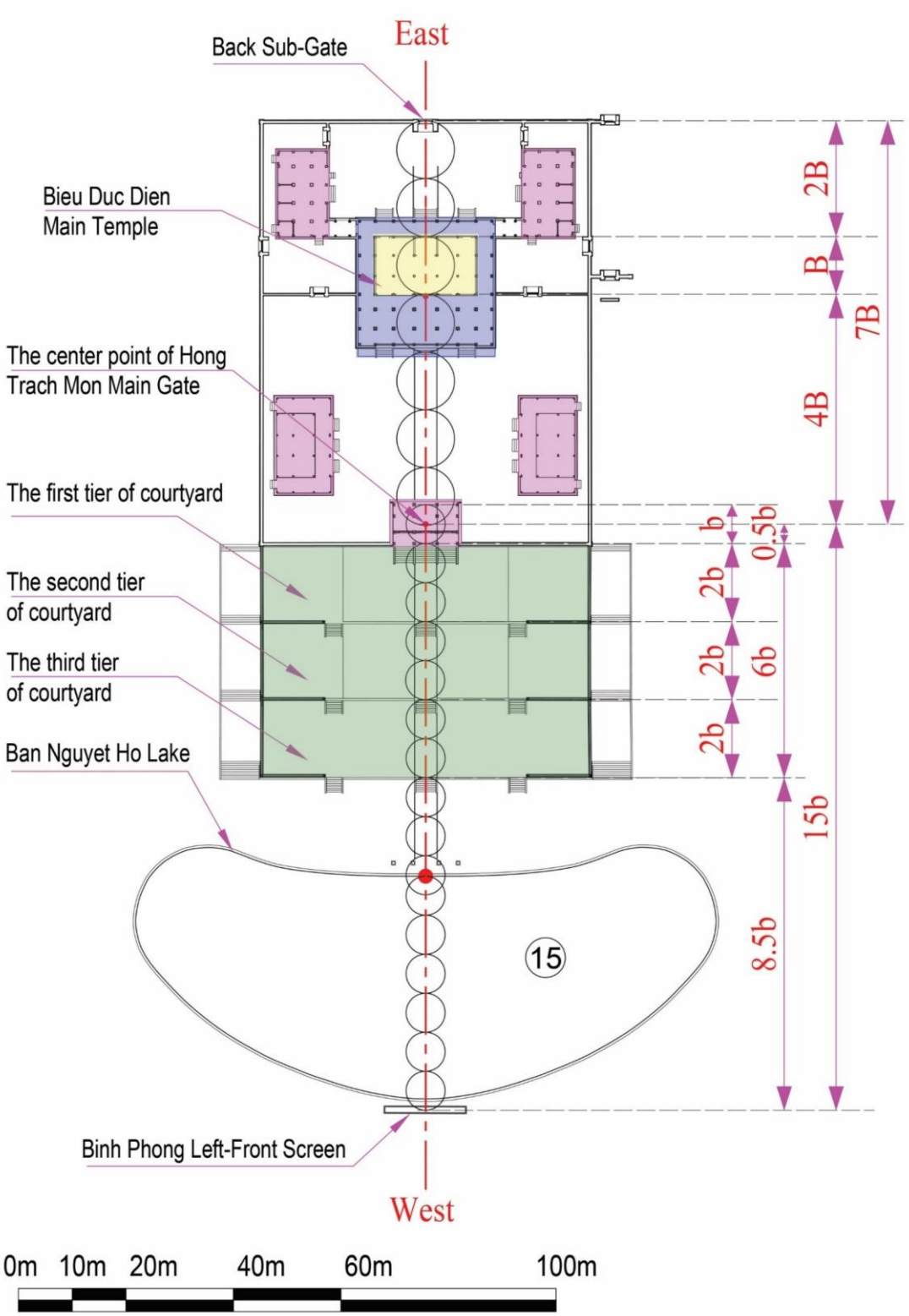


Figure 99: The relationship among the significant points of areas A, B, and C in the site plan of Xuong Lang mausoleum.

Source: Adapted by Author in 2025 based on a drawing of Waseda Heritage Institute

5.5.3 Principle of Grid-rods advance equally along the Central axis

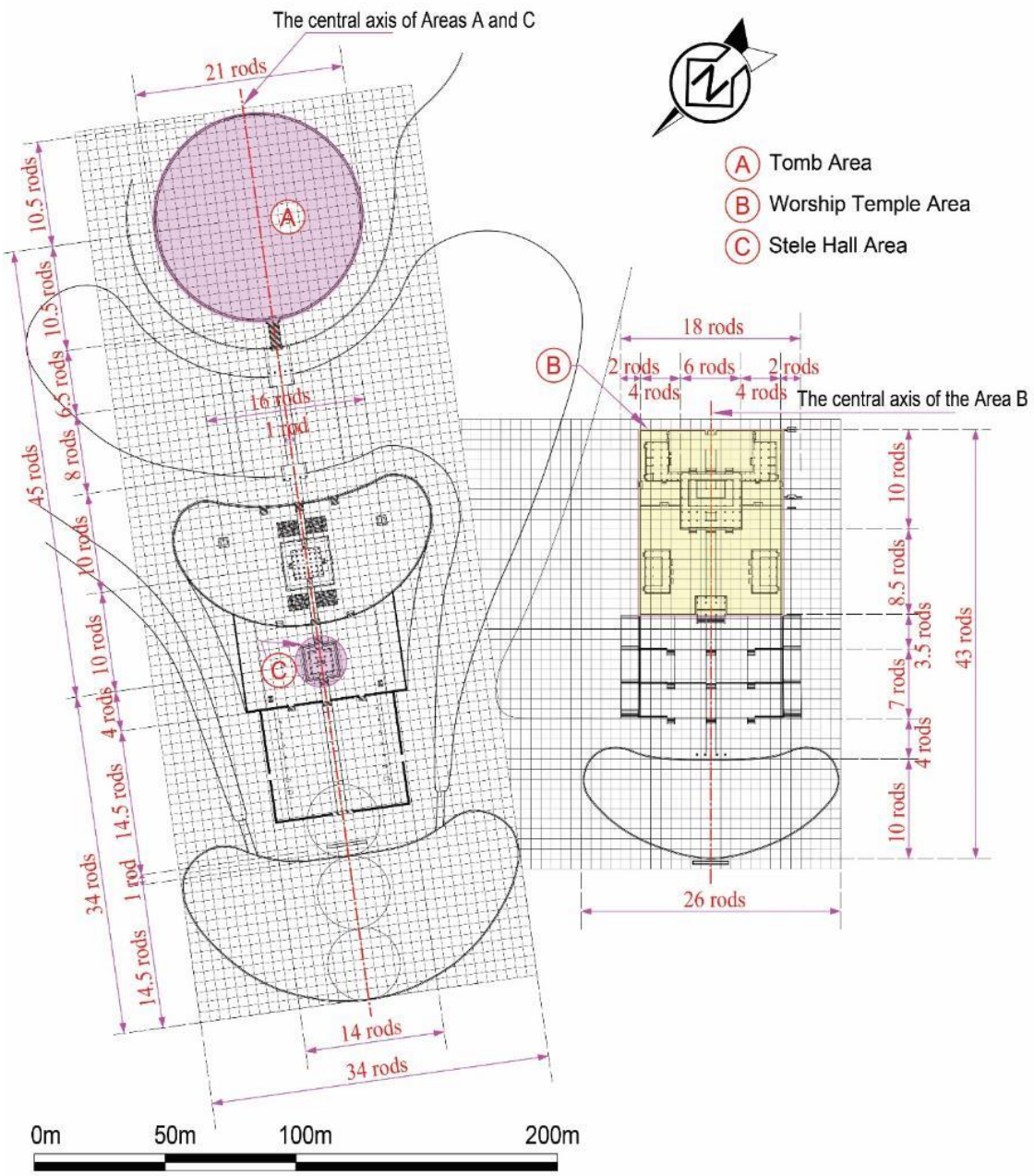


Figure 100: Analysis of grid-rods along the central axis of areas A, B, and C of Xuong Lang Mausoleum.

Source: Adapted by Author in 2025 based on a drawing of Waseda Heritage Institute

5.5.3.1 Grid-rods of the A and C areas

The dimensions of Areas A and C are analyzed according to the Nguyen Dynasty's measurement system, where 1 rod equals 3820 mm. The analysis results are as follows:

Along the longitudinal axis (towards the Grave):

- The distance from the center of Stele Hall (Figures 97 and 101, number 10) to the center of Duc Hinh Lau Pavilion (number 8) is 10 rods.

- To the western edge of Chinh Trung Kieu Bridge (number 4), it is 20 rods.

- To the eastern edge of this bridge, it is 28 rods.

- To Buu Thanh Mon Gate (number 2), it is 34.5 rods.

- To the center of the Grave (number 1), it is 45 rods.

