Modernisation of Building:

The Transplantation of the Concept of Architecture from Europe to Thailand, 1930s–1950s

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Abstract

Conventional studies consider the transplantation of Modern Architecture from Europe and North America to non-western contexts as a one-way imposition with little adaptation, if any. This research goes beyond the importation of 'Modern Architecture' to Thailand by fundamentally questioning the concept of 'Architecture' in Thai society between the 1930s and 1950s when it was transplanted for the first time from Europe to Thailand. By analysing archival materials and case studies in relation to their socio-political contexts, the transplantation of the concept of Architecture from Europe to Thailand is treated as an interactive and non-hierarchical process, involving translation, reinterpretation, and transformation.

The thesis argues that the transplantation of the concept of 'Architecture' was a systematic yet complex and hybrid process that modernised the traditional concept of 'building' as perceived in Thai society. This process reassured the Thai elite that Thailand, the only country in Southeast Asia never to have been colonised by any western power, was a civilised country.

At the same time, traditional practices, rituals, and beliefs, related to buildings, were not completely eliminated but were transformed and mingled with 'Architecture'. Accordingly, the modern concept of 'Architecture' modernised the traditional concept of 'building' but the latter also indigenised the former in many respects.

By examining the transplantation of the concept of 'Architecture' previously unknown in Thailand, the thesis questions the complex concept of modernity in architecture even before the presence of the Modern Movement. More broadly, it also questions the dichotomy between western/modern and non-western/traditional in transcultural modern architecture.

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Chronology:

The dates in this dissertation are in Christian form for the convenience of international readers but formal chronology in Thailand uses Buddhist form (BE). AD 1 was contemporary with BE 543. For example, the year AD 2013 in which this dissertation was written was the year BE 2556.

Siam/Thailand:

In English, the name of the country, Siam, was changed to Thailand in 1939. The country is generally referred to as Thailand in this dissertation. Apart from that, it is referred to as Siam in those sections discussing about the country before 1939. The change of the word, Siamese, to Thai (both representing the adjective and the people of the country) was also done in 1939. Therefore, the use of the words Siamese and Thai in this dissertation is done in the same way as that of the name of the country.

Quotation:

All quotations from Thai sources and individuals are originally written in Thai and therefore translated by me, unless otherwise stated. All quotations from foreign sources and individuals are originally written in English unless otherwise stated.

Translation:

All translations from Thai texts to English are done by me unless otherwise stated in the content. When it comes to a translation from how Thais wrote the name of their ethnic group in the Thai language (there are many Thai words to describe it), it is translated to either Siamese or Thai, depending on the original text. This is because different words signify different definitions in particular contexts.

Romanisation:

The Thai names, ranks, and titles of individuals and the names of places, organisations, and documents, in this dissertation are mostly transliterated from the Thai to the Roman alphabet following the Royal Thai General System of Transcription (RTGS) issued by the Royal Institute. Exceptions are found in some names that have been formally and widely transliterated by the government, the organisations, the individuals or the descendants of them with another system. The general term 'Prince' is used instead of a variety of Thai ranks representing different levels of Princes for the convenience of international readers unless the particular contexts of the contents need an accurate elaboration in Thai. Thai words such as for traditional architectural features are transliterated with the same system and typed in italic fonts.

Abbreviations for the categories of documents from the National Archives of Thailand:

R 5 = Documents from the reign of King Chulalongkorn (Rama V)

R 6 = Documents from the reign of King Vajiravudh (Rama VI)

R 7 = Documents from the reign of King Prajadhipok (Rama VII)

S R = Documents from the Office of Prime Minister

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Prologue

It is no exaggeration in 2013 to say that modern architecture in Thailand remains quite obscure in the world's modern architecture scene. Except for Sumet Jumsai, whose internationally acclaimed Robot Building (1986) was conceived as an opposition to Postmodern and High-Tech architecture, and whose later works were subsequently published worldwide and were exhibited in the Venice Architecture Biennale 1996, there was hardly any other Thai architect who was well known outside the country by the end of the twentieth century.[1]

At the beginning of this millennium, when international architectural discourses have been shifted away from what was being debated two or three decades earlier, such as Postmodernism, and when an ex-high-technology called the internet has become not only a normal household word but an important part of international architectural practice, more Thai architects, especially young practices, such as all(zone), Architectkidd, Supermachine Studio, Onion, Department of Architecture, and Integrated Field, have their presences in popular architecture websites like ArchDaily and Dezeen.[2] Other young Thai architects, i.e. Suriya Umpansiriratana and Boonserm Premthada, have been awarded the *Architectural Review*'s Emerging Architecture in 2006, 2010, and 2011.[3] Premthada's Kantana Film and Animation Institute was shortlisted for the Aga Khan Awards in 2013.[4]

These events have happened alongside the presences of larger and more prestigious projects in Thailand designed by foreign practices such as Central Embassy, a luxurious shopping centre by Amanda Levete Architects, and The Met, a

[1] See R. Stephen Sennott, *Encyclopedia of 20th-Century Architecture* (New York; London: Fitzroy Dearborn, 2004), p. 106; Sumet Jumsai, 'Building Study: Bank of Asia, Bangkok', *Mimar: Architecture in Development*, 23 (1987), pp. 74–81; Kenneth Frampton, ed., *World Architecture 1900–2000: A Critical Mosaic; Volume 10 - Southeast Asia and Oceania* (Wien: Springer, 1999), p. 274; Brian Brace Taylor and John Hoskin, *Sumet Jumsai* (Bangkok: Asia Books, 1996).
[2] See 'Thailand: Archdaily', http://www.archdaily.com/tag/thailand/ [accessed date 2 August 2013]; 'Thailand Archives - Dezeen', http://www.dezeen.com/tag/thailand/ [accessed date 2 August 2013].
[3] Pirak Anurakyawachon, 'Film Institute by Boonserm Premthada, Thailand', http://www.architectural-review.com/buildings/film-institute-by-boonserm-premthada-thailand/8622840.article; 'Walled Monks' Cell by Wallasia, Chonburi Province, Thailand', http://www.architectural-review.com/walled-monks-cell-by-wallasia-chonburi-province-thailand/8608328.article [accessed date 21 July 2013].
[4] '2013 Cycle Shortlisted Projects', http://www.akdn.org/architecture/awards.asp [accessed date 21 July 2013].

high-end-and-high-rise condominium by WOHA.[1] The latter won the RIBA's Lubetkin Prize in 2011. Beyond that, a practice associated with the term 'starchitect' like OMA has, in 2009, also unveiled the design of Mahanakhon Tower, a mixed-use skyscraper that will be the tallest building in Bangkok when it is completed.[2]

I conducted this PhD research in the UK where most people know Thailand as one of their most favourite holiday destinations, with plenty of good food, nice beaches and elaborate temples, and a country whose present King appears to be extremely revered by the Thais — something that Queen Elizabeth II has never experienced in her entire reign. But people in the UK might also perceive that democracy in Thailand is not so stable, because the last coup d'état was staged only in 2006 — and that was the 17th coup in eighty years of democracy! But only a few months after the coup, British tourists started to flock to Thai beaches again. Of course, most of them have no idea about modern architecture in Thailand — and they probably do not care.

In 2010, when I was in the first year of my PhD research, I was a member of the committee of the Sheffield Thai Society, whose members (and actually the majority of Thai students in the UK) come from middle-class families. One day we discussed which Thai film we should select to be screened in the Student Union's international film festival. The first choice was *Suriyothai*, the epic about a Thai heroine in the glorious sixteenth-century Ayutthaya Period, in which the audience could see a magnificent production of elaborate palace sets and traditional costume. The second one was *Uncle Boonmee who can recall his past lives*. In this film, the audience would experience the atmosphere of rural Thailand, picturesque natural scenes, paddy fields, buffalos, superstitious men, and monsters. Both films tend to depict what the audience had already in their minds about Thailand, and had probably expected to be provided on the screen. But the difference between them was the former had been a blockbuster in Thailand while the latter had been awarded the Cannes Festival's Palme D'Or but had been screened in only a couple of cinemas

[1] 'Central Embassy Bangkok, Thailand', http://www.ala.uk.com/portfolio/bangkok-central-embassy/ [accessed 19 July 2013]; Merlin Fulcher, 'WOHA's Bangkok Met Scoops Lubetkin Prize 2011', http://www.architectsjournal.co.uk/news/daily-news/wohas-bangkok-met-scoops-lubetkin-prize-2011/8620626.article [accessed 11 July 2013].
[2] 'OMA Unveils Design for Mahanakhon, Bangkok's Tallest Building', http://www.oma.eu/news/2009/oma-unveils-design-for-mahanakhon-bangkok-s-tallest-building [accessed 18 July 2013].

in Bangkok. The third choice, however, was *Rot Fai Fa Ma Ha Nathoe*. It was a film about a love story between Bangkok white-collar workers who met each other on a BTS Skytrain, which ran above Bangkok's bustling central business districts shaded by skyscrapers. It too was a blockbuster film screened all over the country for months.

When it came to making the decision, the period epic was at first favoured but then dropped as it would have taken too long to screen regardless of its perfect depiction of Thailand's high culture. Therefore we had to choose between the Thai countryside and metropolis. It was not so much about the fact that *Uncle Boonmee who can recall his past lives* had been dubbed as 'art film', which meant it might be too difficult to be appreciated, that made us finally chose *Rot Fai Fa Ma Ha Nathoe*. It was rather because the society's president, who was doing her PhD in plant science, told us that she had been asked by her supervisor about the literacy rate in Thailand, and other members had shared a similar experience, of classmates asking if Thai students rode elephants to school. This was not just a matter of the literacy rate in Thailand being in fact 94% in 2011, or that elephants were only found in zoos. It was more about a group of Thai middle-class students in the early twenty-first century seriously thinking about who they were, how they lived their lives, and how they wanted foreigners to know them. From the mid-nineteenth century until today, the Thai elite and middle classes have been busy satisfying themselves with things modern, especially those the West has had before, but at the same time, they have been struggling to retain something they have been understanding as their identity. In these dual directions, time and again, they have been finding themselves ambivalent about what they actually want to be, what they think they should be, and what they should show to the world.

Returning to the contemporary situation of architectural practice in Thailand, there has been a wide variety of issues involved. To start with the works that have been mentioned before, one might point out that Suriya Umpansiriratana's projects which have received the AR Emerging Architecture Awards are buildings in Buddhist monasteries. This implies a particular ideology and circumstances in the field of international modern architecture that might have affected the decisions to award these works from this 'non-western' country. Or one might question that whether a leading Thai architectural office could have come up with a design that

has broken away from the conventional norm of designing skyscrapers like the one that OMA has provided for Mahanakhon Tower. If so, would the developer have been as convinced as they have been by OMA?

There are many more issues. For private residential projects in Thailand, feng shui is very important for many clients. Many architects in Thailand have shared an experience of designing a house only to find its plan or features being changed after the clients were advised by feng shui masters, who, most of the time, are able to convince the clients better than the architects. In many cases, newly constructed walls in houses are pulled down, not because they do not correlate with the blueprints, but because the feng shui master found that they obstruct a wealth flow, a universal force, etc. If you are wondering why the Thais are bothered by feng shui, which is of Chinese origin, you do not know yet who the Thais are. I will elaborate on this later in the thesis.

Beyond the *Architectural Review*'s Emerging Architecture Awards, the Aga Khan Awards, OMA, and feng shui, one might also question why there are reproductions of mythical demon statues, originally from the Temple of Emerald Buddha, in Bangkok's Suvarnabhumi International Airport designed by Helmut Jahn. Or ask why the new parliament house has been designed as a metaphor to Mount Sumeru, the Buddhist-Brahmanical residence of gods?[1] Or why the unbuilt design for a French Embassy in Brasilia by Le Corbusier materialised as the Panabhandu School in Bangkok in 1970 and received high praise. And why, despite this building's high recognition, it was razed to the ground in order to build a car park for a new superstore that replaced the school only thirty years later? Why were such a large number of suburban housing developments in Thailand in the 1990s built in a wide range of European styles, from Classical to Tudor? And why are many new developments advertised now as being in the 'contemporary' style? Why do lay people in Bangkok sometimes claim that there is no urban planning in Bangkok, despite the fact that the Department of Urban Planning was established in 1962?

[1] See the origin of the metaphor to Mount Sumeru in the design of the new parliament house in Chomchon Fusinpaiboon and Hiroshi Takeyama, 'The Development of Thailand's National Identity in Architecture: The Architectural Competition of the New House of Parliament in 2009', *Na Chua*, 7 (2010), 309–339.

Not all of these contemporary situations will be discussed in the thesis, but in order to conduct research on such issues in the future, an in-depth investigation of the foundational period of modern architectural culture in Thailand needed to be conducted first. This will help us to understand the 'origin', if not an absolute one, of the contemporary situation.

The intended contribution of this doctoral thesis is twofold. Firstly, for me, as a Thai architect/scholar, it builds more of a body of knowledge about modern architecture in Thailand. By understanding more deeply the history of modern architectural culture, it can show that how this history has unfolded and what issues have continued or discontinued. This in turn can shed light on how we might continue to design and build today.

Secondly, for international readers, the thesis brings another case of transnational/transcultural modern architecture to the fore. It will demonstrate how much 'architecture', a discourse invented by the West, was transplanted to a non-western context, and especially in this case — Thailand — a very complex and unique context, in how it was translated, interpreted and transformed.

In a globalised world, where practicing architecture overseas is now taking place regularly, it is as important for international architects as it is for locals to understand the unique circumstances that affect their projects and the built environment in particular places. Beyond the question of architectural culture, this research also comments on how a particular social condition has created its architecture, and how the architecture has contributed to both stasis and change in that society.

1 Introduction

Between 2 June and 16 July 2011, Araya Rasdjarmrearnsook, an internationally acclaimed Thai artist, exhibited her solo exhibition, *The Village and Elsewhere*, at the Gimpel Fils Gallery in London. In the exhibition room on ground floor, a projector projected a video on a white wall, depicting a group of Buddhist monks and villagers, old and young, sitting in the ordination hall of a Buddhist monastery in Chiang Mai, Thailand. Located before the monks and the laypeople of the 'village' were large reproductions of two paintings from 'elsewhere'. The one on the left was Jeff Koons's *Untitled*, depicting a handsome guy in a black t-shirt and two girls in bright-coloured bikinis. The one on the right was Artemisia Gentileschi's *Judith beheading Holofernes*, depicting two women cutting a big man's throat.

In the video, the monks and the laypeople were discussing those paintings. Their discussions were about polygamy, adultery, consciousness, fashion, and global warming, to name but a few themes. A monk tried to relate both paintings to Buddhist teaching, while another woman tried to figure out which girl in the paintings was a mistress. In the middle of the conversation, a boy questioned where he could buy a nice sword like the one used by the women in the painting on the right.

In the exhibition room on the lower ground floor of the gallery, another video depicted the previous video now being viewed by a group of Japanese monks in Japan. The discussion in the 'village' was transformed to be a subject from 'elsewhere' being discussed by another group of audience from (another) 'elsewhere'.

Figure 1.1.1: Village and Elsewhere: Artemisia Gentileschi's Judith beheading Holofernes, Jeff Koons's Untitled, and Thai villagers, 2011, Araya Rasdjarmrearnsook; video, 19:40 minutes; edition of 7 photograph, 28 x 41 inches, edition of 9.[1]

[1] 'Tyler Rollins Fine Art: Araya Rasdjarmrearnsook', http://www.trfineart.com/artists/23?work_id=1120 [accessed date 17 August 2013].

Figure 1.1.2: Village and Elsewhere: Japanese monks and the video of Thai villagers, 2011, Araya Rasdjarmrearnsook; single channel video, 25:30 minutes.[1]

[1] 'Tyler Rollins Fine Art: Araya Rasdjarmrearnsook.'

This exhibition showed another attempt by Rasdjarmrearnsook to experiment with 'story telling' — a theme that had been central to her artistic practice. It posited that once an art work from one culture is transported and is provided before the audience of a different culture, who are unschooled in art, their understanding of such art work is not the same as that intended by the artist but a reflection of the audience's own story and identity.[1] And once this action is provided before another group of audience in another different place and time, a new story is created again, and again.

As regards my description of *The Village and Elsewhere*, the content of the exhibition and how I experienced it perfectly represent the subject and action of this research respectively. The subject is the transplantation of the concept of architecture from Europe to Thailand between the 1930s and 1950s. The action of this research is how I make sense of this historical process.

By analysing how the 'concept of architecture' was received in Thailand, and reinterpreted and transformed by Thai society between the 1930s and 1950s, I assume the role of a viewer of these two videos, analysing how the villagers in Thailand understood or recreated the meaning of the paintings. I have to understand the villagers, their background, their previous understanding of paintings, and the way all these things affect the way they understand the two paintings. This is not to see how the villagers understand the 'original', if any, meanings of the paintings, but to trace from the point they are shown to the villagers, how and why 'new' meanings of the paintings are created, and how these might affect the villagers' life. I also take existing research about my subject, represented by the Japanese monks in the second video who analysed the actions of the villages before, based on their views and experience, into account. In this sense, I create my own story, making sense of all the events happened before my research, based on my current position.

[1] Gimpel Fils Gallery, 'Araya Rasdjarmrearnsook', (London, 2011).

This research is located in the area of history of transnational/transcultural modern architecture. It contributes to the body of knowledge about the history of modern architecture in non-western contexts. It is not over-simplified to divide existing literature in this area into two main groups. The first group looks at the modern architecture in the countries previously colonised by imperial powers, whereas the second looks at the modern architecture of the countries that were never colonised but seemingly modernised themselves following western models.[1]

Accordingly, this research is, more specifically, located in the second group.[2]

The definition of 'modern architecture' in Thailand is ambiguous. One could start to trace this ambiguity through the definitions of the word 'modern', itself an ambiguous word. In English, modern (Adj.) means:

> 1. Now existing; current, present; 2. Of or pertaining to the present and recent times, as opposite to the remote past; 3. Characteristic of the present and recent times; not old fashioned or obsolete, in current fashion; and 4. Everyday, ordinary, commonplace.[3]

From English to Thai, modern was translated as *Samai Mai*.[4] *Samai Mai* in the Royal Institute's Thai dictionary is translated as (N.) *Samai Patchuban*, which means 'present time', and (Adj.) *Than Samai*, which means 'up-to-date'.[5]

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[1] This categorisation is sensible as far as the history of modern world, at least since the mid-nineteenth century, is concerned – the non-western world comprised only two such types of countries.

[2] Among the few countries belonging to the second category, Thailand is a particular case because it was never colonised by any western power, but it had also never been a great empire like China or Ottoman before a formal contact with the West in the nineteenth century either. Nor did it experience a rapid industrialisation and wealth after the so-called modernisation like Japan did. On contrary, it had been a medium-sized kingdom, rivaling Burma and Vietnam, only more powerful than its subordinate kingdoms such as Lao, Lanna, Cambodia, and Northern Malay States. During the period of western imperial threat in the second half of the nineteenth century, it struggled to reform itself and succeeded in maintaining the independence in its name, partly because Britain and France allegedly needed a buffer state between British India and French Indochina. Yet it was highly influenced by the western powers politically, economically, and intellectually. Recent scholars in Thai studies even dubbed it a pseudo-colony. See Eric J. Hobsbawm, *The Age of Empire, 1875–1914* (London: Cardinal, 1987), p. 57. For the concept of 'pseudo-colony', see Harrison, Rachel V., and Peter A. Jackson, eds, *The Ambiguous Allure of the West: Traces of the Colonial in Thailand* (Hong Kong University Press, 2009).

[3] Angus Stevenson, *Shorter Oxford English Dictionary on Historical Principles. Vol. 1, A-M.*, 6th edn (Oxford: Oxford University Press, 2007), p. 1812.

[4] *Collins English-Thai Dictionary: (Thai-English Dictionary)* (London: Collins, 2009), p. 324.

[5] 'Royal Institute's Dictionary', http://rirs3.royin.go.th/new-search/word-search-all-x.asp [accessed date 17 July 2013].

According to the translations, despite the fact that the English word 'modern architecture' is generally referred literally as *Sathapattayakam Samai Mai* in Thai[1], possible translations can be 1. The architecture of the present or recent time; or 2. Up-to-date architecture. More specifically in the history of modern architecture, it can also refer to the architecture of the Modern Movement. All these definitions entail different connotations. And all of them can overlap with each other. Hence, existing research about the history of 'modern architecture' in Thailand has engaged with this ambiguity either intentionally or unintentionally.

Before focusing on 'modern architecture', a larger picture should be addressed. If there is such thing as 'modern architecture' in Thailand, there should be some things that are not 'modern architecture'. It is possible to state that existing research about architecture in Thailand tends to categorise architecture in the country into three categories — Thai architecture, western-influenced architecture, and modern architecture.[2] This general categorisation is largely based on stylistic considerations even though detailed research of the buildings and the circumstances that constructed them is discussed in some of this existing research. And the most crucial point here is that all the three terms can be ambiguous and they have overlaps in many cases. For example, buildings that are categorised as Thai architecture can have a foreign influence, and buildings that are categorised as western-influenced or modern architecture can incorporate Thai features. The categorisation and its ambiguities will be examined in the following review of the existing research.

However, the aim of this research is not to categorise them more effectively or to eliminate the ambiguity in the existing categorisation, but to clarify and understand the origin of factors that have brought such categorisation and ambiguity — the transplantation of the concept of architecture from Europe to Thailand between the 1930s and 1950s.

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[1] See *Yak Thansamai: Sathapattayakam Samai Mai Khong Thai, Po So 2510–2530 (Keeping Up: Modern Thai Architecture 1976–1987)* (Bangkok: TCDC, 2008).

[2] Main examples are Vimolsiddhi Horayangkura et al., *Phattanakan Naew Khwamkid Lae Rupbaeb Khong Ngan Sathapattayakam: Adit Patchuban Lae Anakot (The Development of Concept and Design in Architecture: Past, Present, and Future)* (Bangkok: Association of Siamese Architects, 1993); Somchart Chungsiriarak, *Sathapattayakam Baeb Tawantok Nai Siam Samai Ratchakanti 4 Tueng Po So 2480 (Western Architecture in Siam: Rama IV's Reign to 1937)* (Bangkok: Faculty of Architecture, Silpakorn University, 2010); *Yak Thansamai: Sathapattayakam Samai Mai Khong Thai, Po So 2510–2530 (Keeping Up: Modern Thai Architecture 1976–1987).*

Before critically reviewing the existing history of modern architecture in Thailand, a critical examination of the history of international modern architecture will be done first in order to provide a wider picture of the field in which this research is located. It will discuss the ineffectiveness of conventional literature to understand the transcultural modern architecture and also review the current discourses in the field.

1.1 Transcultural history of modern architecture

The history of architecture in non-western countries, in the academic sense that we know today, started with the mid-nineteenth century studies on Asian architecture of antiquity that was imbued by Orientalist perspectives, from which it has been difficult for subsequent generations of studies to escape.[1] In this sense, pioneering and canonical works such as Fergusson's *A History of Architecture in All Countries and History of Indian and Eastern Architecture* has set a framework regarding how the architecture of non-western countries should be studied.[2] By doing so, Fergusson has categorised the world's architecture in relation to geo-political areas, in which the architecture of western countries is at the centre and that of the non-western-'others' are at peripheries. Following this line, subsequent research's analysis of non-western architecture has been done under the notion of one culture's 'influence' on another.[3] Later studies on modern architecture outside the West also follow the same direction.

To start with the international history of modern architecture, it is worth pointing out that the history of modern architecture was initially conducted within European and North American-centric perspective. Therefore, the pioneering history of modern architecture focused on only the works of a few European and North American architects, whose works were at the 'centre' of the global scene. On top of that, this history has been very influential and has formed the basic understanding of modern architecture for the following generations of architects throughout the world. In fact, this situation is still continuing today.

[1] Vimalin Rujivacharakul, 'Ghosts of Asia: Fergusson's Haunted Mansion and the Architectural History of Asia in a Post-Said World', *Journal of Architectural Education*, 2 (2010), 161–69.
[2] See James Fergusson, *A History of Architecture in All Countries, from the Earliest Times to the Present Day* (London: John Murray, 1865); ———, *History of Indian and Eastern Architecture* (London: John Murray, 1891).
[3] See Christopher Tadgell, *The East: Buddhists, Hindus and the Sons of Heaven* (Abingdon: Routledge, 2008); Rebecca M. Brown and Deborah S. Hutton, *Asian Art* (Malden; Oxford: Blackwell, 2006); John Burton-Page, *Indian Islamic Architecture: Forms and Typologies, Sites and Monuments* (Leiden; Boston: Brill, 2008).

A selective canon: Pioneering history of modern architecture

The first generation of modern architecture historians did their research and wrote their histories based on a shared idea — *Zeitgeist*, the spirit of the age. Modern architecture in their views was the architecture that emerged from, responded to, and therefore characterised the modern age.[1] The modern age in their view means the era that is defined by industrialisation and social change, which brought the need to revolt against conventional architecture, which, as they saw, was unsuitable for the changing society.

According to the pioneering historians' definition of the modern age, one question can suddenly come into the fore — where did the modern age take place? Needless to say, their modern age, at least in the early publications of their books, was actually taking place only in Europe and the United States. Therefore, despite their claims on its universal quality, the modern architecture of those historians was the outcome of European and North American societies. In 1957, Vincent Scully elaborated this point in *Perspecta* explicitly clear:

> Modern architecture is a product of Western civilization. It began to take shape during the later eighteenth century, with the democratic and industrial revolutions that formed the modern age. Like all architecture, it has attempted to create a special environment for human life and to image the thoughts and actions of human beings as they have wished to believe themselves to be. […] Modern architecture has mirrored the tensions of this state of mind and has itself embodied the character of the age that produced them. It has acted as much more than a simple reflection of its society. Like all art, it has revealed some of the basic truths of the human condition and, again, like all art, has played a part in changing and reforming that condition itself.[2]

Scully posited a clear idea that modern architecture is an 'art' created by 'modern' men in order to not only respond to but promote 'modern' conditions.

[1] See Nikolaus Pevsner, *Pioneers of the Modern Movement* (London: Faber & Faber, 1936); Sigfried Giedion, *Space, Time and Architecture: The Growth of a New Tradition* (Oxford: Oxford University Press, 1941); J. M. Richards, *An Introduction to Modern Architecture* (London: Pelican, 1959).
[2] Vincent Scully Jr, 'Modern Architecture: Toward a Redefinition of Style', *Perspecta* 4 (1957), 4–11.

Another fundamental question here is who were exactly those 'modern men'? Were they laypeople, patrons, or architects, or all of them? Those groups of people might have played their parts in the process in which modern architecture was created, but it should be pointed out here that this process would have hardly been successful without another group of important players — the architectural historians who recorded what those people had done.

The first generation of modern architecture historians was publishing their histories while the contents were still evolving as part of those histories. In fact, they were the main campaigners of the historicised subject — the modern architecture, or, more accurately, the Modern Movement. To make it more clear, Nikolaus Pevsner was the main importer of continental modernist ideas into Britain, Sigfried Giedion was the secretary of CIAM (Congrès International d'Architecture Moderne), J. M. Richards was, from 1937 to 1971, the longest-served editor of the *Architectural Review*. This is not to mention those other historians Henry Russell Hitchcock and Philip Johnson, who were the main importers of the European Modern Movement to the United States by organising the exhibition 'The International Style' at MOMA, New York. They also authored the subsequent book from that exhibition, *The International Style* [1], which was among the first publications on the movement and was certainly influential.

The first generation of historians of modern architecture, or, to be more precise, Modern architecture, tried to undermine the trace of tradition in Modernist works in order to promote Modernism as discontinuous from the past. This has prevented a close scrutiny in the way Modernist masters might have reinterpreted the past to benefit modern works. Following this line, Hill has proposed that, as history is, above all, neither completely objective nor subjective, the way Modernist architects convincingly interpreted both past and present actually transformed both of them in a way that was meaningful to the present.[2] But this idea was of course not adopted by the first generation of modern architecture historians. Pevsner's early favour of the Arts and Crafts was the basis for him to champion the Modern

[1] Henry Russell Hitchcock and Philip Johnson, *The International Style* (New York; London: WW Norton & Company, 1932).
[2] Jonathan Hill, 'The History Man', *AA Files*, 65 (2012), 3–18 (p. 16).

Movement. And, despite inspiration drawn from tradition, the Arts and Crafts was also a relatively new movement at the time.

Accordingly, given the roles and positions of the conventional historians, their histories of modern architecture are selective, actually reductive, not only by the fact that they only focus on Europe and the United States, but also by the fact that the historians chose only particular works by particular architects that supported their agenda. By doing so, they excluded quite a few talented architects who were contemporary to the selected masters. Examples are Bruno Taut, Erich Mendelsohn, Hans Scharoun, and Hugo Haring, whose works did not conform to those of the selected masters, and were therefore left unattended to by the first generation of historians. It took quite a long time before these talented figures have been gradually paid more attention in monographs as well as included in the general history of modern architecture.[1]

Last but not least, as most of the first generation of modern architecture historians tended to conceptualise architecture with a close relation to art, or considered it as a kind of art per se, good architecture needed to possess an aesthetic quality. As a result, certain aesthetic principles demonstrated by a few masters were set by these historians as the standard which good architecture of the age should achieve. Accordingly, despite the allowance of some adjustments to suit local cultural and environmental contexts, those doctrines were the criteria that the international modern architecture in non-western contexts were expected to meet in order to be categorised as good modern architecture.

Dismantling the canon: International history of modern architecture

It is timely to look at the history of modern architecture in non-western contexts. As the discussion above has posited that the first histories of modern architecture have set a conventional standard of good modern architecture, the history of international modern architecture in this review is categorised into two groups. The first group is the histories that take the conventional principles of the

[1] See Peter Blundell Jones, *Hans Scharoun: A Monograph* (London: Gordon Fraser, 1978); ———, *Hugo Häring: The Organic Versus the Geometric* (Stuttgart; London: Edition Axel Menges, 1999); ———, *Modern Architecture through Case Studies* (Oxford: Architectural Press, 2002); Kenneth Frampton, *Modern Architecture* (London: Thames and Hudson, 1980); Colin St. John Wilson, *The Other Tradition of Modern Architecture: The Uncompleted Project* (London: Academy Editions, 1995).

first generation of historians as their basis while trying to locate their local architecture in it. The second group is the histories that focus more on the social causality of the modern architecture in particular countries rather than promote its quality.

Firstly, the early and conventional histories of international modern architecture have been dependent on the principles of the so called original modern architecture. As stated above about the authority and influence of the first generation of modern architecture history, this group of history of international modern architecture has been located in the genealogy of modern architecture that has the modern architecture in the West as the starting point of ideas.

Accordingly, the modern architecture in the non-western contexts has not been able to speak out in its own voice but has needed to depend on the so-called origin of the modern idea from the West. Hence, the modern architecture in non-western contexts has been historically perceived in terms of deviations of that from the West.

A good example is explicit in one of the earliest books that include the modern architecture from the non-western countries in it — the 1967-edition of Giedion's *Space, Time and Architecture: The Growth of a New Tradition*.[1] In this edition, he added the examples of modern architecture from Brazil and Japan as 'regional' contributions to the Modern Movement with the proper adaptation to the climate and the continuation of the local tradition respectively.[2] Giedion had actually dealt with the modern architecture in Brazil before, as he had written the preface for Mindlin's *Modern Architecture in Brazil*, stating that the good modern architecture of the former peripheral country had emerged from the clients' good taste.[3] His statement reiterates his idea of 'the spirit of the age', which confirmed the universal quality and the prescribed aesthetic of Modernist works, wherever they were built — either the centre or the regions. In other words, despite the adaptations,

[1] Sigfried Giedion, 'Space, Time and Architecture: The Growth of a New Tradition: The Charles Eliot Norton Lectures 1938–1939' (1967).
[2] Ibid.: xxxviii-xxxix.
[3] Henrique E. Mindlin and Sigfried Giedion, *Modern Architecture in Brazil* (London: Architectural Press, 1956), p. ix.

this local architecture still needed to meet particular visual and spatial qualities set by the western standard.[1]

These principles of historicising international modern architecture are also obviously observed in the series of *Sir Banister Fletcher's A History of Architecture.* The first edition of the series that included international modern architecture is the 18th edition edited by J. C. Palmes in 1975. In this edition, the only aspect of modern architecture from non-European/North American context is, again, those selected from Brazil and Japan, which are described very briefly as regional interpretations of Le Corbusier's ideas.[2]

In the following edition, there is a huge change in the structure of the book with a few additions of content — among others, the chapters on colonial architecture worldwide.[3] However, most of the chapters on both colonial and international modern architecture still follow the preceding principles of putting architecture into the western context as the centre and the non-western context as the deviations with adaptations. The examples of this are the description of colonial architecture as the mixture and adaptation of western styles to local climates and cultures, and the development of modern architecture in China as the succession of styles from Classical revival, Chicago School, Art Deco, and Chinese Classical.[4] In other contexts such as South and Southeast Asia, the works in India are explained as being influenced by Le Corbusier, the works in Dakka after Louis Kahn, and briefly on the works of Sumet Jumsai from Thailand that are affiliated with Hi-Tech concrete Modernism. As stated before, these works are selected because they conform to the principles of good modern architecture in the West.