Accordingly, the diameter of Grave is 21 rods.

Along the longitudinal axis (towards Nhuan Trach Ho Lake):

- The distance from the center of Stele Hall (Figures 97 and 101, number 10) to the edge of the Stele Hall platform is 4 rods.

- To the outer edge of Binh Phong Screen (number 12), it is 18.5 rods.

- To the eastern edge of Nhuan Trach Ho Lake (number 13), it is 19.5 rods.

- To the western edge of this pond, it is 34 rods.

Along the transverse axis:

- The width of Nhuan Trach Ho Lake (Figures 97 and 101, number 13) is 34 rods

- The width of the Bai Dinh Right Courtyard (number 11) is 14 rods.

- The width of the platform area of Duc Hinh Lau Pavilion and Tru Bieu Landmark Towers is 16 rods.

- The width of Chinh Trung Kieu Bridge is 1 rod.

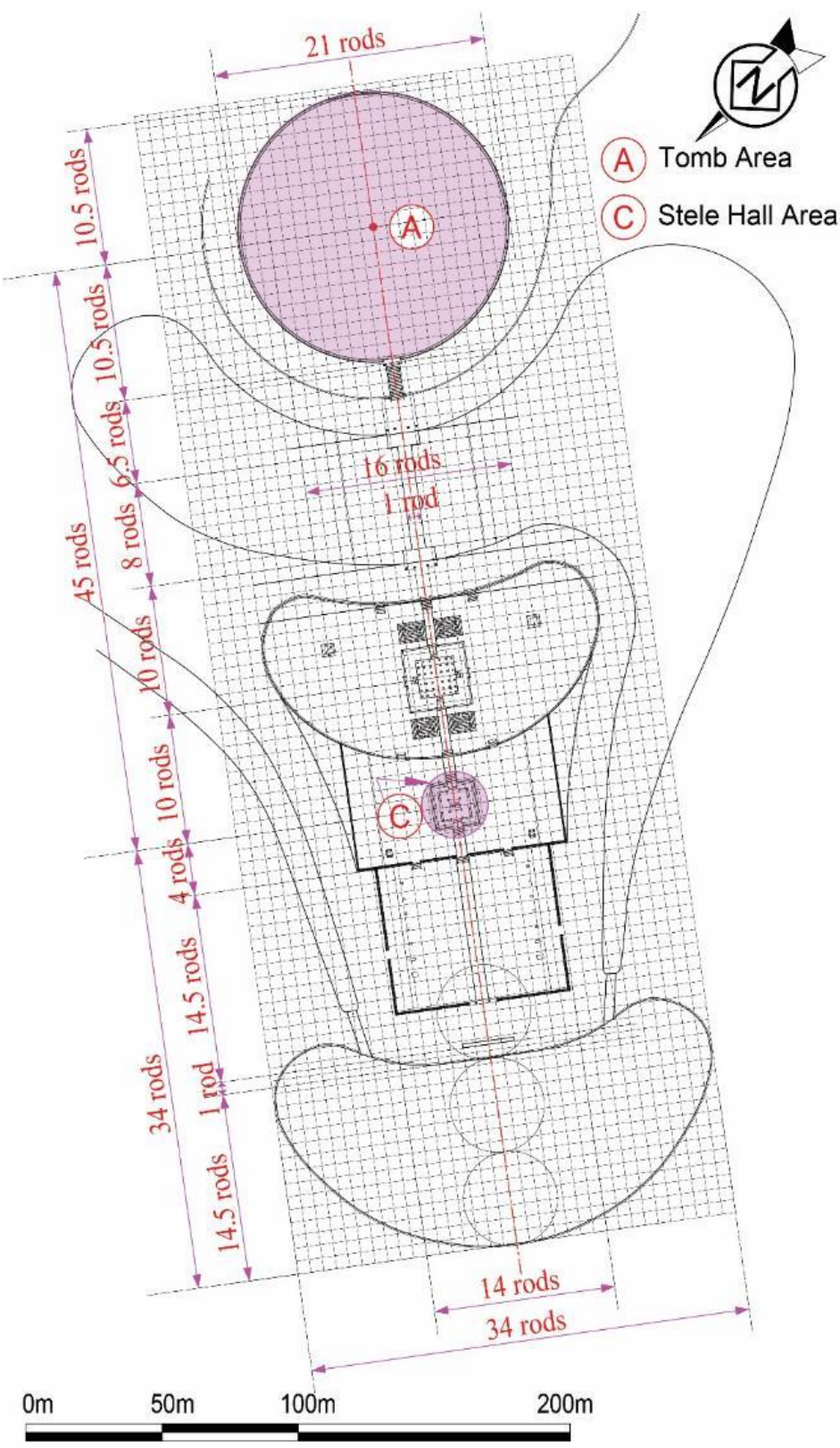


Figure 101: Analysis of grid-rods along the central axis of areas A and C of Xuong Lang mausoleum.

Source: Adapted by Author in 2025 based on a drawing of Waseda Heritage Institute

5.5.3.2 Grid-rods of the B area

Similarly, the analysis results for Area B are as follows:

Along the longitudinal axis:

- The distance from the western edge to the eastern edge of Ban Nguyet Ho Lake (Figures 97 and 102, number 15) is 10 rods.

- To the first tier of Bai Dinh Left Courtyard (number 17), it is 14 rods.

- To the third tier, it is 21 rods.

- To the inner edge of the western wall of the Worship area, it is 24.5 rods.

- To the front edge of the Bieu Duc Dien Temple platform (number 19), it is 23 rods.

- To the eastern wall of the Worship area, it is 43 rods.

Along the transverse axis:

- The width of the Bieu Duc Dien Temple platform is 6 rods.

- The total width of the Worship area and Praying Courtyard area is 14 rods.

- To the outer edge of the outermost steps, it is 18 rods.

The area of the platform for the main worship area of Bieu Duc Dien Temple is denoted as A (Figure 102). This area is equal to the platform area of Hong Trach Mon Gate (Figures 97 and 102, number 18) and the worship areas of the Ta Vu Left Sub-temple and Huu Vu right Sub-temple, which are symmetrically located on either side in front of Bieu Duc Dien Temple.

These dimensions are essential for planning the overall layout and determining the positions of the main structures. Based on this information, the scale and specific dimensions of each structure will be decided following the traditional design methods of the Nguyen Dynasty.

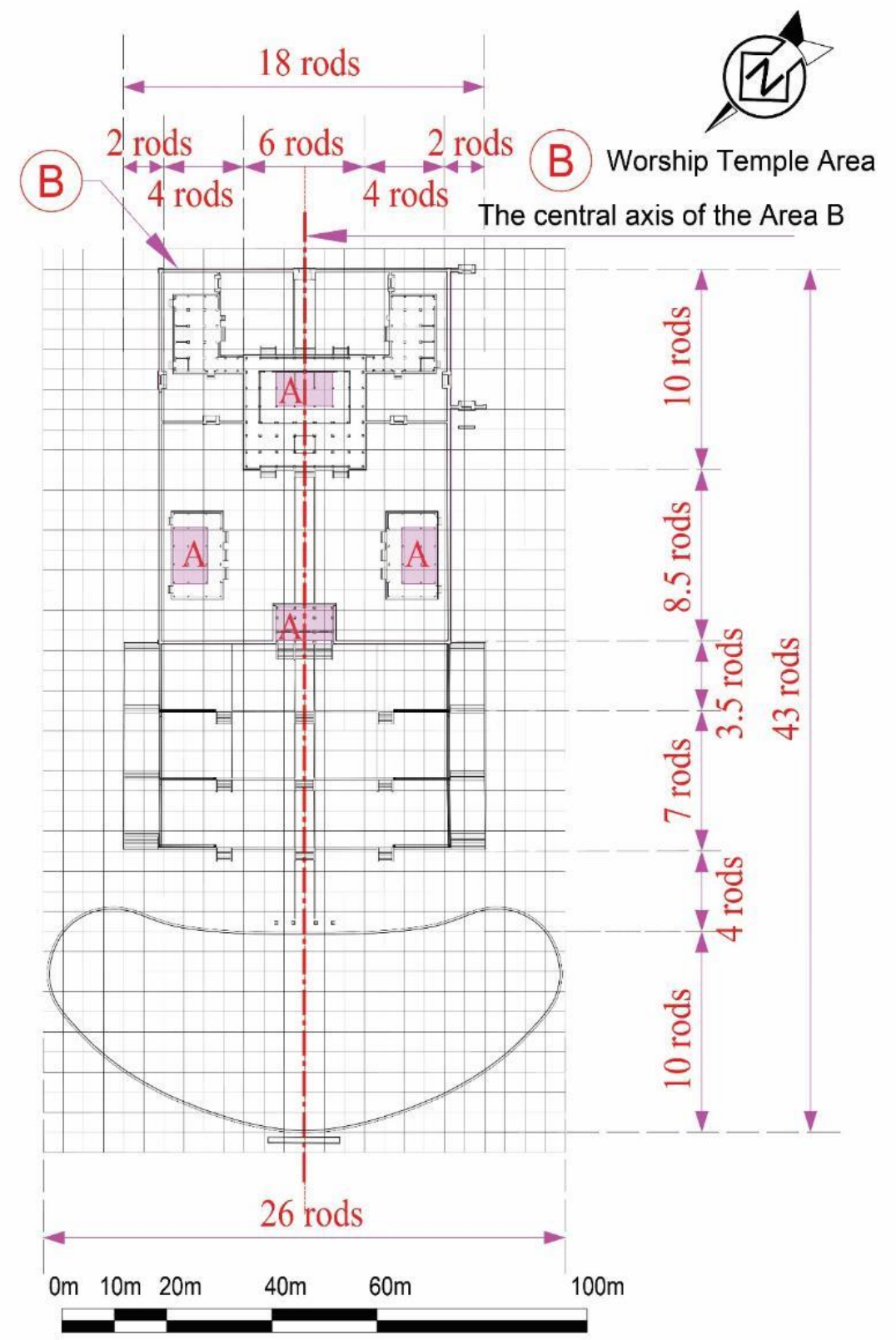


Figure 102: Analysis of grid-rods along the central axis of areas B of Xuong Lang mausoleum.

Source: Adapted by Author in 2025 based on a drawing of Waseda Heritage Institute

5.6 Conclusion

Based on extensive research from reliable historical documents and site investigations, this study has thoroughly examined the design principles applied to the mausoleums of the Nguyen Dynasty, focusing specifically on those of Emperors Gia Long, Minh Mang, and Thieu Tri.

The Mausoleum incorporates both macrocosmic and microcosmic perspectives. The Feng Shui concept influences the former, while the latter adheres to consistent architectural planning in the traditional Vietnamese style, incorporating axes and architectural elements that harmonise with the surrounding natural environment. From an architectural design standpoint, the principles of symmetry and grid-rods play an integral role in understanding the design principles employed in the Mausoleum.

The measurement unit used for planning the Mausoleum is the Rod system, where 1 rod is equivalent to 3820 mm, according to the measurement unit of the Lu Ban Xich rule. The architectural site plan is believed to be based on two axes: the Central axis (running in an east-west direction) and the Landmark-tower axis (running in a North-South direction), for example, the mausoleums of Emperor Minh Mang and Emperor Thieu Tri. The Central axis is perfectly symmetrical, with the two Landmark towers and other accompanying buildings positioned symmetrically on both sides. The Landmark-tower axis, on the other hand, is relatively symmetrical, connecting the central points of the Buu Thanh Mon entrance, Sung An Dien main temple, Buu Thanh grave, and Hien Duc Mon main gate. This axis effectively divides the Mausoleum into front and back sections. The principle of advancing grid-rods equally along the Central axis is strictly adhered to in the central spatial areas. At the same time, the architectural elements surrounding them are designed with irregular lines to soften the overall symmetrical composition. Hence, it can be inferred that the Mausoleum site plan is guided by two main design principles: the axes with functional subdivisions rooted in Vietnamese

traditional architecture, and an architectural landscape that harmonizes with the natural surroundings.

Additionally, the Minh Lau Pavilion occupies a central position within the Mausoleum compound and symbolizes "Thien" (Heaven), "Dia" (Earth), and "Nhan" (Human). This concept is shared by the Sung An Dien Main Temple and the Buu Thanh Mon entrance. Together, these three structures represent the Present, the Past, and the Future, respectively. The Minh Lau Pavilion provides panoramic views of the entire Mausoleum, which encompasses nine hills symbolizing the nine stars of the North Star Cluster. These hills symbolize the spatial dimensions of the universe, where the soul of Emperor Minh Mang is believed to reside. All three mausoleums contain profound layers of symbolism, which is a significant factor contributing to their recognition as a World Cultural Heritage site within the Complex of Hue Monuments since December 1993.

มหาวิทยาลัยศิลปากร

Chapter 6

Discussion of the Study Results

Previous studies have primarily approached the topic from the perspective of historical document research and qualitative assessments of cultural and artistic value rather than through detailed architectural or scientific analysis. These gaps highlight the need for further research and discussion, as addressed in the sections below.

6.1 Mausoleum's Location

There are no specific regulations in historical records regarding the location of the mausoleums or the positional relationships between them. These mausoleums were all planned to be built in the southwestern mountainous area of the Hue Citadel. Historical information mentions the term "*Son Lang"* (*山陵;* Table 8, number 2), which may implicitly refer to their location in the mountainous region. Typically, the ideal location for constructing an emperor's mausoleum should fulfill Feng Shui principles and geographical conditions rooted in Eastern concepts broadly, alongside the specific traditions of Vietnamese culture. An ideal site is surrounded by high mountains, creating a valley containing a large lake.

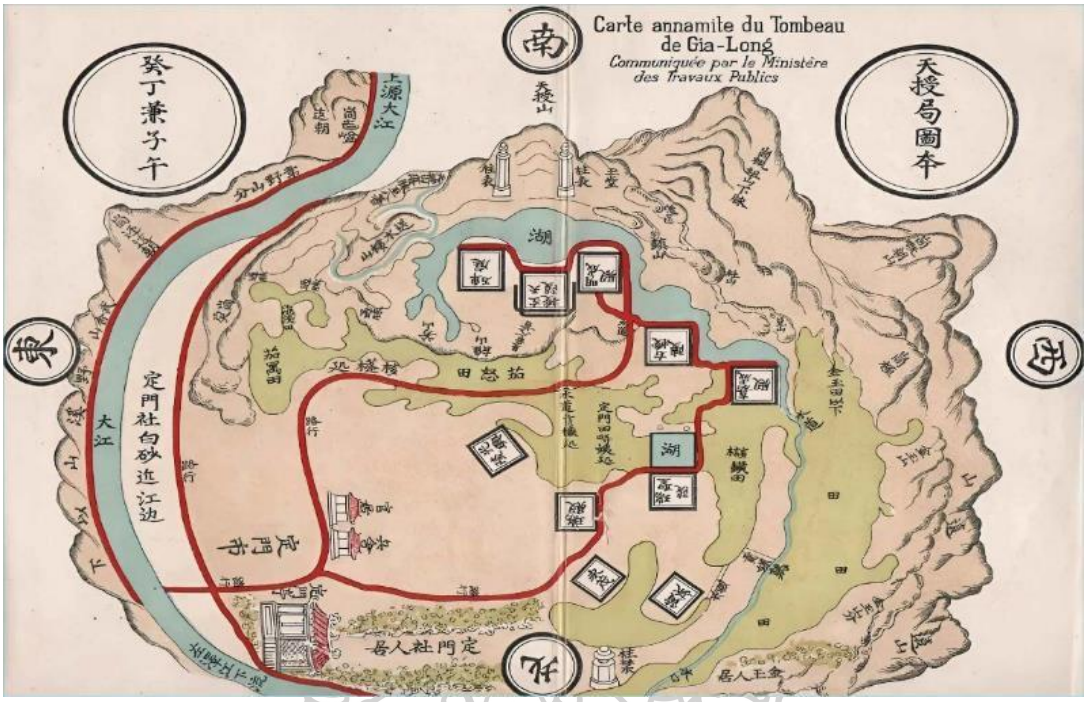


Figure 103: Illustrative map of the site plan of Emperor Gia Long 's mausoleum
Source: Photo @ Bulletin des Amis du Vieux Hue, 1923 drawn by Nguyen Thu