As regards the literature written about the modern architecture in particular countries, again the conventional principles of good modern architecture, set in the West, form their basis. The successive books in this group are mostly about the works in the 40s and 50s-Brazil, and Japan.[5] Despite various attempts in the newer

[1] See also William J. R. Curtis, *Modern Architecture since 1990* (London: Phaidon Press, 1982).
[2] See J. C. Palmes, ed. *Sir Banister Fletcher's a History of Architecture* (New York: Charles Scribner's Sons, 1975).
[3] See J. Musgrove, J. Tarn, and P. Willis, eds, *Sir Banister Fletcher's a History of Architecture* (London: Butterworths, 1987).
[4] Ibid., 1436-50.
[5] See F. Bullrich, *New Directions in Latin American Architecture* (London: Studio Vista, 1969); Z. Q. Deckker, *Brazil Built: The Architecture of the Modern Movement in Brazil* (London: Taylor &

volumes in reinterpreting the causality and development of modern architecture in these countries as something less directly deviating from those of the West, these books all agree in the quality of the selected works in which Modernist originality and creativity have been set as criteria. To put it more simply, these architectural works would not have been selected by the historians if their qualities did not meet the standard of conventional Modernist principles. And that explains the reason why modern architecture in non-western countries has had a very limited space in debates about the international history of modern architecture.

Nevertheless, some light has been shed on the rigid authority of modern architecture principles in its international history. In the chapter 'Critical regionalism: Modern architecture and cultural identity' in *Modern Architecture: A Critical History*, Kenneth Frampton, with the help of the Frankfurt School's critical framework, describes the modern architecture in the former peripheral countries that goes along with the universal principles while maintaining its own local identity.[1] In this account, Frampton addresses his interpretation in a different way from the hierarchical approach. He tries to point out the examples that show the universal assimilation, the resistance, and the cross-cultural interactions in non-hierarchical ways. An example of this is shown in his interpretation of Jorn Utzon's Bagsvaerd Church in Copenhagen. In the design, the use of pre-fabricated concrete represents the assimilation of the universal language, the in-situ concrete represents the custom of local making, and the use of wooden fenestration and slatted partitions represents the interplay between Occidental and Oriental elements.

Frampton's argument was well received during the 1980s and 1990s within the limited space of the debate about transcultural history of modern architecture. This was because, in these decades, the modern architecture from developing countries was paid more attention, partly because of the awareness of the alleged homogenisation of the world led by globalisation, and the trend of the so-called postmodern architecture, which held among its ideas was concern for local identity.

Francis, 2001); U. Kultermann, *New Architecture in Japan*, (London: Thames and Hudson, 1967); M. F. Ross, *Beyond Metabolism: The New Japanese Architecture* (New York; London: McGraw-Hill, 1978); H. Suzuki, R. Banham, and K. Kobayashi, *Contemporary Architecture of Japan 1958–1984* (New York: Rizzoli, 1985); R. J. Williams, *Brazil: Modern Architectures in History* (London: Reaktion Books, 2009).

[1] Kenneth Frampton, 'Critical Regionalism: Modern Architecture and Cultural Identity' in *Modern Architecture: A Critical History*. (London: Thames and Hudson, 1985), 313–27.

As a result, the works of a few architects from the developing countries such as India and the Muslim countries have appeared in architectural publications.[1] These publications illustrate those works as a resistance to conventional modernism that has been perceived as the force aiming at homogenising the world's architecture. The designs of those works exploit local materials, craftsmanship, and involve local culture, sometimes traditional architectural features, in their designs, as the opposition to the modernised ideas and the standardised construction that most of the time involved imported materials. The intentions of the designers are worthy of the compliment, and the inclusion of them in the debate about the international history of modern architecture means that they have already received some recognition. However, apart from the local geniuses that have been discovered, this also further reveals the narrowness of the conventional principles of modern architecture. To cite Blundell Jones, these narrow principles formed the platform for the postmodernists to reject the modernist projects.[2]

It should be pointed out that credit for local resistance has been given by the scholars of international modern architecture only to designers from recent generations such as Charles Correa and Balkrishna Doshi whose works from the 1980s show the aforementioned creativity.[3] On the other hand, the history of modern architecture in developing countries before the emergence of those geniuses mentioned has remained largely unrecognised. Like Frampton, the historians have questioned the rigid authority of conventional modernist principles but they have not questioned the whole historiography of it. What they have done is in fact an introduction of a scattering of talents who tried to balance the universalising aspect of modernism with local identity. And by assessing only a narrow selection of

[1] See S. Cantacuzino, *Architecture in Continuity: Building in the Islamic World Today: The Aga Khan Award for Architecture* (New York: Aperture, 1985); William J. R. Curtis, *Balkrishna Doshi: An Architecture for India* (New York: Rizzoli, 1988); K. P. Gast, *Modern Traditions: Contemporary Architecture in India* (Basel: Birkhäuser, 2007).

[2] Blundell Jones, *Modern Architecture through Case Studies*, p. 5.

[3] For Charles Correa, apart from monographs, one of the most recent examples was the exhibition 'Charles Correa: India's Greatest Architect' at the Royal Institute of British Architects from 14 May to 4 September 2013. For Balkrishna Doshi, see Curtis, *Balkrishna Doshi: An Architecture for India*; P. Davey, 'Community Housing, Indore, India, Doshi, Balkrishna, V. Architect', *Architectural Review*, 1185 (1995), 72–73; C. Melhuish, 'Balkrishna Doshi Indian-Institute-of-Management, Bangalore, India' *Architectural Design*, 124 (1996), 26–29; W. Curtis, 'Balkrishna Doshi Ld-Institute-of-Indology, Ahmedabad, India 1957–1962', *A + U-Architecture and Urbanism*, 322 (1997), 32–39; ———, 'Balkrishna Doshi School-of-Architecture, Center-for-Environmental-Planning-and-Technology, Ahmedabad, India 1966–1968' *A + U-Architecture and Urbanism*, 322 (1997), 44–47; ''Amdavad Ni Gufa' (Balkrishna V Doshi, Vastu Shilpa Consultants)' *A + U-Architecture and Urbanism*, 445 (2007), 10–15.

works, these authors still do it in relatively the same way as they would have assessed works from the centre of the Modern Movement. Therefore, the selected works must possess certain qualities that meet the standard of the works from the centre; otherwise they would not have qualified. For example, it is true that Frampton's Critical regionalism promotes the works that try to mediate rigid principles of conventional Modernism with awareness of locality but this is still done under modernist ideology not any 'other' local wisdom.[1] Accordingly, there is a question about the modern architecture in the rest of the world that does not meet the certain quality imposed by all the aforementioned modernist scholars — from Pevsner to Frampton. Are they not worth inscribing in the international history of modern architecture?

Certainly, it is impossible to include all 'worthy' works in a book anyway. The question here is therefore more about whether the works that do not meet the conventional quality are worth studying at all. And is there an alternative way to study them? In fact, there has been a response to this question and it is the second group of research that will now be reviewed.

The second group of history of modern architecture outside the western world focuses more on social causality of modern architecture in particular countries rather than promoting its quality. It should be noted that the social aspect of history of the modern architecture was emphasised before in a history of modern architecture in the West by Manfredo Tafuri. In his *Modern Architecture*, Tafuri, with a Marxist point of view, challenged the established histories of modern architecture of the first generation of historians by proposing the role of modern architecture as a vehicle to revolutionise capitalist society, not simply to be the outcome of it.[2]

In a broader picture, including non-western contexts, the question on how international modern architecture has diversely evolved within particular regions' own socio-economic and political circumstances rather than as a mere transplantation from the West, has been raised in an extensive survey, *World Architecture 1900–2000: A Critical Mosaic*, published in 1999. But due to its

[1] William S. W. Lim and Jiat-Hwee Chang, eds, *Non West Modernist Past: On Architecture and Modernities* (Singapore: World Scientific Publishing, 2012), p. 3.
[2] See Manfredo Tafuri, *Modern Architecture* (New York: H.N. Abrams, 1979).

enormous scale and the inconsistency of the qualities of each chapter's contribution, the critical question regarding how the architecture was shaped by each place's cultural life and vice versa was hardly seen elsewhere except for the general introduction by Kenneth Frampton. A more recent attempt to understand the way modern architecture has been produced through social interaction and order, and the struggle of everyday life, all of which constitute the social, political and economic structure of society, rather than the questions of arts-based, technological, and philosophical view, has been done in Robert Adam's *The Globalisation of Modern Architecture: The Impact of Politics, Economics and Social Change on Architecture and Urban Design since 1990* but, again, the fact that this research covers a large area of the world and only focuses on relatively recent time allows it to provide only a generalised view as the global situation.[1]

At the same time, there have been the more-detailed research studies on modern architecture in particular non-western contexts in particular periods. The debates about national identity, authenticity, persistence of tradition, and awareness on conservation have been drawn to the studies by a wide range of perspectives such as the studies on imperialism, economic development, modernity, nationalism, and cultural identity.[2]

These studies have shed light on the history of modern architecture in particular places that have been understood in their own contexts, albeit connected with the West in many respects. These studies, despite challenging the conventional genealogy of international modern architecture that constitutes those of the West as the origin, have by no means challenged the principles that justify good modern architecture but have gone beyond that. They have emphasised that modern architecture in different parts of the world should be understood by different perspectives and measured by different parameters. As a result, suitable modern architecture in different places could be created from the understanding of each

[1] Robert Adam, *The Globalisation of Modern Architecture: The Impact of Politics, Economics and Social Change on Architecture and Urban Design since 1990* (Newcastle upon Tyne: Cambridge Scholar, 2012).

[2] See Sibel Bozdogan, *Modernism and Nation Building: Turkish Architectural Culture in the Early Republic* (Seattle: University of Washington Press, 2001); Zhu Jianfei, *Architecture of Modern China: A Historical Critique* (London: Routledge, 2009); Abidin Kusno, *Behind the Postcolonial: Architecture, Urban Space, and Political Cultures in Indonesia* (London: Routledge, 2000); Peter G. Rowe and Seng Kuan, *Architectural Encounters with Essence and Form in Modern China* (Cambridge; London: The MIT Press, 2002).

place's circumstances and constraints, and it should not be evaluated with the same standard as the so-called good architecture of the West. To reiterate this, the goal of the development of modern architecture in non-western contexts would no longer be to achieve the same standard as in the West, with adaptations to suit local cultures (as seminal Japanese works have achieved) or climates (as in 1940s and 1950s Brazilian seminal works) nor even with the exploitation of local materials and construction methods (as in a few masterworks in India).

Mehrotra posited that what is important and can be a more creative way of understanding modern architecture and urbanism is to study not only the works that have achieved the static standard set by the conventional historians but also the ones that have been conceived through kinetic circumstances.[1] These works sometimes demonstrate themselves as negotiations and resistance to modernity, that surround the production of those works as well as the simultaneous modernity, nonconforming to the standard modernity that coexist.[2] The ultimate question here is therefore, how the history of international modern architecture should be studied.

However, most of the aforementioned studies look at a big picture of the situation, in which political powers played a major role in creating modern architecture. Therefore, detailed analysis on the perception and use of space, in which the socio-cultural aspects of users would have been taken seriously, is absent in most cases. If the account regarding how users perceived and use the space is to be taken into account, a better understanding of what modern architecture means for the public in a particular place and time can potentially be revealed. In doing so, the questions regarding theoretical frameworks in relation to methodology are worth discussing.

[1] Rahul Mehrotra, 'Simultaneous Modernity' in Julia Hell and Andreas Schönle, eds, *Ruins of Modernity: Politics, History, and Culture* (Durham: Duke University Press, 2010), pp. 244–252 (p. 247).
[2] Ibid.

Postcolonial framework

There is recent research about modern architecture outside the western world that discusses its theoretical frameworks explicitly. One of the most established schools in recent academic sphere are the research studies that use the postcolonial framework, largely drawn from the theory of Homi Bhabha, in which the conventional idea about cross-cultural relations is challenged.[1] In *Bhabha for Architects*, Felipe Hernández points out the inadequacy of a conventional framework in the history of modern architecture; that is its inclusion of the modern architecture in non-western countries only when they meet the West's standard, and the exclusion of indigenous buildings such as slums from the history of modern architecture as they are outside the conventional principles of good architecture.[2] By using the postcolonial framework, Hernández claims, we can begin to understand the architecture of reality, because the framework counts for every minor group in society, including migrants and gays to name only two, and therefore it focuses on the architecture that responds to individuals not the whole society.[3] Regarding outside influence that has long related to the study of modern architecture in the non-western countries, Hernández employs the concept of 'transculturation' coined by a Cuban eassayist, Fernando Ortiz, to explain the non-hierarchical relations between the centre and the pheriphery — the so-called pheriphery that is independent but interacts with others and is by no means the hierarchically inferior to the centre.[4]

So far, the framework Hernández had proposed has been applied to his studies and edition of the books on the slums and the architecture of emerging Latin American architects.[5] The framework has also been pursued in the re-examination of the modern architecture, urban design, and urbanism in ex-colonies, ranging from India to West Indies, that have long been neglected in the international history of modern architecture.[6] These studies re-examine the historical and contemporary

[1] See Homi K. Bhabha, *The Location of Culture* (London: Routledge, 2004).
[2] See Felipe Hernández, *Bhabha for Architects* (London: Routledge, 2009).
[3] Ibid., p. 20.
[4] See Felipe Hernández, Mark Millington, and Iain Borden, *Transculturation: Cities, Spaces and Architectures in Latin America* (Amsterdam: Rodopi, 2005).
[5] See Felipe Hernández, Peter Kellett, and Lea Allen, *Rethinking the Informal City: Critical Perspectives from Latin America* (New York: Berghahn Books, 2009).
[6] See Anthony D. King, *The Bungalow: The Production of a Global Culture* (London: Routledge and Kegan Paul, 1984); Mark Crinson, *Empire Building: Orientalism and Victorian Architecture* (London : Routledge, 1996); Gulsum Baydar Nalbantoglu and Chong Thai Wong, *Postcolonial*

built environments of the ex-colonies, for which the postcolonial framework was initially designed to be applied, challenging the conventional studies that saw it as a one-way imposition from the metropoles with various climatic, cultural, and stylistic adaptations. They address the notion of acculturation, which happened slowly because of western colonisers' cultural arrogance, e.g. it took long time for the Europeans to understand and adopt the seemingly logical 'comfort' in colonial architecture, such as the use of cross-ventilation and enclosing verandahs, that otherwise are underestimated by the studies that prioritise individual genius and abilities to adapt.[1] They argue that the subordinates of the colonies played as an important part as the colonisers in shaping the hybrid built environments, such as how the colonial architecture of West Indies and Southeast United States was informed by the Africans who built them following the way that materials and space articulation were familiar to them in Africa rather than the ability of the whites to adapt what they had been familiar with in Europe.[2] In doing this, the detailed analysis and interpretation of relevant materials beyond architectural ideas and standard representations, such as drawings, is shaped by the multi-faceted attention to the way the colonised and colonisers created and interacted in spaces, in which the real use is taken into account.

However, as the postcolonial framework is also claimed to benefit the study of unequal transcultural contacts, no matter whether they are in the form of colonisation or not, this direction of research will potentially benefit the studies of modern architecture in many regions of the world, as there is a wide range of different cases regarding the contact with the West without colonisation. These range from the nations with a glorious imperial past like Turkey that was securalised

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Space(s) (New York: Princeton Architectural Press, 1997); Kusno, *Behind the Postcolonial: Architecture, Urban Space, and Political Cultures in Indonesia*; Zeynep Çelik, *Urban Forms and Colonial Confrontations: Algiers under French Rule* (Berkeley: University of California Press, 1997); Jyoti Hosagrahar, *Indigenous Modernities: Negotiating Architecture and Urbanism* (London: Routledge, 2005); Peter Scriver and Vikramaditya Prakash, *Colonial Modernities: Building, Dwelling and Architecture in British India and Ceylon* (London: Routledge, 2007); Tom Avermaete, Serhat Karakayali, and Marion von Osten, *Colonial Modern: Aesthetics of the Past - Rebellions for the Future* (London: Black Dog, 2010).