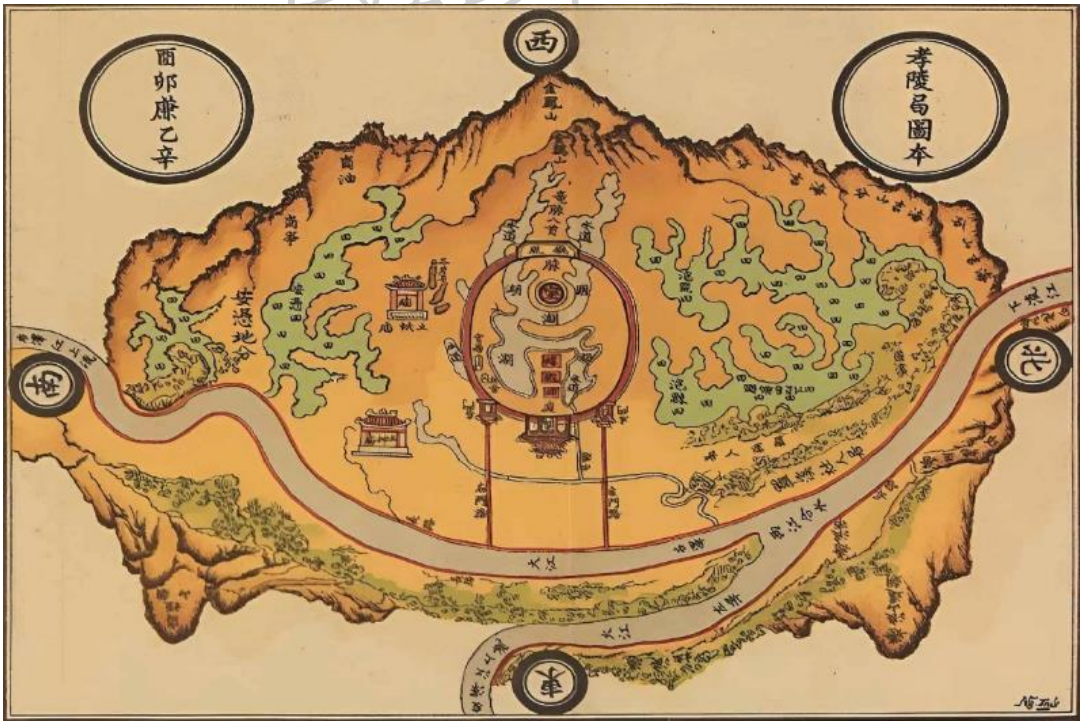


Figure 104: Illustrative map of the site plan of Emperor Minh Mang 's mausoleum
Source: Photo @ Bulletin des Amis du Vieux Hue, 1923 drawn by Nguyen Thu

The preferred land for ancient Chinese emperors when selecting locations for their mausoleums is known as “Son Hoi Thuy Tu,” which translates to “mountains surrounding and water gathering in the center” (Le et al., 2022). The illustrative maps of the first two imperial mausoleums of the Nguyen dynasty, which are still preserved, provide insight into the construction planning concepts of this dynasty (Figures 103 and 104). These maps depict the mausoleums surrounded by a chain of mountains, each named with Chinese characters, and feature a large lake situated in the central area (Cadière, 1923); (Lichtenfelder, 1937).

A recognisable characteristic of these maps is that the mausoleums are surrounded by hills, mountains, and bodies of water such as rivers or lakes. The mountain ranges act as natural defensive walls that protect the mausoleums. Additionally, the highest points collect rainwater, which feeds into the rivers that flow into the lakes surrounding the mausoleums. These rivers not only provide essential water resources for daily life and worship ceremonies but also serve as convenient waterways, granting direct access to the inner areas of the mausoleums. These illustrations support the author's perspective on the Feng Shui characteristics of the Nguyen imperial mausoleums, historically referred to as "Son Lang" (Mountain Mausoleum), as previously discussed.

A notable feature observed in these two images is the presence of rice fields (highlighted in green) and access roads (highlighted in dark red) located in the open areas between the hills and the tombs—elements that have not been recorded in historical documents. The existence of rice fields surrounding the imperial mausoleums suggests that agricultural activities have been historically significant and continue to this day. This phenomenon is unique to the Nguyen Dynasty’s imperial mausoleums in Vietnam and stands in contrast to the layouts of imperial mausoleums in other East Asian countries, such as China, Japan, and Korea, that share similar cultural traditions.

Agricultural cultivation played a crucial role in providing a consistent food supply for the local population, as well as offerings for important ceremonial occasions held at the mausoleums. The distance from the urban center to these mausoleums was considerable (up to 16 km in the farthest cases), making transportation by horse-drawn carriage or rowing boat time-consuming. Therefore, on-site agricultural production was necessary to mitigate logistical challenges posed by the mausoleums' remote locations. Additionally, from a security perspective, open spaces around mausoleums served essential observation and defensive functions. Such land acted as a buffer zone, allowing monitoring and protection against grave robbers, enemy attacks, or damage caused by livestock such as buffalo and cattle. Thus, the site selection had to be advantageous and accessible via waterways and roads.

Regarding the distance from the mausoleums to the Hue Citadel, as indicated in Table 6, Emperor Gia Long's mausoleum is located the farthest away (16 km), followed by Emperor Minh Mang's mausoleum (12 km away), and Emperor Thieu Tri's mausoleum (8 km). The distances of the remaining mausoleums from the Citadel tend to be shorter. This arrangement reflects the concept that mountains are elevated places that first receive clean water from heaven; rivers and lakes subsequently collect and store that precious water. The land elevation is higher farther southwest from the Citadel, featuring more mountains to capture clean water, first utilized in mausoleum worship services, then distributed along rivers to lower areas, near the Imperial City. The elevated mountainous terrain ensures that the land remains clean, uncontaminated, and thus more suitable for spiritual and ceremonial activities.

According to the traditional hierarchical order of feudal dynasties, the founder of a Dynasty is considered the most significant and revered person, followed by succeeding descendants. Although these descendants were all proclaimed emperors after ascending to the throne, they remained subordinate in rank to the founder according to the family lineage. Therefore, mausoleums

for these emperors were generally constructed on land of lower elevation compared to that of the founding emperor.

However, Emperor Khai Dinh's mausoleum, located only 10 km from the Citadel, deviates from this arrangement. Despite being the 12th emperor and having his mausoleum built last, its proximity to the Citadel ranks third, shorter only than the mausoleum distances of the Dynasty's first two emperors. This deviation can be attributed to the declining adherence to traditional, unwritten regulations and practices regarding mausoleum construction during the later stages of the Nguyen Dynasty, which was influenced by Western culture. This shift is evident in Emperor Khai Dinh's mausoleum's architectural features, spatial layout, worship practices, and construction materials, which show partial Western influence (Figures 105-110).

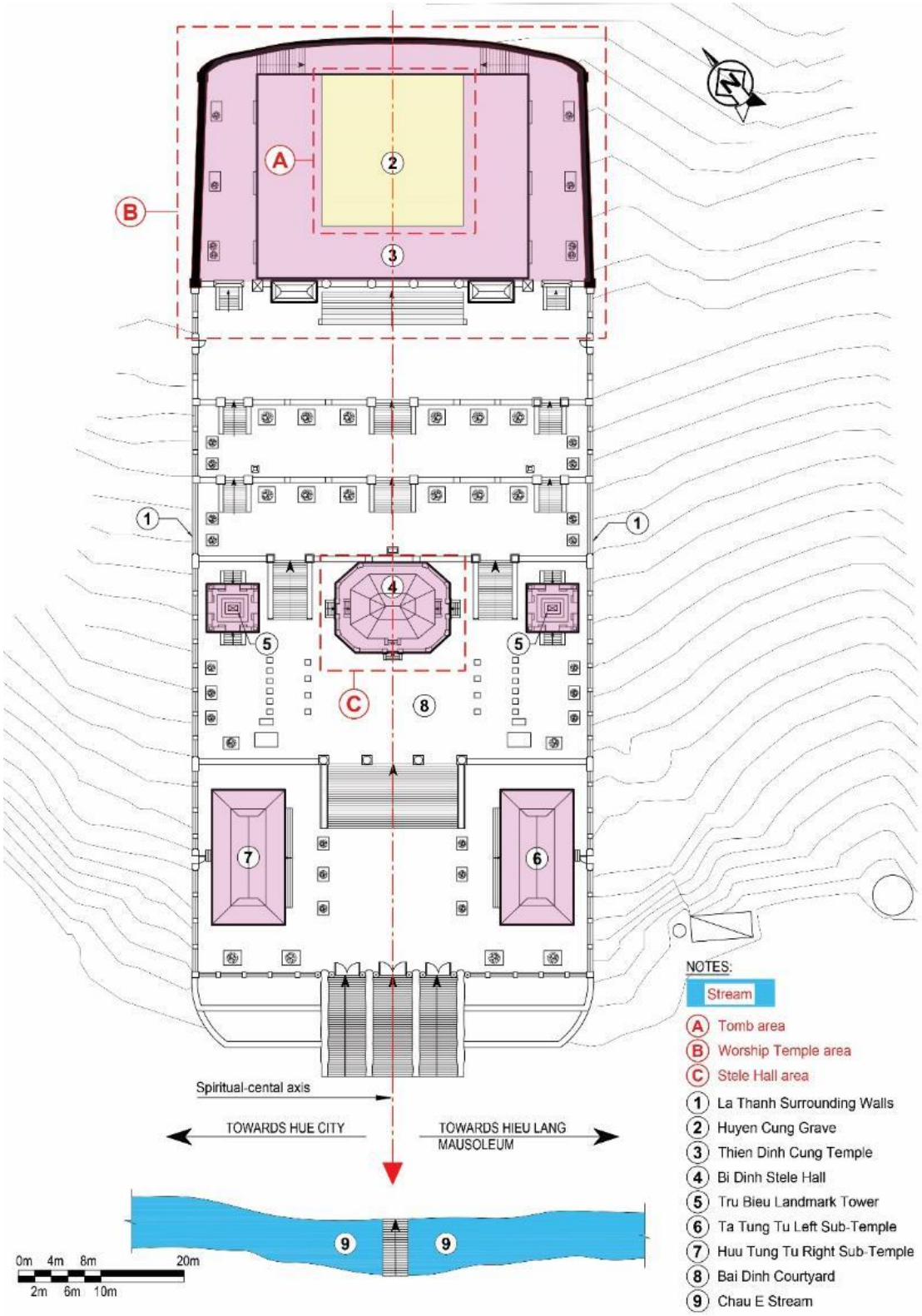


Figure 105: Site plan of Emperor Khai Dinh's mausoleum
Source: Adapted by Author in 2025 based on a drawing of Hue Monuments Conservation Center



Figure 106: Aerial Photograph of Emperor Khai Dinh's Mausoleum
Source: Hue Monuments Conservation Center



Figure 107: Steps leading up to the Bai Dinh courtyard of Emperor Khai Dinh's mausoleum
Source: Photo by Author (2020)



Figure 108: Huu Tung Tu tight sub-temple of Emperor Khai Dinh's mausoleum
Source: Photo by Author (2020)



Figure 109: Bi Dinh stele hall of Emperor Khai Dinh's mausoleum
Source: Photo by Author (2020)

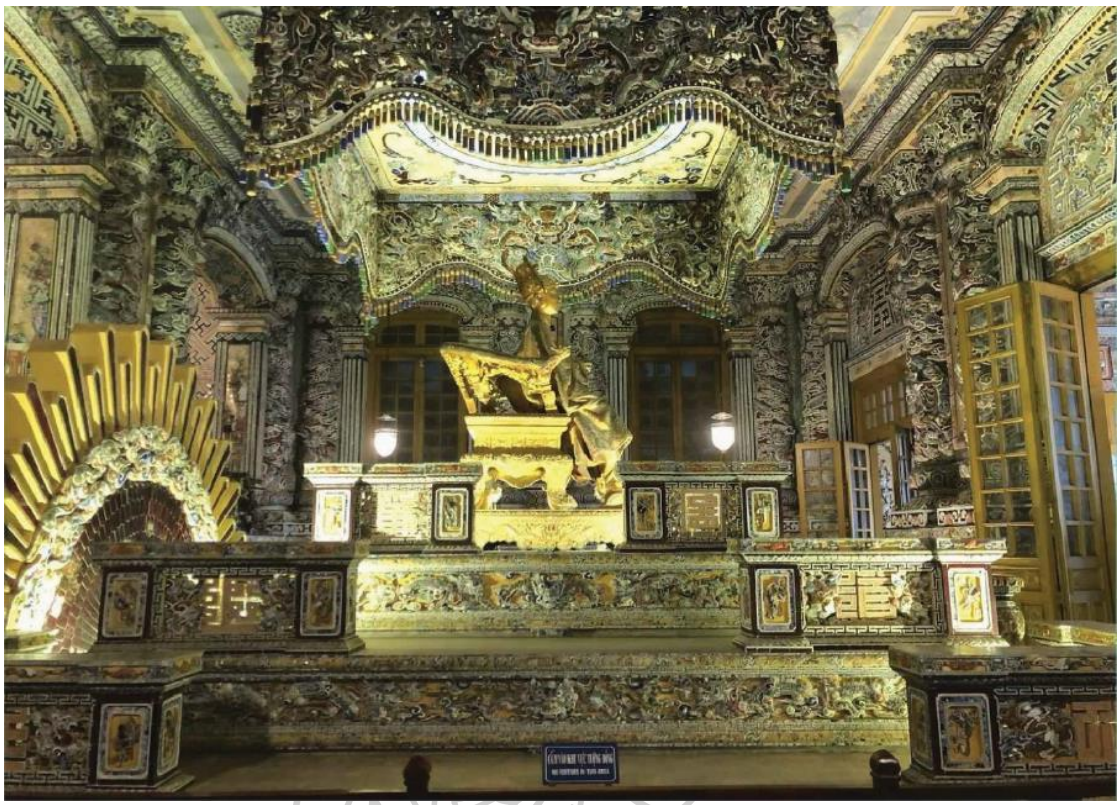


Figure 110: A life-sized statue of Emperor Khai Dinh placed on a podium with his grave directly beneath it
Source: Photo by Author (2020)



Figure 111: Bai Dinh courtyard of Emperor Khai Dinh's mausoleum
Source: Photo by Author (2020)

6.2 Mausoleum Axes and Direction

There are no specific rules for determining the number of axes used in each mausoleum. Groups A, B, and C can be organized along one axis (as in the mausoleums of Emperor Minh Mang and Emperor Khai Dinh), two axes (as in those of Emperor Thieu Tri, Emperor Tu Duc, Emperor Duc Duc, and Emperor Dong Khanh), or three axes (found only at Emperor Gia Long's mausoleum). Similarly, the primary orientation of the mausoleum may be toward the southwest, southeast, northwest, or northeast, but never directly east, west, south, or north. This orientation likely serves to minimize the direct impact of natural elements (sun, rain, wind) on the buildings' front facades (Table 19).

Table 19. The mausoleums' axes and directions

No.	Emperors	Mausoleums	Main Directions	Axes	Positional relation of A, B, C	Geo-coordinates
1	Gia Long	Thien Tho Lang	Southwest	Three axes	A central axis, B on right-parallel axis, C on left-parallel axis	16°21'42"N 107°35'48"E
2	Minh Mang	Hieu Lang	Southeast	One axis	A (back), B (central), C (front) of the axis	16°21'42"N 107°35'48"E
3	Thieu Tri	Xuong Lang	Northwest	Two axes	A (back) and C (front) on the right axis; B on the left-parallel axis	16°25'04"N 107°34'21"E
4	Tu Duc	Khiem Lang	Northeast	Two axes	A (back) and C (front) on the left axis; B on a slightly right-	16°25'58"N 107°33'59"E

					parallel axis	
5	Duc Duc	An Lang	Northwest	Two axes	A (back) and C (front) on the left axis; B on the right-parallel axis	16°27'04"N 107°35'35"E
6	Dong Khanh	Tu Lang	Southeast	Two axes	A (back) and C (front) on the right axis; B on the left radial axis	16°25'47"N 107°34'11"E
7	Khai Dinh	Ung Lang	Southwest	One axis	A (back), B (central), C front of the axis	16°23'56"N 107°35'25"E

Regarding the selection of the mausoleum's orientation, some perspectives suggest that the primary direction of the mausoleum is determined based on the emperor's astrology, ascertained from his birth date, and adjusted by rotating the central axis according to the compass directions of Feng Shui, based on the chosen time for the groundbreaking ceremony.

In reality, each mausoleum can have more than one central axis, which creates confusion in analyzing direction and identifying a definitive pattern. Multiple variables and parameters must be considered when determining the orientation of the Feng Shui compass in relation to the "Bagua" *(八卦)*. The "Bagua" originates from the I Ching (Book of Changes), comprising a system of eight trigrams used in Taoist cosmology to represent fundamental principles of nature and the universe. It is commonly applied in Feng Shui, traditional medicine, martial arts, and architecture. Each trigram consists of three lines (solid for Yang and broken for Yin), forming eight possible combinations, each associated with special meanings, as explained in Table 20.

Table 20. Eight trigrams of the *"Bagua"*

Trigram	Name (Vietnamese)	Name (Chinese)	Meaning	Element	Direction
☰	Càn	Qián *(乾)*	Heaven, strength, masculinity	Metal	Northwest
☷	Khôn	Kūn *(坤)*	Earth, receptivity, femininity	Earth	Southwest
☵	Khảm	Kǎn *(坎)*	Water, danger, wisdom	Water	North
☲	Ly	Lí *(離)*	Fire, clarity, civilization	Fire	South
☳	Chấn	Zhèn *(震)*	Thunder, movement, initiation	Wood	East
☶	Cấn	Gèn *(艮)*	Mountain, stillness, stability	Earth	Northeast
☴	Tốn	Xùn *(巽)*	Wind, penetration, adaptability	Wood	Southeast
☱	Đoài	Duì *(兌)*	Lake, joy, communication	Metal	West

Accordingly, the main direction of the mausoleums, as indicated by the central axis of the tomb area, facing Southwest, corresponds to trigram *Kūn* (☷); facing Southeast, corresponding trigram *Xùn* (☴); facing Northwest, corresponding trigram *Qián* (☰); and facing Northeast, corresponding trigram *Gèn* (☶).

However, upon verifying the emperor's astrology based on their birth dates and analyzing actual survey measurements, it becomes evident that these perspectives do not apply in this case. Thus, the selection of the mausoleum's direction based on the emperor's astrology was not practiced (Table 21).