[1] Jay D. Edwards, 'Architectural Creolization: The Importance of Colonial Architecture', in Mari-Jose Amerlinck, ed., *Architectural Anthropology* (Westport; London: J F Bergin & Garvey, 2001), pp. 83–113 (p. 89). See also an account about Dutch officials in Batavia who denied to take a bath and changing clothes frequently, as well as to build well-ventilated houses for centuries in Roxana Waterson, *The Living House: An Anthropology of Architecture in South-East Asia* (London: Thames and Hudson, 1997), p. 29.

[2] Edwards, 'Architectural Creolization: The Importance of Colonial Architecture', p. 89.

and modernised by its new elite after the decline of the Ottoman Empire at the beginning of the twentieth century, to a vast kingdom like Persia that was also modernised by its reforming elite, yet suffered from British and Russian imperial threats. Or from an almost completely isolated country before the mid-nineteenth century that turned into a rapidly industrialised and imperial power itself by the third decade of the twentieth century like Japan, to a country with its imperial past that succumbbed to western countries and to the newly emerged imperial Japan, like China from the mid-nineteenth to the first half of the twentieth century. Or from the only African nation that had been establised by the ex-slaves from America and was never colonised by European powers like Liberia, to an ancient country that almost shared the same destiny to Thailand if not being occupied briefly by Italy before World War II, like Ethiopia. Even beyond the field of East/West dichotomy, Fraser and Kerr have already used postcolonial approach to unviel the hybridity and cultural interplay in British post-war architecture beyond a general claim of being Americanised.[1] Similarly, the case of modern architecture in Thailand can be a good try for the postcolonial framework.

The Postcolonial line of thought has only recently been proposed for use with Thai studies because the word 'colonial' explicitly contradicts the rigid idea that Thailand is the only country in Southeast Asia that has never been colonised by any western power, but it has been immensely influenced notwithstanding. The idea has been deeply established in not only the mindset of the Thais but also that of the scholars of conventional Thai studies.

In order to justify a use of postcolonial framework with Thai studies, it is necessary to discuss about the concept of 'cultural imperialism'. Imperialism is normally used to explain the imposition of political or economic influence by more powerful foreign powers over weaker states.[2] It explains not only policies and military actions, which the ultimate result is in a form of colonisation, but also attitudes that reinforce the cultural hegemony of the more powerful civilisation, in this case the western imperial powers. The concept of cultural imperialism can, therefore, be applied to studies related to the subjects contacted by imperialism

[1] Murray Fraser and Joe Kerr, *Architecture and the 'Special Relationship': The American Influence on Post-War British Architecture* (London: Routledge, 2007).
[2] William A. Darity, *International Encyclopedia of the Social Sciences*, 2nd edn (Detroit: Macmillan Reference, 2008), pp. 586–90.

despite the absence of actual colonisation. Largely emerging from media studies, the term has been used to examine phenomena in international relations, anthropology, education, science, sports, literature, and history. Thailand was not colonised but could not or, actually did not, escape the unequal relations with the West culturally, voluntarily accepted the superiority of and discipline in the way knowledge, even about Thailand itself, was initiated and produced by the West. This can be clearly seen from the re-opening of the country to the West in the mid-nineteenth century up until post-World War II, or even nowadays. For on the one hand, the *Mahaprathet* (advanced countries), *Farang* (westerners), *Prathet Phatthana Laew* (developed countries) have been seen as the point that Thailand should achieve. On the other hand, the binary idea of West and East, in this case the West versus Thailand, also created by the imperial discipline of knowledge production, has given definition to what has been considered 'Thai' or 'Thainess' as the resistance to something 'western' in order to retain what is believed to be Thai identity.[1]

To challenge cultural imperialism, Thirayuth Bunmi, a prominent Thai scholar who has called for a break with Eurocentric epistemology in Thai culture, philosophy, and history, has acknowledged that he had drawn his idea from postmodernist and postcolonial schools of thought, but used the term 'post-westernism' rather than 'postcolonialism' to suit Thai context and its audience.[2] But the postcolonial framework is useful despite Thailand's non-colonial past (in theory) because one of the main points of the postcolonial theory is to criticise the constructed dichotomy between the West and the East, or, indeed, the West and the 'other'.

This research is, therefore, a case study to justify the application of postcolonial framework for cases beyond colonist/colonised and to reveal a western hegemony that had been concealed by the absence of colonisation.[3] Following this line, the thesis has been built on the basis that it has become un-creative to continue

[1] For the concept of binary opposition created by the West see Edward W. Said, *Orientalism* (London: Routledge and Kegan Paul, 1978).
[2] Thirayuth Boonmi, *Ruthon Pratya Lae Sinlapa Baeb Tawantok Pen Sunklang (Deconstructing Western-Centric Philosophy and Art)*, 2nd edn (Bangkok: Saithan, 2003), pp. 15, 38.
[3] For the revelation of western hegemony concealed by the absence of colonisation, see Michael Herzfeld, 'The Absent Presence: Discourses of Crypto-Colonialism', *South Atlantic Quarterly*, 101 (2002), 899–926 (p. 922).

with such rigid concepts of East/West, or Thai/foreign dichotomy. The processes of acceptance and opposition indeed involved convergence, assimilation, transculturation, and transmediation that resulting in hybrid, heterogeneous, extraordinary, differentiated, and unmonolithic quality of culture both of the superiors and subordinates as well as in their old and new practices.[1]

In sum, this thesis argues that there has been hybridity and ambiguity in the encountering process not in the sense of A+B=(A+B) as conventional accounts on the Thais' assimilation of something considered foreign like to promote, but A+B=C. In other words, the process that the foreign 'B' was 'adapted' to suit the so-called Thai 'A' created the 'reinvention' and 'reinterpretation' of both of them, so that the resulting 'C' was something new.[2] The point is that if we understand our 'C' throughout our history we can possibly think about what kind of 'C' built environment the 'C' society at the present would like to, or should, live with.

The postcolonial framework helps this research to examine Thai society after the mid-nineteenth century, as well as the architecture that has been produced by such a society and vice versa, in the way that avoids linear and over-generalised assumption posited by the conventional theory of modernisation. The society and its architecture are examined under the idea that, as posited by Geertz, there is 'no simple progression from "traditional" to "modern" but a twisting, spasmodic, unmethodical movement which turns as often toward repossessing the emotions of the past as disowning them'.[3]

Anthropological approach

Clifford Geertz's statement in the last paragraph has brought us to anthropology, another approach that will assist the postcolonial framework in the examination of case studies that potentially leads to a more understanding on how the architecture was perceived by its users and the society. In *The Interpretation of Cultures*, Geertz champions the 'thick description' to be used for understanding symbolic meanings of cultural activities and artifacts. His short example relating to architecture in the book is worth quoting:

[1] Edward W. Said, *Culture and Imperialism* (London: Chatto & Windus, 1993), p. xxix.
[2] Harrison and Jackson, *The Ambiguous Allure of the West: Traces of the Colonial in Thailand*, p. 5.
[3] Clifford Geertz, *The Interpretation of Cultures: Selected Essays* (New York: Basic Books, 1973), p. 319.

> Chartres is made of stone and glass. But it is not just stone and glass; it is a cathedral, and not just a cathedral, but a particular cathedral built at a particular time by certain members of a particular society. To understand what it means, to perceive it for what it is, you need to know rather more than the generic properties of stone and glass and rather more than what is common to all cathedrals. You need to understand also — and, in my opinion, most critically — the specific concepts of the relations among God, man, and architecture that, since they have governed its creation, it consequently embodies. It is no different with men: they, too, every last one of them, are cultural artifacts.[1]

In *Anthropological Theory of Art*, Gell has not only extended the anthropological understanding of non-western societies beyond social relations, but also set a lens to understand so-called primitive arts from the basis of their particular societies.[2] For example, a Maori tattoo artist could be appraised by the community for his works that instantiated the best quality tattoo among his peers, but not for his individual creativity.[3] This lens is useful for this research because architecture was much related to art, especially in the way it was involved with styles and ornaments. It is used through the investigation of the concept of architecture, the processes of project initiation, design, realisation, reception, as well as the way it was used and the rituals that were associated with it.

Anthropology has long been dealing with architecture. Most of the anthropological studies related to architecture focus on houses as a direct affiliation to the topic of 'dwelling' that forms an important part of the discipline.[4] In the 9th International Congress of Anthhropological and Ethnographical Sciences in 1974, Amos Rapoport organised a forum later published as *The Mutual Interaction of People and Their Built Environment* that has ever since increased the evaluation of

[1] Clifford Geertz, *The Interpretation of Cultures: Selected Essays*, p. 51.
[2] See Alfred Gell, *Art and Agency: An Anthropological Theory* (Oxford: Clarendon Press, 1998).
[3] Ibid., p. 158.
[4] See Stanley J. Tambiah, 'Animals Are Good to Think and Good to Prohibit', *Ethnology*, 4 (1969), 423–59; Pierre Bourdieu and Richard Nice, *Outline of a Theory of Practice* (Cambridge: Cambridge University Press, 1977), p. 118; Roxana Waterson, *The Living House: An Anthropology of Architecture in South-East Asia* (London: Thames and Hudson, 1997); ———, 'Houses and Hierarchies in Island Southeast Asia', in Janet Carsten and Stephen Hugh-Jones, eds, *About the House: Levi-Strauss and Beyond* (Cambridge: Cambridge University Press, 1995), pp. 46–69.

research methodology in settlements and built-form.[1] Others contribute to the studies of vernacular architecture and, for the much recent accounts, reaffirm the understanding and application of vernacular built environments as a potential contribution to the present and future of increasingly globalised and urbanised societies.[2]

Even though a few anthropological works dealt with so-called vernacular architecture, deliberate use of anthropological lens in the historical study of architecture is yet far from widespread. The issue of how anthropology could help architectural history was raised by Blundell Jones as early as 1996 in his article, 'Architecture and anthropology: An Anthropological view of Architecture', in which he suggested the discipline that sought to deduce the relationship between particular societies and the way they perceived, gave meanings, and inhabited built-forms can be used to examine architecture in the past that might result in a better understanding in the field of history of architecture.[3] This has been applied in a few studies ranged from how Dutch statesmen in the seventeenth century happened to turn their domestic matter to a public one by administering order of all stuffs in their houses systematically in order to reassure their honour, to how post-war social housings' open plans intended by Modernist architects to allow freedom of function ended up with partitioning of space by the residents as they interpreted that the open plans allowed them to create their unique 'rooms' in a uniformed 'space' of the monotonous housing shared by other people of relatively similar social stratum.[4]

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[1] *Architectural Anthropology*, ed. by Mari-Jose Amerlinck (Westport; London: Bergin & Garvey, 2001), p. xiii. And this was done after some books had addressed the implicit notions of anthropology in architecture. See Paul Oliver, *Shelter and Society* (London: Barrie & Rockliff, 1969); Amos Rapoport, *House Form and Culture* (Englewood Cliffs: Prentice-Hall, 1969); Labelle Prussin, *Architecture in Northern Ghana: A Study of Forms and Functions* (Berkeley: University of California Press, 1969).

[2] Supakit Yimsrual, 'Anthropological View of Architecture: An Alternative Approach to the Study of Architecture and Built Environment', *Nakhara: Journal of Environmental Design and Planning*, 8 (2012); Raymond Cole and Richard Lorch, *Buildings, Culture and Environment : Informing Local and Global Practices*, (Oxford: Blackwell, 2003); Alan Bicker, R. F. Ellen, and Peter Parkes, *Indigenous Environmental Knowledge and Its Transformations: Critical Anthropological Perspectives* (Amsterdam: Harwood Academic, 2000); Paul Oliver, *Vernacular Architecture in the 21st Century* (London: Prince of Wales Institute, 1999); Bernard Rudofsky, *Architecture without Architects: A Short Introduction to Non-Pedigreed Architecture* (New York: The Museum of Modern Art, 1965).

[3] Peter Blundell Jones, 'Architecture and Anthropology', *A.D. Profile*, 124 (1996), 22–25.

[4] Irene Cieraad, *At Home: Toward an Anthropology of Domestic Space* (Syracuse: Syracuse University Press, 1999).

The assembly of writings that share the anthropological approach in architectural research in *Architectural Anthropology* by Mari-Jose Amerlinck strengthened the cross-discipline presence in both academic fields. It reassured the fundamental points that architectural anthropology could shed light on the way particular cultures produce their built forms and how the significance in social, material, and symbolic levels, are imbued in them, as well as how the built forms further, in turn, shape the cultures.[1] In addition, the last notion was supported by Buchli's historical observation about how anthropologists had interpreted the way architecture had not only 'represented' but also 'done' to its societies.[2] Lastly, in the evaluation of benefit that architectural theory and practice could gain from Pierre Bourdieu's anthropological/sociological theory, Kim Dovey has asserted that architectural theory and practice have to take complicity seriously. There is no neutral space in the field: architects and theorists, once committed to an architectural task, step into a sphere involving politics.[3]

It is true that the postcolonial and anthropological frameworks adopted by this research have been discussed separately. But it is worth noting here that these two fields provide an overlapping perspective. An explicit example can be seen in Berleant-Schiller's research informed by an anthropological point of view in which she pointed out that colonial architecture was created with a great deal of creative responses and interpretations from the colonised as much as from the impositions of the colonisers.[4] Even outside the architectural realm, Watson has gathered researches on how McDonald's, a fast food restaurant chain associated with low price and convenience in the United States, has been localised in east Asia as a symbol of modern life, a cool place to sit and be seen, and a family restaurant, instead of a threat by American's cultural imperialism, as some people have claimed.[5]

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[1] Amerlinck, *Architectural Anthropology*, p. 3.
[2] See Victor Buchli, *An Anthropology of Architecture* (London: Bloomsbury, 2013).
[3] Kim Dovey, 'The Silent Complicity of Architecture' in Jean Hillier and Emma Rooksby, eds, *Habitus: A Sense of Place* (Hants: Ashgate Publishing, 2005), pp. 283–94 (p. 291).
[4] Riva Berleant-Schiller, 'Machian-Moravian Mission Settlements and Their Built Environments, 1740–1772' in *Architectural Anthropology*, ed. by Mari-Jose Amerlinck (Westport; London: Bergin & Garvey, 2001), pp. 13–25 (p. 17).
[5] James L. Watson, *Golden Arches East: Mcdonald's in East Asia*, 2nd ed. (Stanford: Stanford University Press, 2006).

1.2 Historiography of modern architecture in Thailand

The last part of this introductory chapter has definitely to be about the history of modern architecture in Thailand. History of modern architecture in Thailand is an obscure subject in the architectural practice and education of the country. Relatively little research has been done. In fact, a research about what is literally called 'modern architecture in Thailand' has been conducted by Koompong Noobanjong as his PhD dissertation in 2003.[1] But it was not until 2008 when the book, *Keeping Up: Modern Thai Architecture 1976–87*, has been published as the catalogue of the exhibiton with the same name, that the subject has been publicised and exhibited for wider public.[2] The former will be discussed later in this chapter. For the latter, even though the book and the exhibition try to show how the modern architecture particularly emerged from the socio-political curcumstances of Thailand and what it represented during the first economic boom years of 1970s, the selection of case studies sticks to the idea that modern architecture, Modern architecture, and Modernist architecture are one, all of which developed from the same origin which is the Modern Movement.

But if we consider this book and the rationale behind it alongside what has been quoted before regarding Scully's claim that 'Modern architecture is a product of Western civilization', one might question whether it is sufficient to see the modern architecture in Thailand as emerging from that country's particular situation, i.e. a product of its own civilisation, yet handed over from the West, where it had originally emerged. Or is it possible to consider 'modern' architecture in Thailand anew? If modern architecture is believed by Scully to be shaped in the West at the end of the eighteenth century, was it possible that modern architecture was also shaped in somewhere else but in different forms, at different times, and by different causes — somewhere without democracy and industrial revolutions — and somewhere it was not even called modern architecture?

[1] Kumpong Noobanjong, 'Power, Identity, and the Rise of Modern Architecture: From Siam to Thailand, (doctoral thesis, University of Colorado at Denver, 2003). It has been edited and published as a book ten years later. See Koompong Noobanjong, *The Aesthetics of Power: Architecture, Modernity, and Identity from Siam to Thailand* (Bangkok: White Lotus Press, 2013).
[2] *Yak Thansamai: Sathapattayakam Samai Mai Khong Thai, Po So 2510–2530 (Keeping Up: Modern Thai Architecture 1976–1987).*

In order to examine these points, it is worth considering Berman's criteria of modernity that is:

> To be modern is to find ourselves in an environment that promises us adventure, power, joy, growth, transformation or ourselves and the world — and, at the same time, that threatens to destroy everything we have, everything we know, everything we are.[1]

In relation to the statement, one might further asks that 'who are we?, where is our environment?, when does it take place?', and etc. Accordingly, Appadurai's clarification of global modernity is useful. He states that '[global modernity] is decisively at large, irregularly self-concious, and unevenly experienced'.[2] In this sense, what 'modern' architecture is depends on what it means to be 'modern' in a particular place and at a particular time.