Table 21. Astrology of the Emperors and the directions of their mausoleums

No.	Emperors					Mausoleums		
	Name of Date	Date of Birth (Lunar year)	Astrology					
			Trigram	Element	Directions	Direction	Element	Trigram
1	Gia Long	15/01/1762	Xùn (☴)	Wood	South, East, North, Southeast	Southwest	Earth	Kūn (☷)
2	Minh Mang	13/04/1791	Kūn (☷)	Earth	West, Northwest, Northeast, Southwest	Southeast	Wood	Xùn (☴)
3	Thieu Tri	11/05/1807	Xùn (☴)	Wood	North, East, South, Southeast	Northwest	Metal	Qián (☰)
4	Tu Duc	25/08/1829	Lí (☲)	Fire	East, North, Southeast, South	Northeast	Metal	Gèn (☶)
5	Duc Duc	04/01/1853	Zhèn (☳)	Wood	South, Southeast, North, East	Northwest	Metal	Qián (☰)
6	Dong Khanh	12/01/1864	Kăn (☵)	Water	Southeast, South, East, North	Southeast	Wood	Xùn (☴)
7	Khai Dinh	01/09/1885	Duì (☱)	Metal	Northwest, Northeast, Southwest, West	Southwest	Earth	Kūn (☷)

The direction of the mausoleums appears to have been selected based on directions associated with positive meanings corresponding to the above-mentioned trigrams: *Kūn, Qián*, *Gèn*, and *Xùn*. Alternatively, it is also possible that the mausoleums' directions were determined by a special principle yet to be deciphered.

An observed convention is that Area A (Tomb area) is always mentioned first in historical documents describing these mausoleums, followed by Area B (Worship Temple area), and then Area C (Stele Hall area). This suggests that Area A is the most important, as it contains the emperor's coffin and is unique to the mausoleum, whereas Areas B and C can be found in multiple locations

within the Hue Imperial City or in the residences of royal family members. For mausoleums with two axes, Area A and C are consistently linked and arranged on the same axis, while Area B may occupy a separate axis.

The principles governing the arrangement of these three areas (A, B, and C) along one or multiple axes and determining the main direction of the mausoleum are complex and difficult to interpret. Kingship and Theocracy are axes of political ideology that are inseparable in a feudal society, where the emperor is referred to as the Thien Tu (天子), meaning Son of the Gods and a God. The axis of Area A represents kingship, whereas the axis of Area B symbolizes theocracy. This relationship reflects the organic connection between invisible and visible elements within a socio-political entity, such as a kingship, with the emperor as its representative. The axis of Area C, perhaps, represents civil rights - the right to know, the right to observe, and the right to evaluate - and can be aligned with Area A or with the components of both Area A and B.

Although the site plan arrangement of each mausoleum may differ, these three essential constituent elements consistently appear and have been restored and preserved through generations of emperors.

6.3 Concepts of the Three-Elemental Constitutions

6.3.1 Tomb Area

The Tomb area (Area A) is the most important part of the mausoleum, as it is the exclusive location where the bodies of the emperors are interred. Therefore, it is meticulously safeguarded, with a single entrance secured by durable bronze doors that remain closed at all times. The Tomb area typically occupies a disproportionately large space relative to its practical needs. Its ground plan can either be circular or square, encompassing the underground tunnel and the grave itself, which is buried deep underground after construction. Typically, it is impossible to determine the exact location of the

coffin. A notable exception is Emperor Khai Dinh's mausoleum, where the coffin's location was precisely identified directly beneath the life-size statue, and photographed to mark this position. (Figure 105)

According to Eastern spiritual beliefs, death represents the conclusion of one life cycle and the beginning of a new one. Therefore, when the emperor was buried, he was always accompanied by numerous burial items and royal treasures for use in the afterlife. The practice of bodily preservation after death was common in ancient Egypt and throughout Asia. This practice symbolically allowed the soul to return and re-enter its body. Scientifically, physical burial preserves bones containing human DNA, thus symbolically maintaining a connection with descendants. The construction of a mausoleum from durable materials such as stone, designed for long-term sustainability, arises from this cultural and spiritual conception.

6.3.2 The Worship Temple Area

The Worship Temple area (Area B), with the main temple building placed at its center, houses the votive tablets and serves as the location for worshipping the souls of the emperor and queen. According to the Vietnamese emperor's burial ceremony (Do & Do, 1968, p. 343), the emperor's soul, called *Than Minh (神明),* was symbolically transferred from the corpse into a ceremonial dummy known as *Than Bach (神帛)*. His votive tablet, recording the emperor's name and date of birth, is called *Than Chu (神主)* (Do & Do, 1968, p. 349). If the Tomb area preserves the physical body, then the Worship Temple area serves to venerate the soul and preserve the emperor's personal resume.

6.3.3 The Stele Hall Area

The Stele Hall area (Area C) contains the stone stele, which records and commemorates the emperor's merits. It may also include messages intended by the emperor as a testament for future generations, providing insights for

descendants and the country. Creating a stone Stele shares the same purpose as constructing a mausoleum from stone: durability and permanence. The stele functions as a concise historical record of each emperor's reign, intended to ensure remembrance and so gratitude among future generations. Moreover, it reflects the community and nationality of each Dynasty.

When the Stele Hall area is positioned independently on its own axis, this arrangement may represent the axis of civil rights being elevated to equal prominence alongside those representing kingship and theocracy. Such an arrangement occurred uniquely in Emperor Gia Long's mausoleum, established at the beginning of the Nguyen Dynasty, when the country had recently emerged from civil war and achieved reunification. In contrast, in the mausoleums of subsequent emperors, regardless of whether they were organized along one axis or two, the Stele Hall area was always situated in front of the Tomb area. This placement suggests that national consciousness and civil rights consistently held a central place in the political philosophy of the Nguyen Dynasty, an idea explicitly embodied in the architecture of the emperor's mausoleums.

6.4 The Grid-Rod System in the Planning of Three Early Mausoleums of the Nguyen Dynasty

Axes and grids play a fundamental role in the organization of space in traditional Eastern architecture, particularly in Vietnamese royal and mausoleum architecture.

The main axis (center) represents the cosmological and royal ideology and serves as the axis connecting heaven, earth, and humanity. At the same time, this axis guides the overall architectural layout of the project.

The grid system is a technical tool used to divide the architectural floor plan and to determine the position and distance between buildings according to the traditional measuring system (units of measurement: foot and rod)

Based on the analysis of the site planning principles of the first three mausoleums from the early Nguyen Dynasty, a measurement unit of 382 mm was identified and used for large-scale analysis. This unit was then developed into a square grid system, where 1 rod equals 10 units, totaling 3,820 mm. Specifically:

6.4.1 Thien Tho Lang Mausoleum (Emperor Gia Long's mausoleum): Open, Multi-axis Layout Model

a) Outstanding Features

Thiên Thọ Lăng is located within a vast complex that takes advantage of the natural terrain of Thiên Thọ Mountain and the Hương Giang River. The overall layout is dispersed and organized along three parallel axes: Tomb Axis: Main burial area, Temple Axis: Worship and ritual area, and Stele Axis: Bi Dinh Stele Hall

b) Grid System

The axial grid is non-uniform, with asymmetrical cells due to the mountainous terrain. The distance between structures was determined based on field measurements, with a greater emphasis on Feng Shui principles rather than strict standardization.

c) Meaning

This represents a transitional period, when the Nguyen Dynasty had just been established and no standardized model had yet been formed. The Emperor Gia Long's Mausoleum embodies the harmony between tradition and nature, laying the groundwork for the more systematic development of later imperial tombs.

6.4.2 Hieu Lang Mausoleum (Emperor Minh Mang's Mausoleum): Central-axis Normalized Layout

a) Outstanding Features

This represents the pinnacle of planning concepts during the Nguyen Dynasty. Emperor Minh Mang advocated for building his mausoleum in accordance with Confucian ideals, symbolizing imperial power and cosmic order.

- The entire complex is arranged along a single Than Dao axis, extending from Dai Hong Mon to the main tomb.

- The structures on both sides are arranged symmetrically and strictly follow geometric principles.

b) Grid System

- The grid is precisely established, with squares serving as the basic unit.

- All important structures, such as Hieu Duc Mon, Bi Dinh, and Minh Lau, are located at the intersections of the grid, creating a high degree of regularity and harmony.

c) Meaning

The Emperor Minh Mang's mausoleum marks a significant shift from naturalistic planning to an academic and standardized model, becoming the prototypical design for later imperial mausoleums.

6.4.3 Xuong Lang Mausoleum (Emperor Thieu Tri's mausoleum): Hybrid Two-axis Model

a) Outstanding Features

The Thieu Tri Mausoleum does not strictly follow a rigid model but rather represents a combination of two approaches:

- Parallel double axes, including the Burial Axis and the Worship Axis.

- A layout in which the two main areas are connected by a central courtyard, creating a sense of balance while allowing greater flexibility compared to the highly standardized layout of Minh Mang's mausoleum.

b) Grid System

- The basic grid is based on an 18×18 square module, but it does not extend evenly across the entire site.