Following this line, there are other areas of research that are not particularly about 'modern architecture' in Thailand, but about the architecture that was engaged with the idea of 'modern'. They covered the architecture of different periods, starting from the mid-nineteenth century when Thailand re-opened itself to the western world.[3] Not unlike the book and exhibition *Keeping Up: Modern Thai Architecture 1976–87*, conventional research in this area normally takes stylistic categorisation as a main tool to define and understand the architecture.

Under this historical view, an important milestone of the history of architecture in Thailand has been set at 1932, when the previously absolute monarchy was put under a constitution by People's Party, a group of middle-ranking civilian and military officials who staged a coup d'état on 24 June, and introduced democracy. Amidst the political changes, Thai architects who had graduated from

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[1] Marshall Berman, *All That Is Solid Melts into Air: The Experience of Modernity*, 4th edn (London: Verso, 1989), p. 15.

[2] Arjun Appadurai, *Modernity at Large: Cultural Dimensions of Globalization* (Minneapolis; London: University of Minnesota Press, 1996), p.3.

[3] Chungsiriarak, *Sathapattayakam Baeb Tawantok Nai Siam Samai Ratchakanti 4 Tueng Po So 2480 (Western Architecture in Siam: Rama IV's Reign to 1937)*; Khaisang Sukhavadhana, '*Kansuksa Itthiphon Khong Sathapattayakam Tawantok Thi Mi to Baeb Yang Khong Ngan Sathapattayakam Nai Prathet Thai Po So 2208–2475* (A Study of the Western Architectural Influences on Styles of Architecture in Thailand During A.D. 1665–1932)', (unpublished master's thesis, Chulalongkorn University, 1977); Trungchai Buranasomphop, '*Kan Suksa Sathapattayakam Tawantok Thimi Itthiphon to Sathapattayakam Thai Nai Phaendin Somdet Phra Narai Maharat Changwat Lopburi* (A Study of Western Architecture That Influenced Thai Architecture in the Reign of King Narai, Lopburi Province)' (Bangkok: Faculty of Architecture, Silpakorn University, 1991).

Europe started to take over architectural practice in the country from Europeans, and established the professional association and school, as well as introducing certain 'styles' of architecture. However, these styles of architecture have not been dubbed 'modern architecture' by conventional research. They are only perceived to be categories of buildings that are preceded by 'traditional' and 'western-influenced' buildings. The former existed before the influx of European 'influence' and ideas, while the latter emerged after that, but were constructed before 1932. To be more specific, these categories of buildings were those constructed during 1932 to 1957. The latter year marked another abrupt change in the socio-political and economic situation, as it saw the rise of another regime and brought another category of buildings, with more affiliation to Modernist architecture from the West.

Existing studies about the architecture built between 1932 and 1957 could be divided into two groups. The first one comprises conventional studies about architecture in Thailand, essentially general accounts based on evidence gathered from archival research and interviews. The second comprises works from a newer generation of scholars who focus on 'meaning' in architecture and claim this helps towards a better understanding. These two groups of research studies are not contradictory to each other, but it could be perceived that the former has laid the foundation in the field and has been challenged by the latter, which approached the field from a different angle. However, both have left research gaps which this thesis tries to fill.

The conventional research studies by Tiptus and Horayangkura are the pioneering works in the field.[1] The main studies from this group began with concern about identity in modern architecture in Thailand in the 1980s and 1990s,

[1] Vimolsiddhi Horayangkura, *Hok Thatsawat Sathapattayakam Thai Samai Mai (Six Decades of Modern Thai Architecture)* (Bangkok: Association of Siamese Architecture, 1993); ———, 'Architecture of Thailand: Change Amid Continuity: The New Challenge', in Jon Lim, ed., *Transforming Traditions: Architecture in the ASEAN Countries, Brunei, Malaysia, Indonesia, Philippines, Singapore, Thailand* (Singapore: ASEAN Committee on Culture and Information, 2001), pp. 244–263; Horayangkura et al., *Phattanakan Naew Khwamkid Lae Rupbaeb Khong Ngan Sathapattayakam: Adit Patchuban Lae Anakot (The Development of Concept and Design in Architecture: Past, Present, and Future)*; Pussadee Tiptus, *Chang Farang Nai Krung Siam (European Architects in Siam)* (Bangkok: Chulalongkorn University Press, 1998); Pussadee Tiptus and Manop Bongsadadt, *Ban Nai Krungthep: Rub Baeb Lae Kan Plian Plaeng Nai Rob Song Roi Pi (Houses in Bangkok: Style and Change in 200 Years)* (Bangkok: Chulalongkorn University, 1983); Pussadee Tiptus, *Sathapanik Siam: Puen Than Bot Bat Pon Ngan Lae Naew Kid (Po So 2475–2537) [Siamese Architects: Foundation, Roles, Works, and Concepts (AD 1932–1990)]* (Bangkok: Association of Siamese Architects, 1996); ———, *Sathapattayakam…Yon Adit Pinit Patchuban (An Architectural Digest: From the Past to the Present)* (Bangkok: Association of Siamese Architects, 1992).

when a fear of the myth about homogenising power of globalisaiton demonised seemingly imported architectural 'styles'.[1] As a result, they tried to look at the architecture in Thailand since 1932 in retrospect, in order to discover how the architects in the past mediated between modern architectural ideas, which mainly came from the West, and local conditions, given by Thailand's society and environment.

As a result, these pioneering research studies fell into the conventional path of historicising modern architecture in non-western countries by seeing the modern architecture in those countries, in this case: Thailand, as deviations of the original in the West plus some adjustments to suit local climates and cultures. They assembled a broad historical account on architecture in Thailand that was built between 1932 and the 1990s, based on the questions of What, Where, When, How, and Why? However, despite providing a great account of the general picture of modern architecture, the studies have gaps of detail due to a huge number of buildings they cover and the particular limits of each study. For example, Tiptus stated that there is little information on the educational background and architectural ideas of the architects whose careers were active between 1932 to 1957, as her research mainly relied on archival sources and oral history, caused by the lack of archival materials at the time of her research and the fact that most of the architects from that period were dead.[2]

Furthermore, the issue of how architects active from 1932 to 1957 adopted and adapted, architectural ideas from Europe, the place they had studied, reapplying them in the context of Thailand, has generally been portrayed as an adaptation of European architectural ideas to suit the local society and climate.[3] This general claim, without in-depth interpretation and detailed examples, is also a result of the limited amount of information accessible during the time of study, and the fact that scant concern was paid to the issue that, despite similarities of style, the architects

[1] Horayangkura et al., *Phattanakan Naew Khwamkid Lae Rupbaeb Khong Ngan Sathapattayakam: Adit Patchuban Lae Anakot (The Development of Concept and Design in Architecture: Past, Present, and Future)*, pp. 1–6.
[2] Tiptus, *Sathapanik Siam: Puen Than Bot Bat Pon Ngan Lae Naew Kid (Po So 2475–2537) [Siamese Architects: Foundation, Roles, Works, and Concepts (AD 1932–1990)*, pp. 1–30.
[3] Ibid; Horayangkura et al., *Phattanakan Naew Khwamkid Lae Rupbaeb Khong Ngan Sathapattayakam: Adit Patchuban Lae Anakot (The Development of Concept and Design in Architecture: Past, Present, and Future)*.

might not have designed their buildings in Thailand following the ideas learnt from Europe, because of different socio-political, cultural, and technological conditions between the two places.

An aim of this thesis is, therefore, to examine, through new found materials and a new perspective, how those architects received and applied the knowledge and practices from the West to Thailand within the contemporary circumstances, and what was their rationale in doing so. The material is from both architectural and non-architectural fields. The former directly provides evidence for the analysis of the initiation, design, realisation, reception, and inhabitation of projects, while the latter provides not only background but also factors that made the processes happen as they did.

Another issue that will be examined in this thesis is how Thai elite and architects constituted and balanced the dichotomy between things 'western' with things they thought 'Thai' and why they did so. This issue in intellectual debates has been raised by Winichakul in his discussion about the constituted dichotomy of the West's worldly and the Thai's spiritual values, but so far the issue has not been seriously explored in culture and the production of physical objects, including architecture.[1]

Furthermore, by initiating research on the background, architectural education, roles, works, and ideas of the Thai architects from the pioneering generation to those who worked in the 1990s, Tiptus has speculated that the lack of previous studies on the works and ideas of the Thai architects since the pioneering generation was 'perhaps, because of the lack of attention to the people behind the creation of architecture'.[2] This research takes up her speculation as one of the main issues to inform an essential research questions, i.e. what was the role and image of architects in Thailand between the 1930s and 1950s? It seeks to find out whether the attention to the people behind the creation of architecture was really absent. And if so, what were the factors that created such a situation? In sum, this research

[1] Thongchai Winichakul, 'Coming to Terms with the West: Intellectual Strategies of Bifurcation and Post-Westernism in Siam' in Rachel V. Harrison and Peter A. Jackson, eds, *The Ambiguous Allure of the West: Traces of the Colonial in Thailand* (Hong Kong University Press, 2009), pp. 135–152.
[2] Tiptus, *Sathapanik Siam: Puen Than Bot Bat Pon Ngan Lae Naew Kid (Po So 2475–2537) [Siamese Architects: Foundation, Roles, Works, and Concepts (AD 1932–1990)*, p. 1.

wants to clarify how architectural practice and architecture was received and understood by the public.

Another issue that had been overlooked by conventional research studies was the question of 'meanings' in the architecture in Thailand, particularly regarding buildings built between the 1930s and 1950s. This was first tackled in the PhD dissertation by Noobanjong in 2003.[1] By trying to deduce the relationship among power, identity, and architecture, the dissertation opens up a conventional way of understanding modern architecture in Thailand. Yet, the arguments about most case studies in the research would have been more convincing if more primary materials were used to support them. The question of meanings in the architecture of Thailand was then made more recognised in the field by the books of Prakitnonthakan in 2007 and 2009.[2] In his polemical essays, Prakitnonthakan challenges the conventional studies by pointing out their inadequate questioning on 'Why' questions, as well as the pitfalls from the way they answered the 'Why' questions mainly by using evidence from the architects who designed the buildings. He also points out the drawbacks of the clear division between traditional and modern architecture that the studies relied on.[3] Moreover, he denies the way the conventional scholars attached to and tried to categorise the architecture in Thailand between the 1930s and 1950s within the categorisation of styles generated by the history of modern architecture in the western world.[4]

Prakitnonthakan points out that abundant evidence from social sciences, humanities, political sciences, and arts in Thailand needs to be used to examine the meanings embedded in architecture and would lead scholars to understand its history more comprehensively. He uses archival materials from those fields to explain how the architecture in Thailand built from the period under scrutiny has been used by the

[1] Noobanjong, 'Power, Identity, and the Rise of Modern Architecture: From Siam to Thailand'.
[2] Chatri Prakitnonthakan, *Kanmueng Lae Sangkhom Nai Sinlapa Sathapattayakam: Sayamsamai Thaiprayuk Chatniyom (Politics and Society in Architecture: Siam Era, Transforming Thai, and Nationalism)* (Bangkok: Matichon, 2004); ———, *Sinlapa Sathapattayakam Khana Ratsadon: Sanyalak Thang Kanmueng Nai Choeng Udomkan (The People's Party's Art and Architecture: Ideological and Political Symbolism)* (Bangkok: Matichon, 2009).
[3] Prakitnonthakan, *Kanmueng Lae Sangkhom Nai Sinlapa Sathapattayakam: Sayamsamai Thaiprayuk Chatniyom (Politics and Society in Architecture: Siam Era, Transforming Thai, and Nationalism)*, pp. 5–7.
[4] ———, *Sinlapa Sathapattayakam Khana Ratsadon: Sanyalak Thang Kanmueng Nai Choeng Udomkan (The People's Party's Art and Architecture: Ideological and Political Symbolism)* (Bangkok: Matichon, 2009), p. 5.

democratic government to symbolise a clear break with the bygone era of the absolute monarchy.

The orientation towards social history as much as architectural history by Prakitnonthakan pioneered a new methodology to understand history of architecture in Thailand — the history of architecture that is inseparable from the history of the society, especially, in Prakitnonthakan's argument, from politics. This is evident in his own statement that he hopes the history of modern architecture in Thailand could help us re-examine the social history of the country.[1] However, the 'architectural culture' that constituted the use of modern architecture as a political symbol has not been examined by Prakitnonthakan's research. 'Architectural culture', as Roy Landau has suggested, operates under the premise that architecture is not a self-referential discipline engaging only forms and form making but rather a cultural realm that involves institutions, architectural schools, publications, exhibitions, competitions, and professional associations, which constitute the discourses about architecture under particular social and political circumstances.[2]

In order to understand architectural culture more specifically, the materials about all these architectural institutions should be used to inform the study alongside the democratic government's propaganda, popular media, and culture, as well as debates and controversies, with which contemporary architecture was involved. These include not only government documents, but also newspapers and personal accounts. The interaction between these two is what the studies of Prakitnonthakan still take for granted, as he considers mainly the appearance of buildings rather than other aspects such as plans, construction, the way they were received and used by the public, as well as the origin and transformation of architectural ideas adopted by local architects. Without these materials, architecture in its historical studies is reduced to text, a mere system of signs, without any notion of habitability and usefulness, the two main qualities by which, arguably, it should be understood.[3]

On top of that, the issue of transcultural contacts between Thai society and the West is taken by this research as a prevailing circumstance in not only the

[1] Ibid., p. 14.
[2] Roy Landau, 'The History of Modern Architecture That Still Needs to Be Written', *AA Files*, 21 (1991), 49–51.
[3] See a criticism on the reading of architecture as text in Blundell Jones, 'Architecture and Anthropology', p. 22.

background but also the analysis of the events and case studies. Prakitnonthakan's research played down this important issue as he deliberately emphasised the domestic political issue of the wresting between old and new regime as his main focus. The world in the inter-war period went through a traumatic circumstance mainly as a consequence of the First World War that finally led to the second one. Outside Thailand, nationalism, which was also at work within the country, caused major conflicts such as the Turkish War of Independence, the Italian colonisation of Ethiopia, the Japanese invasion of Manchuria, and the Spanish Civil War, all of which challenged the early establishment of internationalism, mainly represented by the ill-fated League of Nations. Modernism in art and architecture, widely recognised as a fruit of internationalism was also affected by this hectic period worldwide, ranging from the expulsion of German Modernists by the Nazis to the invitation of those who fled from that country to the newly established Republic of Turkey and the United States.

The history of architecture in Thailand in this period is like the history of the country itself that, as Sir Josiah Crosby stated, cannot be examined without considering the relation of the country to the Great Powers.[1] And one important point here is that he, as the British diplomat to Thailand from 1934 to 1941, stated that the country's policy regarding the foreign powers was not significantly changed from the period of the old to that of the new regime. Moreover, like the history of modern Thailand, the fact that the country started to engage with western imperial powers seriously in the mid-nineteenth century means that the history of architecture from the 1930s to the 1950s cannot be studied without a thorough understanding of the architecture since the mid-nineteenth century and its legacy that affected the architecture of the period in focus.[2]

As regards the issue of the relationship between imperial western powers and Thai society in relation to architecture, a recent canon on 'western style architecture' in Thailand published by Somchart Chungsiriarak has been so far the most

[1] Josiah Crosby, *Siam: The Crossroads* (London: Hollis & Carter, 1945), p. 50.
[2] Chanwit Kasetsiri pointed out in '2475, Episode 1: Memory', Thai PBS Channel, 25 July 2012, that the history of BE 2475 (1932) incident that put the absolute monarchy under a constitution and its aftermath cannot be understood without an examination of what had happened in the last one hundred years.

completed volume.[1] It has covered the period from 1851 to 1937. By analysing the relationship between style, planning, construction, and socio-cultural circumstances, he argued that western style architecture during that period represented the main characteristics of the Thai people, who were receptive and adaptive, rather than being ideologically committed.[2] By taking this line, he argues that the Thai were always ready to follow the 'superior', in this case, the West, in order to acquire the stage of 'up-to-date', resulting not in 'development' but mere 'transformations' of their architecture to suit the changing notion of 'progress'.[3] He also argues that, at the same time, the old values and beliefs, such as the patronage system, Buddhism, Brahmanism, and superstition were always evident in planning and ornaments of Thailand's western style architecture, but they fostered an illusion that Thailand remained Thailand, and never affected the main principle of the western canon.[4]

The fact that Chungsiriarak ended his focal period in 1937 by marking it as the moment by which Thai idea about constructing western style architecture was firmly settled and had become part of the way of life for every social stratum, has inevitably needed to be examined further. We need to see how the architectural culture actually worked. Apart from the fact that the dominating elite of the country was changed from a monarchy to a democratic government in the momentous decade after the 1932-revolution, architectural practice, school, and publication were all then systematically established for the first time. This raises the question of whether the non-ideological and receptive trend towards the West's superiority in the adoption of western architecture was continued or discontinued; what constituted that process, and how was it done? In response to Chungsiriarak's analysis of how Thai architecture has been changed by western influence, this research takes it the other way around — to examine how western architectural ideas and practice have been changed by Thai society in Thailand.

It is also important to raise another question as to whether the lower middle and lower class, whose buildings were not included in Chungsiriarak's research, also appreciated the idea. This question is important, as the idea and behaviour of the

[1] Chungsiriarak, *Sathapattayakam Baeb Tawantok Nai Siam Samai Ratchakanti 4 Tueng Po So 2480 (Western Architecture in Siam: Rama IV's Reign to 1937)*.
[2] Ibid., pp. 594–99.
[3] Ibid.
[4] Ibid., p. 600.

classes mentioned inevitably affected the ideas and actions of the post-1932-revolution elite, who sought to transplant the modern idea of architecture in the country at a larger scale than under the absolute monarchy. Furthermore, the roles of indigenous spatial practices or rituals and the ways they interacted and transformed or were being transformed by modern knowledge, issues previously undermined by Chungsiriarak, are taken seriously in this research. This could be seen as what Spivak has posited: that subalterns are allowed to narrate the stories previously told only by their superiors.[1]

To start the examination in the first chapter, the way Thai people perceived, gave meaning, and inhabited architecture before the presence of western ideas and practices were established, should be examined not only to form the background of the period in focus but also to introduce and clarify some issues that will be taken to examine the architecture of following periods. Then the transformation and maintenance of those forms, practices, and rituals from the mid-nineteenth century to the 1920s under a range of policies to modernise the country by Siamese Kings will be examined.

The second chapter examines how pioneering Siamese architecture students learnt about architecture, a new concept for Siamese, in Europe during the 1900s and 1930s. Then it will scrutinise how Siamese graduates returned to Siam and tried to fit themselves in the country's building practice under the last absolute monarchy. The third chapter will examine how the Thai architects, once becoming more mature, systematically 'transplanted' the concept of architecture from Europe to Thailand under a new political regime. And the last chapter will provide case studies that show how the concept of architecture transplanted was materialised and received by the public.

[1] Gayatri Chakravorty Spivak, 'Can the Subaltern Speak?', in Cary Nelson and Lawrence Grossberg, eds, *Marxism and the Interpretation of Culture* (Urbana: University of Illinois Press, 1988).

2 Before Architecture

2.1 The old tradition: Building culture and buildings in Siam before the mid-nineteenth century

The title of this chapter could have been 'Architectural culture and architecture in Siam before the mid-nineteenth century' but it would have been misleading. This is because there was no concept of 'architecture' in Siam before the turn of the twentieth century, not to mention 'architectural culture', which, as referring to Roy Landau before, operates under the premise that architecture is a cultural realm that involves institutions, architectural schools, publications, exhibitions, competitions, and professional associations, which constitute the discourses about architecture under particular social and political circumstances.[1] As the concept was imported from Europe after the period in scrutiny, the term 'architecture' is avoided in this chapter.

The statement above is not to say that there was no social, cultural, and political aspect in the buildings in Siam before the turn of the twentieth century. On contrary, this chapter will discuss how 'buildings' were perceived, used, constructed, and how the production of them was controlled at the time under contemporary social, cultural, and political circumstances, in which there was no 'architectural culture', but 'building culture'.[2] The discussion will be done under the basis that concepts of buildings and their related rituals in the traditional Siamese society were embedded in the common 'knowledge' about them. Through the lens of 'the social construction of reality', posited by Berger and Luckman, this knowledge was never questioned by the society as it was taken for granted and was perceived as 'reality'.[3] This caused by the accumulation of sedimented and shared experience of individuals in the same society, in which, at some point, they perceived them as a norm and

[1] Landau, 'The History of Modern Architecture That Still Needs to Be Written'.
[2] Howard Davis defines 'building culture' as a 'coordinated system of knowledge, rules, procedures, and habit that surrounds the building process in a given place and time'. See Howard Davis, *The Culture of Building* (Oxford: Oxford University, 1999).
[3] See Peter L. Berger and Thomas Luckmann, *The Social Construction of Reality: A Treatise in the Sociology of Knowledge* (Harmondsworth: Penguin, 1991).

transferred them from generation to generation.[1] In this sense, each building type had its own meaning, use, and rituals that attached to it, all of which were perceived by the society without the need to have theory about them.

Accordingly, apart from empirical observations that deal with practical aspects of the buildings, this chapter focuses on social, cultural, and political aspects that created the buildings and building culture of early Rattanakosin (Bangkok) period in particular (1782–1851). By doing so, it examines main building types with emphasis on five topics, namely transience, auspiciousness, use, hierarchy, and foreign elements, in order not only to give a picture of what preceded the building culture of the transformation period (1850s–1920s) and the architectural culture of the period in focus of this thesis (1930s–1950s) but also to point out the issues that need to be compared with, and, indeed, affected, what happened in the following periods. Before examining Rattanakosin period, a brief account on the country and its buildings prior to that time is worth giving in order to provide a foundation of what happened afterwards.

Siam and its buildings before Rattanakosin period (sixth century–1782)

The area now known as Thailand is at the centre of the mainland-Southeast Asia. The present name, Thailand or *Prathet Thai*, signifying a meaning that the country is the land of the 'Thai', was created in 1939 by the nationalist government that sought to use the idea of racial homogeneity to unite the country in a difficult time approached by World War II. In order to grasp a brief but critical history of the country, previously known as 'Siam', and its buildings as the background for this thesis, one must look back as far as its early historic period of the area and must realise its multi-ethnic and cosmopolitan background.

The mainland Southeast Asia and the southern and southwest China were the regions that a pool of culture was formed since the pre-historic period. By the first century, Chinese records show that Tai people (note the different between Tai and Thai) who lived in *Muang*, polycentric small scale principalities in much of south and southwest China, had their unique language and advanced civilisation,

[1] Peter L. Berger and Thomas Luckmann, *The Social Construction of Reality: A Treatise in the Sociology of Knowledge*, pp. 85–87.

distinctive from the Chinese.[1] A Chinese record also indicates that the Tai people lived in houses raised on piles above the ground, as opposed to those belonged to Chinese and Vietnamese.[2] Houses raised on piles had indeed been predominant in the mainland and island Southeast Asia since the pre-historic period.[3]

The Tai people, who later brought the core element of what becomes known as Thai culture, however, only arrived in the area now known as Thailand in the tenth century. Prior to that, a classical civilisation of Dvaravati had dominated much of the area between the sixth and the ninth centuries. The civilisation used Mon language, a branch of Austroasiatic family, which is different from the Tai family. The presence of the Tai in the area at the time is unclear as there is no reliable record but they were still likely to settle around the fringes of the Dvaravati's sphere of influence. One important thing is that the animist Tai began to know about Buddhism, the main religion of Dvaravati, derived from India. They practiced the religion alongside their old belief. Remains of Buddhist stupas from this period are scarce and not in a perfect condition to deduce accurate styles, but a bas-relief, found at Muang Fa Daed Songyang, depicting an episode of the Buddha's life includes a building behind the Buddha's throne having gables with ornaments resembling what has become a feature of Thai buildings in subsequent periods (Figure 2.1.2).

In the eleventh and twelfth centuries, Khmer Empire, whose capital was Angkor in present day Cambodia, became the dominant power in the region. The further from Angkor, the lesser the areas had Khmer population, who spoke Khmer (Cambodian), another language of Austroasiatic family, as the dominant. Therefore, the increasingly infiltrating Tai population, the existing Mon, the Khmer, and others cohabited in the areas under the governors mostly sent from Angkor. Under the Khmer's rule, the Tai, who gradually became the majority of the region, engaged more with Buddhism and Brahmanism, another religion derived from India. However, the original animism still persisted. Land spirit still needed to be pleased by offering.

[1] David K. Wyatt, *Thailand: A Short History*, 2nd ed. (New Haven: Yale University Press, 2004), p. 384.
[2] Ibid.
[3] K. G. Izikowitz, P. Sørensen, and Nordiska Asieninstitutet, *The House in East and Southeast Asia: Anthropological and Architectural Aspects* (London: Curzon, 1982), pp. 7–14.

Figure 2.1.1: This map shows the boundary of present day Thailand among its neighbouring countries.[1] Locations and historic cities mentioned in this chapter are also labelled in the map.

[1] Terrain map from Google Maps, labelled by Chomchon Fusinpaiboon

Figure 2.1.2: *Bai Sema*, found at Muang Fa Daed Songyang, Kalasin Province, Thailand, a bas-relief used to define the ecclesiastic boundary in a Buddhist monastery, from Dvaravati civilisaiton (sixth–ninth centuries).[1] It depicts an episode of the Buddha's life. Note the building behind the Buddha's throne having gables with ornaments resembling what has become a feature of Thai buildings in subsequent periods.

[1] Srisak Wanliphodom, *Ruen Thai Ban Thai (Thai Houses Thai Homes)* (Bangkok: Muang Boran, 2009), p. 116.

One of the most important provincial outposts of Angkor in the area now known as Thailand was Lopburi, previously a major principality of Dvaravati civilisation. A bas-relief panel at Angkor Wat depicts mercenaries from Lopburi, referred to as '*Sayam* (Siam)'. And this is one of the unclear origins of the name of the country called by foreigners.

Khmer temples and shrines were built in Siam and across the areas from the southwest of the Chao Phraya River plain to the Khorat Plateau serving multi-ethnic population, including the majority Tai (Figure 2.1.3). Some of these edifices, such as Prasat Hin Phimai (Figure 2.1.5), were built on existing sacred sites. This means Khmer's sandstones and laterite walls were built on remnants of brick foundations previously belonged to the existing buildings.[1] The mixture of Khmer and Mon influence in the edifices' designs and construction shows not only a mere demonstration of new administrative power but also the nature of local craftsmanship that compromised the new style and construction method with local labour and culture. As Wanliphodom has posited, the Khmer authority did not merely demonstrate its superiority upon the locals but inserted itself as a patron of them by creating elaborate places of worship, serving the locals.[2]

At the same time, the Mandala layout, symbolising the ideology of, as Tambiah coined, 'Galactic Polity', was firmly adopted and applied to the sacred edifices (Figure 2.1.4, Figure 2.1.5). Trai Phum, the Buddhist-Brahmin ideology about the universe, in which centre located Mount Phra Sumaen surrounded by continents, stood for a symbolic arrangement of a centre and its surrounding satellites in reality. The symbol of it demonstrated in the layout of the temples and shires reassured its employment in every socio-political context from the spatially deployment of a capital region and its provinces, as well as their decreasing autonomies, to the social arrangement of a ruler, princes, nobles, their respective retinues, and commoners.[3]

[1] Sarah Talbot and Janthed Chutima, 'Northeast Thailand before Angkor: Evidence from an Archaeological Excavation at the Prasat Hin Phimai', *Asian Perspectives*, 2 (2001), 179–94.
[2] Wanliphodom, *Ruen Thai Ban Thai (Thai Houses Thai Homes)*, 24.
[3] Stanley J. Tambiah, 'The Galactic Polity: The Structure of Traditional Kingdoms in Southeast Asia', *Annals of the New York Academy of Sciences*, 1 (1977), 69 – 97 (p. 79).

Figure 2.1.3: Prang Sam Yot, Lopburi, Thailand.[1] An example of Khmer Buddhist temples in Siam built in the reign of King Jayavaraman VII of Angkor (1181–1220). It was built with sand stones and laterite blocks, originally plastered and decorated with stucco, probably by Mon craftsmen.

[1] Clarence T. Aasen, *Architecture of Siam: A Cultural History Interpretation* (Kuala Lumpur; New York: Oxford University Press, 1998), p. 116.

Figure 2.1.4: A conceptual diagram of the Buddhist-Brahmin universe having Mount Phra Sumaen at the centre that is reflected in the mandala plan of Khmer edifices.[1]

Figure 2.1.5: Mandala plan of Prasat Hin Phimai, Phimai, Thailand.[1] **An important example of Khmer temples in Siam (eleventh–twelfth century)**

[1] Joti Kalyanamitra, *Sathapattayakam Baeb Thai Doem (Traditional Thai Architecture)* (Bangkok: The Association of Siamese Architects, 1996). Reprinted in Prakitnonthakan, *Kanmueng Lae Sangkhom Nai Sinlapa Sathapattayakam: Sayamsamai Thaiprayuk Chatniyom (Politics and Society in Architecture: Siam Era, Transforming Thai, and Nationalism)*, p. 42.

The thirteenth century saw the decline of the Khmer Empire. Principalities with Tai leaders gradually became autonomous. A Tai ruler, Pokhun Mangrai, established Chiang Mai or 'new city', as the capital of his kingdom in the Ping River plain in 1292. Another kingdom, Sukhothai, whose centre was previously a Khmer regional outpost in the north of the Chao Phraya River plain, also expanded its sphere of influence as far as Nakhon Sri Thammarat in the north of Malay peninsula rapidly in the reign of Pokhun Ramkhamhaeng by the end of the thirteenth century. Styles, ideological principles, and construction methods of previous empires were adopted. Further developments resulted in what might be called distinctive Sukhothai styles (Figure 2.1.6). Bell shape stupas were also built as the religious connection with Lanka (Ceylon) was well established. By the intermingling with other cultures for more than three centuries since the Tai first infiltrated into this area, their culture was now clearly unique, differentiating from those who remained in south China and other regions.

By the mid-fourteenth century, the city of Ayutthaya was established near the mouth of the Chao Phraya River at the Gulf of Siam, amidst the confusion in Chiang Mai and the decline of Sukhothai's power upon its subordinate states after Pokhun Ramkhamhaeng's death, not to mention former empires that fail to disarray. Ramathibodi I, the first King of Ayutthaya, whose ethnic origin remains unclear, pulled together Tai labour from the western portion of the river plain, Khmer prestige and statecraft from Lopburi and the provinces in the east, and Chinese and other Asian merchants to build up the kingdom. Wars with neighboring kingdoms from Sukhothai to Chiang Mai, and crumbling Angkor entailed regular mobilisation of multi-ethnic subjects, the important resource for the vast-land-scarce-labour region, across the kingdom. The mobilisation also involved various schools of craftsmen that brought their own techniques and styles to other regions. In the court, special vocabularies based on Khmer and Sanskrit was spoken. The prestigious language, alongside Brahmanical conducts and ceremonies, raised the King far above his subjects, assuming the status of a divine.

[1] Aasen, *Architecture of Siam: A Cultural History Interpretation*, p. 46.

Figure 2.1.6: A reconstruction of a *Wihan* (congregation hall) of Sukhothai period (thirteenth–fifteenth century), based on archaeological research, at Ancient City, an outdoor museum in Samut Prakan. It is an example of Tai *Wihan*, built in Sukhothai Kingdom, all of which have been destroyed.[1]

[1] 'Sukhothai Architecture', Faculty of Architecture, Chiangmai University, http://statics.atcloud.com/files/comments/94/941214/images/1_original.jpg [accessed date 2 August 2013].

The Khmer practice was even strengthened after Ayutthaya seized Angkor during 1431 and 1432, when more Khmer scribes, court Brahmans, jurist, chamberlain, accountants, physicians, astrologers were brought back to the capital. Khmer traces including mandala plan and features in prestigious edifices also remained prominent, now mixing with the Tai's components. The major administrative reform in the reign of King Borommatrailokanat (1448–88) brought a more systematic and centralised kingdom. Principles and a variety of styles from the capital were applied in royal buildings of the regions.