- Secondary elements, such as corridors and water pavilions, are arranged with greater looseness, reflecting both economic constraints and adjustments made to accommodate the natural terrain.

c) Meaning

This mausoleum represents a compromise between two trends: the standardized and formalized approach of Minh Mang and the naturalistic and open layout of Gia Long. The Thieu Tri Mausoleum reflects a period of relative stability, but with limited economic and political resources, leading to the simplification of certain formal elements in its design.

Therefore, it can be concluded that:

Development Process:

- The analysis results demonstrate a clear evolution in the planning concepts of Nguyen imperial tombs, progressing from a naturalistic approach → to strict standardization → and finally to harmonization and balance.

- This evolution also reflects the historical and political context of each emperor's reign: Thien Tho Lang Mausoleum: a period of national foundation, characterized by flexibility and adaptation to natural terrain. Hieu Lang Mausoleum: a period of prosperity and centralization,

marked by rigorous standardization and symbolic authority. Xuong Lang Mausoleum: a period of relative stability, but economic constraints led to a simplified yet balanced approach.

Grid System and Its Implications:

- The grid applied during Minh Mang's reign represents an advanced technical tool**,** comparable to other East Asian planning systems of the same period.

- This grid system is not merely technical, but also deeply symbolic, embodying philosophical concepts of yin-yang dualism and the Five Elements, thereby linking architectural planning with cosmological and ideological meanings.

Table 22. Overall comparison of the three mausoleums

Criteria	**Mausoleum of Emperor Gia Long (Thien Tho Lang)**	**Mausoleum of Emperor Minh Mang (Hieu Lang)**	**Mausoleum of Emperor Thieu Tri (Xuong Lang)**
Axis Model	Three parallel axes	Single central axis	Two parallel axes
Degree of standardization	Low – dependent on natural terrain	High – strict and formalized	Medium – moderate and flexible
Grid Type	Non-uniform, natural	Standardized, regular square grid	Square grid combined with free-form layout
Symbolism	Harmony with nature	Cosmology – imperial authority	Balance and reconciliation
Subsequent influence	Foundational basis	Prototypical standardized model	Transitional stage

6.5 Conclusion

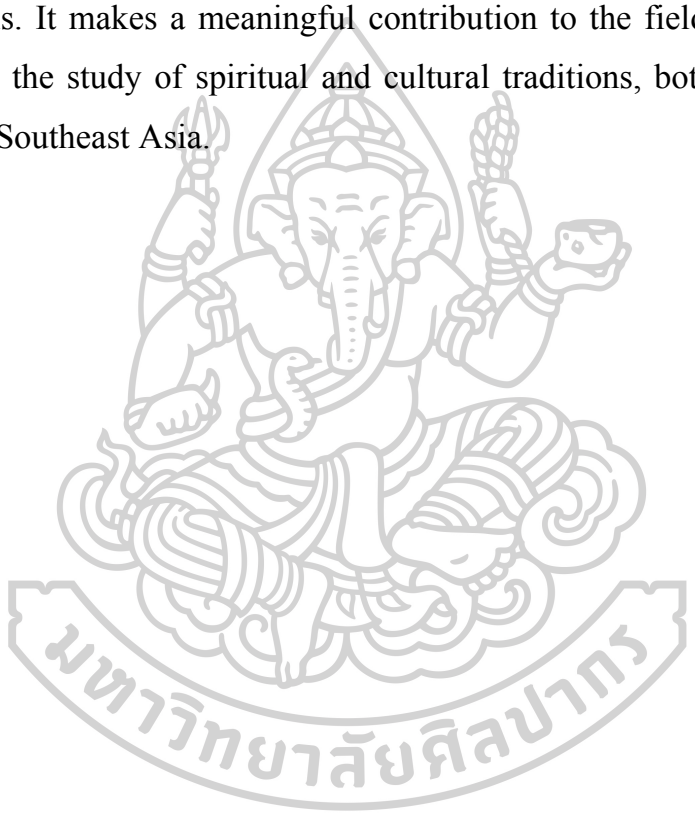
This research has examined three case studies of the emperor's mausoleums from the early stage of the Nguyen Dynasty: those of Emperor Gia Long, Emperor Minh Mang, and Emperor Thieu Tri. The mausoleums are structured around three elemental constituents: the Tomb area (Area A), the Worship Temple area (Area B), and the Stele House area (Area C). Each of these elements symbolizes kingship, theocracy, and civil rights. Although the rules for arranging these components along a unified or separate central axis are not explicitly defined, a consistent pattern emerges where Area A and C are interconnected, while Area B frequently serves as an intermediary element.

The repeated appearance of these three fundamental components (A, B, and C) across all mausoleums articulates a delicate balance between tangible and intangible realms, human view, and spiritual beliefs concerning the cyclical nature of life and the universe. This architectural structure allows a deeper understanding of the coexistence between visible and invisible entities, generating an abstract concept of time and space that transcends purely material interpretations.

The architectural legacy embodied in the Nguyen Dynasty's mausoleums offers valuable insights into the interconnected concepts of Body, Soul, and Memory, as represented through these three areas. These mausoleums thus stand as a profound testament to intellectual and spiritual evolution, providing enduring philosophical insights that should be continually examined and interpreted. Preserving and understanding this legacy can significantly contribute to future sustainable human development, enriching Vietnamese traditional culture and the world community's memory.

The scientific findings of this research provide valuable guidance for the restoration and conservation of the imperial mausoleum complex of the Nguyen Dynasty in Hue. They present significant opportunities for the

comprehensive rehabilitation of mausoleum areas damaged by natural disasters and wars, ensuring historical accuracy in the preservation of architectural heritage. These efforts not only enrich the cultural heritage resources but also contribute to the economic growth and tourism development of Hue city in particular, and Vietnam as a whole. Moreover, the research holds considerable academic value by providing a comprehensive understanding of the planning and construction principles behind the Nguyen Dynasty's imperial mausoleums. It makes a meaningful contribution to the fields of architectural history and the study of spiritual and cultural traditions, both within Vietnam and across Southeast Asia.



Chapter 7

Conclusion

In the continuum of Vietnamese architectural history, feudal dynasties have left behind numerous works of exceptional cultural and artistic value. Among these, the Nguyen Dynasty stands out as a representative period, profoundly reflecting the worldview, aesthetic ideology, visual arts, and traditional construction techniques of its time. Over its 143-year existence within a turbulent historical context, the Nguyen Dynasty created a large-scale architectural complex in the ancient capital of Hue. Within this complex, the system of imperial mausoleums holds a particularly significant role, embodying the Dynasty's ideological, symbolic, and technical values.

However, compared with the royal and religious structures of the same era, the imperial mausoleums of the Nguyen Dynasty remain insufficiently and unsystematically studied. Most previous research has primarily focused on documenting the current condition or analyzing isolated artistic elements, without clarifying the underlying principles of spatial organization, the rules of overall planning, or the roles of axiality, architectural grids, and traditional measurement systems.

Recognizing these gaps, this thesis focuses on the survey and analysis of three representative imperial mausoleums from the early Nguyen Dynasty—those of Emperors Gia Long, Minh Mang, and Thieu Tri. Its aim is to elucidate their architectural characteristics, planning principles, and symbolic meanings in the organization of mausoleum space. Through on-site surveys combined with comparative analysis of historical documents and planning maps, the study identifies the spatial morphology, principles of ground layout, and cultural and ideological factors that shaped the construction process. The selection of sites and the arrangement of architectural components were profoundly influenced by geomancy, Eastern cosmology, and Confucian

ideology. Furthermore, this research reconstructs the traditional system of measurement units and establishes a representative design grid model, thereby explaining the coherence of proportion, rhythm, and spatial structure in the planning of these mausoleums.

By comparing the three case studies, the thesis also traces the evolution of planning concepts and construction techniques in early Nguyen Dynasty mausoleum design: from the dispersed, terrain-harmonizing layout of Gia Long's mausoleum, to the tightly structured and symmetrical organization of Minh Mang's mausoleum, and finally to the spatial condensation evident in Thieu Tri's mausoleum. These findings not only clarify the distinctive architectural characteristics of early Nguyen imperial tombs but also provide a foundation for scholarly discourse on spatial organization, design methodology, and the symbolism of royal power in nineteenth-century Vietnamese architecture.

In addition to fulfilling its research objectives, the thesis supplements and advances previous studies, particularly in the areas of planning, measurement systems, and spatial organization of Nguyen Dynasty imperial mausoleums. The principal research findings can be summarized as follows:

7.1 Assumption of the study results

It may be posited that a comprehensive examination of the imperial mausoleums of the first three Nguyen emperors —Gia Long, Minh Mang, and Thieu Tri —reveals the emergence and subsequent consolidation of a distinctive typology of royal funerary architecture in nineteenth-century Vietnam. This typology transcends the domain of technical virtuosity and the codified symbolism of the imperial court, instead materializing as a coherent cultural system in which architectural form, spatial configuration, and landscape composition converge to embody philosophical, cosmological, and political ideals.