Ayutthaya's power and prosperity was built up by its advantage location near the sea, its fertile ground, and its emergence when other precedent powers declined. The kingdom's exports were forest products, such as deer hides, sappanwood, eaglewood, lac and benzoin; rice, and spices, while imports were Indian cloth, accessories, luxury goods, firearms, and metals. Ceramics imported from China were in great demand, as Guy Tachard, a member of the first French envoy to Siam in 1685 described the interior of an official's house that 'which way forever one casts his eyes, there was nothing to be seen but fine China of all sizes, placed in niches'.[1]

By the beginning of the seventeenth century, Ayutthaya's international relations reached as far as Europe. The Ayutthayan court continued the practice of appointing foreigners to assist their administration, now including Sheik Ahmad from Persia at the turn of the seventeenth century, and a Greek, Constantine Phaulkon, at the end of the century, both of which were responsible for the finance and foreign affairs. Portuguese mercenaries were also regularly employed. Throughout the century, Ayutthaya also welcomed Dutch, French, and English to trade and evangelise. The court sent envoys to the Netherlands in 1608 and to the court of Louis XIV of France in 1680 and 1686. The purposes, as claimed by King Narai (reigning 1656–88), was to establish a firm and friendly relationship with, and to obtain exotic stuffs from the western kingdoms like what Siam had done with

[1] Guy Tachard, *A Relation of the Voyage to Siam, Performed by Six Jesuits Sent by the French King to the Indies and China in the Year 1685 with Their Astrological Observations and Their Remarks of Natural Philosophy, Geography, Hydrography and History* (London: T.B. for J. Robinson and A. Churchil, 1688). Quoted in Dawn F. Rooney, 'Chinese Export Ware in Thailand', in *Siam in Trade and War: Royal Maps of the Nineteenth Century*, ed. by Narisa M. R. Chakrabongse (Bangkok: Bangkok: River Books; London: Thames & Hudson, 2006), p. 65.

China, Persia, and Japan before.[1] Kosa Pan, the Siamese ambassador to France in the 1686 envoy, recorded exhaustively about how advanced and prosperous the kingdom of Loius XVI was.[2]

The prosperous and cosmopolitan nature of Ayutthaya was by now sufficient to support a clearer differentiation of its population from the Tai ancestors of the majority. Simon de La Loubère, an ambassador from the court of Louis XIV recorded that the locals now generally referred to themselves as 'Thai' (not Tai), while 'Siamese' was generally what foreigners called them, so was the name of the kingdom — Siam.[3]

As regards buildings in Ayutthaya, apart from glittering temples and royal buildings built with bricks, foreign records described houses of the majority around the capital city of Ayutthaya as wooden houses raised on high piles.[4] Poor people used bamboo, while rich people and noblemen used wood to construct their houses. Gable roofs were made by attap palm leaves or terracotta. Apart from temples and palaces, a European observer might perceive that Siamese houses were dirty and untidy[5], due to their mainly non-durable materials and their savage settings, such as muddy approaches, all of which contradicted to the perceived idea of good European architecture in terms of its materials, setting, and hygiene. The use of these general features was carried onto the next period of Rattanakosin and became what might be considered as typical type of traditional Siamese houses in the central plain region. Apart from that, European's buildings, such as houses, churches, and observatories, as well as Muslim's shops, many of them built with bricks, added a variety of Ayutthayan scenery.

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[1] Alain Forest, *Les missionnaires Francais au Tonkin et au Siam (XVIIE–XVIIIE Siecles)* (Paris: L'Harmattan, 1998), pp. 429–35.
[2] See C. Chaophraya Kosathibodi and Dirk van der Cruysse, *The Diary of Kosa Pan (Ok-Phra Wisutsunthon), Thai Ambassador to France, June-July 1686*, (Chiang Mai: Silkworm, 2002).
[3] Suchit Wongthet, *Khon Thai Ma Chak Nhai? (Where Did the Thais Come From?)* (Bangkok: Matichon, 2005), p. 217.
[4] François Caron, Joost Schouten, and Roger Manley, *A True Description of the Mighty Kingdoms of Japan and Siam* (London: Robert Boulter, 1671), pp. 124–25.
[5] Engelbert Kaempfer, *The History of Japan, Together with a Description of the Kingdom of Siam 1690–92* (Glasgow: James MacLehose, 1906), p. ixxxix.

Figure 2.1.7: Gold-appliqué-on-black-lacquered doors of a Buddhist script cabinet in late-Ayutthaya period (seventeenth–eighteenth century) depict a European and a Persian.[1]

[1] National Museum, Bangkok

Figure 2.1.8: Prosperous Ayutthaya, painted by Alain Manesson Mallet (1630–1706), published in Description de l' Univers, a five volume-world history (1683).[1]Figure 2.1.9: A European engraving shows Siamese people, a palace with multi-tiered gables and galleries, and a house on piles by the water.[2]

[1] Tricky Vandenberg, 'Mapping Iudea: A Cartographic Exercise', http://www.ayutthaya-history.com/Essays_MappingIudea.html [accessed date 12 August 2013].
[2] Simon de La Loubere, *Du Royaume de Siam. Par Monsieur de la Loubere, Envoye extraordinaire du roy de Siam en 1687 & 1688* (Paris: Chez Abraham Wolfgang, 1691), pp. 72, 78, 96.

Figure 2.1.10: Plan of Wat Chai Watthanaram (1630), Ayutthaya.[1] The main *Phra Prang* at the centre of the mandala plan symbolises Mount Phra Sumaen, the centre of Buddhist-Brahmin universe. *Ubosot*, the ordination hall, faces east.

Figure 2.1.11: Wat Chai Watthanaram (1630), Ayutthaya.[2] The main *Phra Prang* at the centre of the mandala plan symbolises Mount Phra Sumaen, the centre of Buddhist-Brahmin universe. The destroyed *Ubosot* faces the river on the east.

[1] Aasen, *Architecture of Siam: A Cultural History Interpretation*, p. 122.
[2] Karl Döhring, *Buddhist Temples of Thailand* (Bangkok: White Lotus, 2000), p. 186. The book was originally published as *Buddhistische Tempelanlagen in Siam* (Bangkok-Berlin: Asia Publishing House-Walter de Gruyter & Co., 1920).

The power and prosperity of Ayutthaya were developed alongside its rivalry with Burma since the first war between the two in 1548. The era of Ayutthaya was brought to the end when the capital was captured and burnt down by the Burmese army in 1767. The governor of Tak named Sin, the son of a Chinese father and Siamese mother, unified the shattered territories of the falling kingdom and regained its independence from Burma. He ascended to the throne, entitled himself as King Taksin, and moved the capital to Thonburi, a port town nearer to the mouth of the Chao Phraya River, in the same year. The Thonburi Kingdom lasted for fifteen years until Chao Phraya Chakri, an important minister, overtook the throne and established a new dynasty, Chakri, in 1782. The capital was then moved from Thonburi to Bangkok on the other side of the Chao Phraya River. Then it started the Rattanakosin period.

Building culture and buildings in Siam at early Rattanakosin period (1782–1851)

Socio-political and cultural context of Siam under early Chakri Dynasty (Rattanakosin Period) resembled those of the late Ayutthaya. It is worth noting again that the Siamese syncretised not only Buddhism but also Brahmanism with their original animism.[1] Trai Phum, the Buddhist-Brahman universe was still believed and the King, as a lived god, was at the top of the political and social strata. Buddhism focused more on doctrines but ceremonies, whereas Brahmanism exploited ceremonies extensively. As a result, the Siamese, especially commoners, engaged Buddhism more on their everyday life, such as livelihood, relationship to parents, cousins, and others in the society, dressing and dining manners, etiquettes, and, indeed, spatial practice. These principles were sophisticatedly regulated for Buddhist monks so the Siamese who had already ordained brought back home and practiced it until it has become the norm of the society. At the same time, like previous periods, Brahmanism engaged more with the Siamese ceremonies, especially in those of the court, whose divine status over its subjects needed such elaborate ceremonies to support. This could be explained by Clifford Geertz's notion of 'theatre state', also being practiced in Bali — a Brahmanic kingdom, that

[1] For details of the syncretisation, see Niels Mulder, *Inside Southeast Asia: Religion, Everyday Life, Cultural Change*, 2nd edn (Amsterdam: Pepin, 1996).

royal ceremonies were not a mere symbol of politics but the politics itself.[1] Like previous periods, all socio-political, cultural and environmental factors of Siam shaped its buildings in early Rattanakosin period.

The following section will discuss how the socio-political, cultural and environmental factors shaped Siamese buildings and building culture. It should be noted that this account focuses on Bangkok, the capital city, where the earliest transformation of buildings and building culture occurred in the following periods. Buildings in the central region of the kingdom shared most of building features and practices with those in Bangkok while those in other regions shared a few features and practices but had their own variations in choices of material, pitches of roof, interior lay-out and hierarchy in spaces, decoration, as well as in domestic rituals.[2]

But before discussing about the building culture,a general picture of the built environment of Siam in relation to its landscape is worth providing. Before the mid-nineteenth century, the parallel images of urban and rural areas in Siam, including Bangkok, were not much visibly differentiated from each other (Figure 2.1.12). In other words, instead of the sharp mark of where a city ended and a countryside started, the urban and rural lives coexisted in the city, where agriculture was interwoven with residential and commercial areas.[3] As a result, a denser area of Bangkok was more like a dense rural area rather than an urban area in a European sense.[4]

[1] See Clifford Geertz, *Negara: The Theatre State in Nineteenth Century Bali* (Princeton; Guildford: Princeton University Press, 1980).
[2] See Wanliphodom, *Ruen Thai Ban Thai (Thai Houses Thai Homes)*, p. 92.
[3] Waterson, *The Living House: An Anthropology of Architecture in South-East Asia*, p. xix.
[4] See M. L. Chittawadi Chitrabongs, 'Cleanliness in Thailand: King Rama V's 'Strategy of Hygiene' From Urban Planning to Dress Codes in the Late-Nineteenth-Century' (unpublished doctoral thesis, Open University, 2010).

Figure 2.1.12: A map of Bangkok, originally published in 1854, shows that waterways were the main mean of transportation and defense.[1] Even though low density-areas of orchards and houses were outside the city wall, the dark-rendered-areas inside the city wall did include agriculture alongside residences and commerce, making the city like a dense rural area rather than a city in European sense.

[1] Jean-Baptiste Pallegoix, *Description of the Thai Kingdom or Siam: Thailand under King Mongkut* (Bangkok: White Lotus, 2000), p. inner back-cover.

Before looking in detail, it is worth reiterating again that this discussion tries to demonstrate how buildings were perceived by the society at the time. However, there is a limitation and precaution in doing this. The limitation is that primary accounts about how buildings, especially houses, were built and used in early Rattanakosin period are scarce. This is because of the absence of specialised records on the subjects. This research, therefore, has to rely on a limited number of contemporary accounts, such as mural paintings, literature, foreigners' memoirs, and a couple of houses from the period that still survive. In addition to that, it needs to rely on secondary accounts which are research on vernacular houses conducted during the 1960s to 1980s when a large number of houses in countryside were still built and inhabited in relatively the same way as they had been done in the past. The precaution is that given the information taken to account is both primary and secondary, it is risky to take some interpretations of recent scholars who imposed an empirical interpretation upon 'traditional' buildings based mostly on scientific commonsense of the present time as a fact. This can overshadow other cultural aspects that require a look from different angles. This situation can happen with the primary accounts by foreigners as well. This research is sensitive to this issue and whenever an empirical assumption from existing research is likely to involve, it will be clearly acknowledged. To start with, the most basic building type — house — will be discussed.

Houses

It is possible to say that, apart from the house, there were almost no other secular building types in early Rattanakosin period. The use of houses, like outdoor space, could be, however, 'multi-purposed' and 'ephemeral'. For example, governmental officials used their own houses as their offices. And people also used their houses for ceremonies, feeding animals, collecting crops, while recreations, festivals, trades and shopping were normally done temporarily along the city's waterways and open spaces, with some shading from umbrellas and trees.

But firstly, it is important to point out that nowadays the English word 'house' is translated into Thai as '*Ban*'. But '*Ban*' was originally referred to the boundary of a house or a village. The house itself, in which people lived, was called '*Ruen*'.

Houses in the central plain, especially in Bangkok, which is located in the low land near the mouth of the Chao Phraya River, could be categorised into three main types: raft house, boat house, and detached house. They were all vernacular buildings — the buildings that reflected the culture of the majority and how they lived their lives, rather than grand designs.[1] Despite different types of house, they were usually located near or on water ways, the main trade and transportation route, and the source of daily exploitation for washing, bathing, and gardening.

The observation of houses in Bangkok by Jean-Baptise Pallegoix, a French priest whose residency in Siam spanned across the 1830s, well reflects the significance of water in relation to Siamese dwelling:

> Nearly a quarter of the population stays in boats of all shapes and sizes. These are families of small merchants stationed permanently in the capital or trading from place to place. They are so used to staying on their boats days and night that there must be an exceptional case for them to go on land. […] The Thai bathe two to three times a day. Sometimes they plunge in the water; sometimes they sprinkle their body beginning by their heads. These frequent ablutions are very salutary and keep them very clean.[2]

Raft houses too, were dominant along the banks of Chao Phraya River and canals (Figure 2.1.13). They were inhabited by many classes from noblemen, merchants, to commoners. A small number of European traders lived on raft houses too before they were allowed by the King to build houses on land.[3] The houses sat on bamboo rafts, linked with other raft houses and moored at the bank. The linkages were removable when the owners of houses wanted to change the location, due to their work or business.

[1] See Rapoport, *House Form and Culture*.
[2] Pallegoix, *Description of the Thai Kingdom or Siam: Thailand under King Mongkut*, pp. 105–12.
[3] Frederick Arthur Neale, *Narrative of a Residence at the Capital of the Kingdom of Siam* (London: Office of the National Illustrated Library, 1852), pp. 31–32.

Figure 2.1.13: An engraving depicts raft houses and boat houses along the Chao Phraya River in Bangkok in 1858.[1]

[1] Henri Mouhot, *Voyage dans les Royaumes de Siam, de Cambodge, de Laos et autres parties centrales de l'Indo-Chine: Relation extraite du journal et de la correspondance de l'auteur par F. de Lanoye, etc* (Paris: Librairie de L Hachette, 1872), p. 22.

Despite the abundance of raft houses and boat houses, detached houses were the majority. Most of them were built with wood as masonry in house building was not a norm for Siamese. Apart from the abundance of timber, Pramot has speculated that the Siamese's inclination to nature of which impermanence and constant change was the norm originally prevented their needs to build houses with more durable materials.[1] Buddhist teachings towards transience of things support this point.

The construction method that mostly employed prefabrication, implied by the traditional use of the word '*Prung Ruen*' (assemble the house), demonstrates that a house could be quickly assembled or dismantled and transported to another site (Figure 2.1.16).[2] Frederick Arthur Neale, once an English resident in Bangkok during the 1820s and 1840s, recalled that three hundred houses burnt down by a fire were rebuilt within three days.[3] Pallegoix also recorded at relatively the same period that fire sometime burnt down four hundred to five hundred houses but everything was rebuilt within seven to eight days with the help from relatives and friends of the owners.[4] This kind of buildings and social relations made permanent and durable houses not extremely necessary. The Siamese, therefore, only built temples in masonry with elaborate decoration as they were the offerings to Buddhism and were deemed to last.[5]

But among the wooden detached houses, there was a differentiation by the status of the owners in relation to construction materials. The types of wood used in the construction differentiated the economic status of the owners — normal commoners and the poor, and the rich and nobles. The former built their houses with bamboo. Their houses were called *Ruen Krueng Phuk* (the house that is built with tied-up components). The latter built theirs with wood and called them *Ruen Krueng Sab* (the house that is built with dovetailed components).

[1] Khukrit Pramot, *Laksana Thai*, vol 4 (Bangkok: Bangkok Khukrit, 1998), p. 291.
[2] Sumet Jumsai and R. Buckminster Fuller, *Naga: Cultural Origins in Siam and the West Pacific* (Singapore ; Oxford: Oxford University Press, 1988), p. 85.
[3] Neale, *Narrative of a Residence at the Capital of the Kingdom of Siam*.
[4] Pallegoix, *Description of the Thai Kingdom or Siam: Thailand under King Mongkut*, p. 32.
[5] Nit Hinchiranan, '*Sthapattayakam Thai* (Thai Architecture)', (paper presented at the Sirindhorn Conference, Chulalongkorn University Auditorium, Bangkok, 1993).

Bamboo houses were, therefore, the houses of the majority. Being lifted on piles, they usually comprised only one *Hong* (room), a *Rabiang* (front gallery), and sometime a small *Chan* (deck) next to it, all of which were multi-purposed spaces. The houses were built almost entirely with many forms of bamboo and roofed with nipa leaves thatch. Before 1861 when King Mongkut (reigning 1851–68) declared a new principle of compensation, all the land in Siam literally had belonged to the King and the inhabitants had been displaced from a land with the compensation of nipa leaves equivalent to the size of their houses whenever the King had wanted.[1] This is not to mention a comprehensive system of property rights in land, in which transferable deeds was adopted, that was issued only in 1892.[2] Accordingly, unsettled families were likely to build their houses with the least permanent material until they settled down permanently somewhere, which of course related to their social and economic status.