The findings of this study suggest that these mausoleums articulate a dual framework of design principles. At the macrocosmic level, their orientation is governed by geomantic doctrines, Feng Shui prescriptions, and the sacralization of the natural environment, situating the imperial tomb within a cosmic order inscribed in the landscape. At the microcosmic level, their architectural organization reflects indigenous Vietnamese planning traditions, including the rod-based measurement system, the axial arrangement of spatial components, and the tripartite division of functional precincts—the tomb precinct, the worship precinct, and the stele precinct. Taken together, these two interdependent layers of planning generate a dialectical balance between cosmic determinism and human agency, embedding the emperor's resting place simultaneously within the natural and metaphysical universes.

Although unified by this conceptual framework, the three mausoleums also manifest notable variations that correspond to shifting political ideologies and evolving cultural priorities. Gia Long's mausoleum demonstrates an enduring affinity with the natural environment, privileging organic landscape harmony over rigid formal symmetry. Minh Mang's mausoleum, by contrast, embodies an insistence on hierarchical order, axial regularity, and cosmic symbolism, thus aligning closely with the Confucian ideals of moral governance and universal order. Thieu Tri's mausoleum, though more restrained in scale and ambition, represents a transitional phase in which established traditions are retained while emergent adaptations in design and ritual practice are introduced.

The recurrent presence of the three fundamental architectural domains—tomb, temple, and stele—not only provides a consistent structural grammar but also enacts a symbolic schema in which kingship, theocracy, and civil authority are rendered mutually constitutive. This structural recurrence, therefore, may be understood as a deliberate articulation of the cyclical interrelations between

body, soul, and memory, reinforcing the continuity between terrestrial existence, ancestral commemoration, and the eternal cosmos.

From this perspective, the Nguyen imperial mausoleums serve as both funerary monuments and philosophical exegeses, as well as political manifestos. Their architectural logic extends beyond the materiality of construction to encompass intangible cultural values, offering profound insights into Vietnamese conceptions of time, space, and the human condition. Consequently, the study contributes a rigorous theoretical framework not only for heritage conservation and restoration practices but also for broader scholarly debates concerning Southeast Asian architectural traditions, cosmological systems, and the cultural construction of identity.

7.2 Academic Contributions of the Study

In term of the development of a typological framework, through a systematic analysis of the mausoleums of Emperors Gia Long, Minh Mang, and Thieu Tri, this research delineates a coherent typology of Nguyen imperial funerary architecture. This typological framework elucidates the complex interplay between indigenous Vietnamese traditions, Confucian spatial hierarchies, and Feng Shui cosmology, thereby offering a structured model for comparative inquiry both within Vietnam and across the broader East Asian cultural sphere.

In terms of integrating macrocosmic and microcosmic perspectives, the study advances theoretical discourse by demonstrating how the planning principles of Nguyen mausoleums combine macrocosmic symbolism with microcosmic architectural rationality. This dual framework, combining a cosmological orientation with localized construction logic, provides a critical lens for examining the convergence of metaphysical worldviews and pragmatic design practices in the production of sacred landscapes.

In terms of symbolic and philosophical interpretation, the findings enrich the intellectual study of architectural symbolism by viewing the mausoleums as cultural texts in which architecture articulates the cyclical relationship between body, soul, and memory. In this sense, Nguyen funerary architecture emerges as a medium of mediation between the tangible and intangible realms, broadening academic perspectives on the philosophical and ontological functions of built form in pre-modern Southeast Asia.

In terms of the contribution to conservation theory and practice, by identifying enduring principles, such as axial planning, spatial hierarchy, and the symbolic integration of natural landscapes, the research provides a rigorous scholarly foundation for conservation and restoration efforts. These insights contribute to heritage preservation theory by modeling historically informed and culturally sensitive approaches that are directly applicable to the safeguarding of Nguyen mausoleums and can be adapted to other heritage contexts.

In terms of an interdisciplinary relevance, beyond architectural history, the study contributes to broader scholarly discourses in anthropology, cultural studies, and Southeast Asian studies by linking architectural form to socio-political ideology, religious cosmology, and collective memory. The Nguyen mausoleums thereby serve as an exemplary case study for interdisciplinary research on the intersections of architecture, power, and cultural identity.

And, in terms of the synthesis, the academic significance of this research lies not only in documenting and analyzing the architectural characteristics of Nguyen imperial mausoleums but also in positioning them within wider theoretical debates on heritage, cosmology, and cultural identity. By doing so, it enhances both local and global understandings of Vietnamese cultural heritage while providing a robust foundation for future theoretical engagement and practical conservation strategies.

7.3 Applicability of the Study

The findings of this research hold significant applicability across multiple domains, particularly in heritage preservation, architectural conservation, urban development, and academic inquiry.

- *First*, for the Heritage Conservation and Restoration:

The study provides a theoretical and practical foundation for the conservation of Nguyen Dynasty mausoleums, which have been subject to deterioration due to natural disasters, wars, and environmental changes. By identifying core design principles—such as axial planning, symbolic spatial hierarchy, and integration with natural landscapes—the research offers guidelines for historically accurate and culturally sensitive restoration efforts.

Second, for the Cultural Landscape Management

The emphasis on harmonizing-built forms with natural surroundings has direct applicability in contemporary cultural landscape management. The study underscores the importance of preserving not only the monuments themselves but also their broader environmental context, thus supporting a holistic approach to heritage conservation.

Third, for the Urban and Regional Planning

Insights from the mausoleum planning process—particularly the balance between symmetry, symbolism, and environmental adaptation—can inform sustainable approaches to modern urban and regional planning. This is especially relevant in heritage cities like Hue, where urban growth must coexist with the preservation of historical and cultural sites.

Fouth, for the Tourism Development

The study contributes to cultural tourism strategies by providing deeper interpretive frameworks for presenting Nguyen mausoleums to both domestic and international audiences. Enhanced historical and symbolic narratives

derived from the research can enrich visitor experiences, thereby promoting sustainable tourism and economic development.

Fifth, for an Academic and Educational Use

The research findings are applicable in academic curricula on Southeast Asian architecture, cultural heritage studies, and conservation theory. They can serve as case studies in teaching about the intersection of architecture, cosmology, and cultural identity, while also guiding future comparative studies across different cultural contexts.

Sixth, for the Policy and Decision-Making Support

By articulating the architectural, cultural, and symbolic values of Nguyen mausoleums, the study provides a solid evidence base for policymakers and cultural authorities in Vietnam. It supports the formulation of conservation policies that balance development with heritage protection, ensuring that interventions remain aligned with historical authenticity.

7.4 Discussion Opportunities of the Study

This study opens up multiple opportunities for scholarly discussion and debate, particularly regarding the relationship between architectural design, cultural symbolism, and heritage preservation in nineteenth-century Vietnam.

On the domain of the Typology and Comparative Frameworks

The identification of a distinct Nguyen funerary architectural typology provides a basis for comparative discussions with other imperial and royal mausoleums in East and Southeast Asia. Such dialogue invites scholars to question how local Vietnamese traditions were selectively integrated with broader Confucian and Feng Shui principles, and how these interactions shaped a uniquely Vietnamese expression of imperial power.

On the domain of the Symbolism and Philosophy of Space

The interpretation of the mausoleums as mediators between body, soul, and memory creates opportunities for debate on the philosophical dimensions of architecture. This invites interdisciplinary discussions with cultural studies, anthropology, and religious studies, allowing scholars to re-examine the extent to which architecture functions as both a material and spiritual construct.

On the domain of the Heritage, Authenticity, and Conservation Ethics

The study raises critical questions about conservation practices in contexts where architecture and landscape are inseparable. Discussions may emerge around the tension between preserving historical authenticity and accommodating contemporary needs, as well as how intangible cultural meanings can be safeguarded alongside tangible structures.

On the domain of the Political and Ideological Dimensions

The mausoleums reflect not only aesthetic and symbolic concerns but also the political ideologies of the Nguyen Dynasty. This offers space for debate on how architecture can be read as a political instrument that reinforces authority and cultural legitimacy, and how such interpretations remain relevant in contemporary nation-building narratives.

On the domain of the Interdisciplinary Methodological Approaches

The combination of historical documents, site analysis, and symbolic interpretation provides fertile ground for methodological discussions. Future scholarly dialogue may center on the benefits and limitations of such integrative approaches in architectural history and heritage research, potentially inspiring new frameworks for studying other cultural sites.

In summary, this study not only documents the architectural features of the Nguyen mausoleums but also generates productive discussion opportunities across multiple academic fields. By highlighting the intersections of architecture, symbolism, and cultural identity, it encourages ongoing critical

dialogue that enriches both national and international understandings of Vietnam's heritage.

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