As regards wooden houses, they could be built as a single unit for a nucleus family like bamboo houses or a combination of many units linked with a deck for an extended family (Figure 2.1.14, Figure 2.1.15). The arrangement and size of the units varied and was extendable when the family size increased. This transient quality was reflected in the phrase *Pluk Ruen* (growing the *Ruen*), signifying the idea that a house can be grown, and therefore, can grow more.

A wooden house of a nuclear family, which was a family with a husband, a wife, and their unmarried children, usually comprised a *Hong Non* (bedroom), a *Rabiang* (gallery), a *Chan* (deck), and a *Hong Krua* (kitchen).[3] A nuclear family could become an extended family when one of the children got married.[4] A couple might build a new house in the parents' plot later on. Alternatively, new units were added to the existing house connected with the existing units by a deck. The couple

[1] See the Royal Decree Announcing the Grant of Lands, Houses, Rice Fields, and Orchards, 7 April 1860 in Bangkok, National Archives of Thailand, R 4, J S 1222. Quoted in Chatthip Nartsupha and Suthy Prasartset, *Socio-Economic Institutions and Cultural Change in Siam, 1851–1910: A Documentary Survey* (Singapore: Institute of Southeast Asian Studies in co-operation with the Social Science Association of Thailand, 1977), pp. 1–3.
[2] L. Small, 'The Political-Economy of Productivity - Thai Agricultural-Development, 1880–1975', *Journal of Asian Studies*, 4 (1984), 798–99.
[3] Reuthai Chaichongrak, *The Thai House: History and Evolution* (Bangkok: River; London: Thames & Hudson, 2002), p. 25.
[4] For commoners, a Siamese man normally moved into his parent-in-law's house after marriage. He was therefore an outsider, normally working outside the house, socialising with people at markets and festivals. See Wanliphodom, *Ruen Thai Ban Thai (Thai Houses Thai Homes)*, p. 73.

would either occupy the new rooms or leave them to be a new living and ceremonial area, while they still shared the parents' room separated by partitions.[1]

It was, however, also possible that a couple would move out of the parents-in-law's house. But before doing so, after completing *Su Kho*, the introduction of the prospective bridegroom to the prospective bride's parents by a person of ranks, the prospective bridegroom had to build a small house on the land of his parents-in-law, in which after the wedding ceremony he would live for a month or two before he could take his wife to anywhere he wanted.[2] If the couple did not take their house with them, the abandoned house would have been used for other purposes or would have been dismantled to donate to a Buddhist monastery. All these scenarios signify the concept of transience of the house as well as the household.

It has been discussed that wooden houses shared features and construction method but different in their sizes, decoration, and organisation. However, no matter how rich some commoners were, they did not build houses with some particular features, such as *Cho Fah*, *Bai Raka*, and *Hang Hong* on the roofs, and materials, such as glazed ceramic tiles, that resembled those of palaces and temples. This was a practice of hierarchy represented in buildings of stratified societies like Southeast Asian kingdoms that allowed aristocracy to differentiate themselves from commoners.[3] As there has been no formal regulation discovered so far, Hinchiranan speculated that it was an unwritten rule, being accepted and practiced by the society.[4] People who broke the rule could be considered '*Mai Ru Chak Thi Tham Thi Sung*', literally means 'not knowing the low and high places'. There was also a phrase saying that '*Narok Cha Kin Hua*' (Hell will eat their heads) for the ones who broke the rule. In this sense, the unwritten rule created a socially constructed reality regarding the hierarchy of both buildings and the society.[5]

[1] Chaichongrak, *The Thai House: History and Evolution*, p. 25.
[2] Pallegoix, *Description of the Thai Kingdom or Siam: Thailand under King Mongkut*, p. 116.
[3] Waterson, 'Houses and Hierarchies in Island Southeast Asia', p. 58.
[4] Hinchiranan, '*Sthapattayakam Thai* (Thai Architecture)', p. 15.
[5] See Berger and Luckmann, *The Social Construction of Reality: A Treatise in the Sociology of Knowledge*.

Figure 2.1.14: One of the simplest forms of a Siamese house, raised on piles, for a nucleus family, having a room in which a partition separated spaces, and a front gallery on a lower step, in which a kitchen was located at a corner.[1]

Figure 2.1.15: A mural painting at Wat Phra Chetuphon Wimonmangkhalaram, a Buddhist monastery in Bangkok, painted in the reign of King Nangklao (1824–51), shows a house occupied by an extended family.[2] **Two units of bedrooms were placed adjacent to each other connected by a gallery. A deck at a lower level is also visible.**

[1] National Archives of Thailand. The drawing was drawn in 1916. The creator is unknown.
[2] Photo by Chomchon Fusinpaiboon

Figure 2.1.16: A 1940-illustration of a scene in *Khun Chang Khun Phaen*, an early nineteenth century epic poem written from folklore, depicting a dismantling of an abandoned house for donation to a Buddhist monastery.[1]

[1] *Khun Chang Khun Phaen*, (Bangkok: Khlang Witthaya, 1963), unnumbered p. 10

Apart from the wooden houses mentioned, masonry houses did exist in early Rattanakosin period. They were initially introduced by wealthy Chinese settlers, who migrated to Siam to be ennobled merchants, entrepreneurs, and traders amidst the extensively flourishing trade between two countries in the reign of King Nangklao (1824–51). They lived in courtyard houses with somehow fixed functional spaces, such as the main hall for ancestor altar, reception, dining room, adult bedrooms, children bedrooms, servants, kitchen, and storage. They built houses with timber columns and timber roof structure but brick walls. The migration of the Chinese was more accelerated by natural disasters, economic problems, and the suppression of Tai Ping Rebellion in China by Qing Dynasty. As Chinese labour who could build masonry houses also migrated to Siam, some Siamese started to adopt masonry in their house building, resulting in what might be called as Sino-Siamese hybrid style.

The durable and permanent masonry houses were started to be adopted by the well-to-do because moving houses were not much a norm for them. On contrary to most commoners, a wife (or wives) normally moved in to the wealthy or ennobled husband whose social and economic status was secure. The increasing density of Bangkok that made fire more threatening also perhaps increased the awareness of durability. A large fire on 24 March 1831 destroyed a large number of palaces and noblemen houses.[1] In sum, well-to-do Siamese built masonry houses for both durability and expressing their high status.

In addition, Pallegoix mentioned that Siamese noblemen usually build brick houses that are 'very elegant on the outside but dark inside, having only small plank windows, except for the reception halls, which have walls of trelliswork or railings'.[2] The flourishing trade with China also imported many construction materials, such as ceramic tiles, stone pavement, lampshades, furniture, and tableware. Some popular Chinese ceramics, such as Bencharong and Lai Namtong that incorporating Siamese patterns, were designed particularly for the Siamese market.[3]

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[1] Tiptus and Bongsadadt, *Ban Nai Krungthep: Rub Baeb Lae Kan Plian Plaeng Nai Rob Song Roi Pi (Houses in Bangkok: Style and Change in 200 Years)*, p. 29; Chao Phraya Thiphakornwong, *Phraratchapongsawadan Krung Rattanakosin Ratchakanthi 3 and Ratchakanthi 4 (Royal Chronocles of the 3rd and 4th Reigns of Rattanakosin Period)* (Bangkok: Khlang Wittaya, 1963), p. 115.
[2] Pallegoix, *Description of the Thai Kingdom or Siam: Thailand under King Mongkut*, p. 112.
[3] Rooney, 'Chinese Export Ware in Thailand', p. 65.

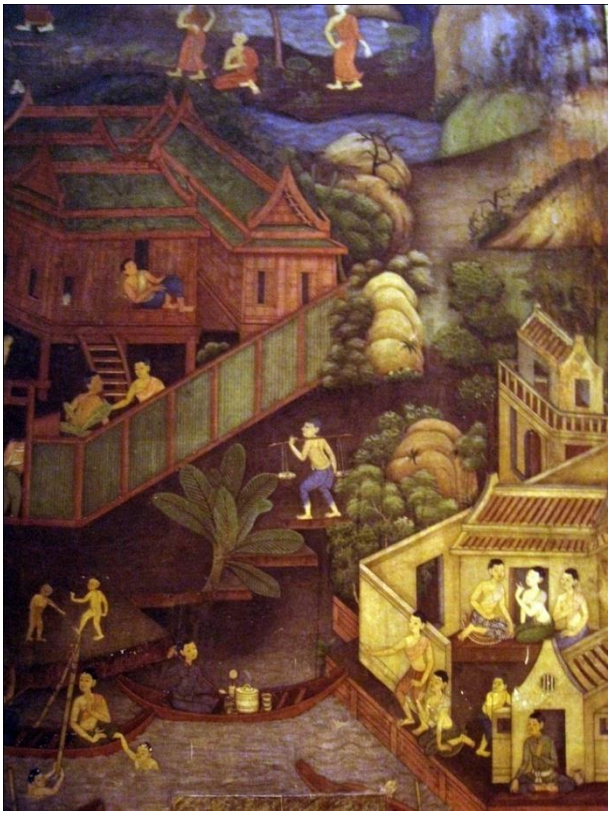

Figure 2.1.17: A mural painting at Wat Phra Chetuphon Wimonmangkhalaram, a Buddhist monastery in Bangkok, painted in the reign of King Nangklao (1824–51), shows a wooden house of an extended family having many rooms linked with a deck and galleries; and a masonry house showing a Sino-Siamese hybrid style.[1]

[1] Photo by Chomchon Fusinpaiboon

It is worth quoting Pallegoix's observation of Siamese well-to-do's houses again here to see their favour of both domestic and imported commodities:

> In respect to the rich, they also possess sculpted beds, carpets, mattresses, curtains, furniture in mother-of-pearl inlay work, lances, rifles and other weapons, small Chinese tables, caskets, small copper tables to lay foodstuffs on and, in addition, spittoons, pots, cups and plates of China porcelain.[1]

It has been shown here that Chinese immigrants and imports played an important part in well-to-do-Siamese life by the mid-nineteenth century regarding houses and commodities. The Siamese were inspired by the Chinese. They employed the Chinese to build their houses and bought commodities from China. They did not, however, bother to do these things themselves.

Spatial articulations and practices in the Siamese house

Now the spaces in Siamese houses as well as the way they were arranged and used will be discussed in detail. As regards the detached house, wooden houses were generally built on piles, while masonry houses were built on a masonry base. The height of the main floor was approximately the height of a man. This was enough to escape the flood and poisonous animal.

The underneath space was used mainly for storage, parking carts, manufacturing crops or goods. Inhabiting spaces upstairs were defined by step changes. The highest level was always bedroom. Between a bedroom and a deck was located an 'in-between' space, gallery, which was used for domestic activities such as eating, studying, and chatting, during most of the day. The gallery was 30–40 cm. lower than the bedroom and was 30–40 cm. higher than the deck. These step changes allowed inhabitants to sit on the higher levels and place their feet on the lower level without chairs or benches.[2] The deck was used for drying food, placing rain water containers, and placing tree pots, flower pots, and ceramic fish tanks.[3]

Beyond the discussion about functional aspects, a cultural aspect of the raised main floor and the step changes on it is worth pointing out. The way spaces were

[1] Pallegoix, *Description of the Thai Kingdom or Siam: Thailand under King Mongkut*, p. 112.
[2] Pramot, *Laksana Thai*, vol 4, p. 298.
[3] *Khun Chang Khun Phaen*, pp. 394, 69.

defined vertically related to the custom of hierarchy in Siamese culture. One's head was considered the highest and most exalted part of a person relating to one's mind and spirit, whereas one's feet were the lowest and impure. Therefore, elevating the main floor of a building literally put one's head further from people's feet. Accordingly, buildings had only one main floor and the underneath space was not for habitation as it would have put one's head under others' feet. As mentioned before, hierarchy was also involved with the social status. Siamese commoners, therefore, had to stay lower than noblemen, and no one could be higher than the King; this was certainly applied to their houses' height.[1]

The further differentiation between floor levels on the main floor guided the inhabitants and guests about where and how they should walk, crawl, sit, sleep, and cook in relation to other people on the house. This conformed to the same principle of the head-versus-feet hierarchy and seniority. For example, younger people should sit at a lower level than that of the older, whom they were socialising with.

As regards bedrooms, it was more popular to build each of them in three bays not two as odd numbers were considered inauspicious.[2] The bedroom was ventilated by fenestrations. This allowed Pallegoix to describe it with the scientific perspective of hygiene that was 'Thai dwellings are very clean, very healthy and well-adjusted to the climate because they let refreshing wind passing through.'[3] Low windowsills responded to the Siamese habit of sitting on the floor. The kitchen, which was considered dirty, was normally placed at a corner of the house or completely separated especially in the case of large houses with servants who were responsible for cooking. Strong smells and smoke from Thai food cooking were ventilated by porous floors, walls and gables. However, in small houses of poor people, not only kitchen but also gallery could be used for cooking and eating. Steep gable roofs and long eaves were applied to each room, protecting the inhabitants from strong sunlight and heavy rain.

[1] Rapoport, *House Form and Culture*, p. 111.
[2] Tiptus and Bongsadadt, *Ban Nai Krungthep: Rub Baeb Lae Kan Plian Plaeng Nai Rob Song Roi Pi (Houses in Bangkok: Style and Change in 200 Years)*, p. 45.
[3] Pallegoix, *Description of the Thai Kingdom or Siam: Thailand under King Mongkut*, p. 105.

Figure 2.1.18: A mural painting at Wat Phra Chetuphon Wimonmangkhalaram, a Buddhist monastery in Bangkok, painted in the reign of King Nangklao (1824–51), depicts a spatial practice in a house.[1] The owners are supposed to be noblemen as their house is a three-room type roofed with glazed ceramic tiles. Their garments and ceramic bowls reiterate their well-to-do status. They were dining, using their hands and low table, on a raised gallery — the space that people used most during day time. The people of lower status, presumably the servants, wear no tops and sit on the deck, a lower level.

[1] Photo by Chomchon Fusinpaiboon

Auspiciousness in the Siamese house

When it came to the question that how Siamese houses were designed and constructed, the overall principle that encompassed such processes was auspiciousness. It can be seen in the following discussion that some rules and conducts can be described scientifically while others might not fit to any scientific rationale. But the most important point here is that such rules and conducts were operated within the realm of auspiciousness and not science. Therefore, people did not take the explanation seriously (or never asked for any explanation) but followed the principles mainly inherited by words from previous generations. These best portrayed the way people perceived dwelling and houses. They ensured their good livelihood by planning auspicious plans, construct them with auspicious process, and lived in them in an auspicious way. Principles of such auspiciousness derived from animism, astrology, Brahmanism, and Buddhism, and they could vary from regions to regions with a large portion of correspondence.

Auspiciousness involved from selection of sites and the shapes of the sites. A *Tamra Phrommachat*, a Buddhist astrological manuscript for auspicious life covering issues from good careers for people born in particular months and dates, good types of partner, to the auspicious way to build a house, indicates meanings of particular shapes of plots regarding future dwellers well-being and wealth (Figure 2.1.19).[1] Furthermore, smell of the soil on site, time to gather construction materials, selection of materials, time for construction, orientation, components of houses, names of the components, animals and plants in houses, and custom of habitation (Figure 2.1.20).[2] Astrologers or Buddhist monks in villages played a major role in this practice.[3] At the beginning, an astrologer or a monk was invited to a tentative site, in order to examine whether the shape of the plot would bring fortune. He would also advise the owners to clear anthills or stumps in the site, if any.[4]

[1] London, British Library, Thai Manuscripts, *Phrommachat* (1885), p. 50.
[2] See Pluluang, *Sang Ruen Hai Yu Yen Pen Suk (Building Houses for Happiness and Well-Being)* (Bangkok: Muang Boran, 2003).
[3] *Tamnan Sathapattayakam Thai 1: Ruen Thai Doem (The Legend of Thai Architecture 1: Traditional Thai House)*, (Bangkok: Phimlak, 2005), p. 176.
[4] Phraya Anumanratchathon, *Prapheni Nueng Nai Kan Taeng Ngan Lae Prapheni Nueng Nai Kan Pluk Ruen (The Tradition of Marriage and Building House)*, 2nd edn (Bangkok: The Association of Social Science of Thailand, 1971), pp. 1–2.

Figure 2.1.19: A page from a Tamra Phrommachat manuscript, written in 1885, describes particular shapes of land that will bring different kinds and levels of auspiciousness and inauspiciousness to the future dwellers.[1]

Figure 2.1.20: A page from a Tamra Phrommachat manuscript, written in 1885, describes an auspicious direction for erecting the prime column of a house in particular months, regarding the position of Naga, the mythical creature representing water element in the land.[2]

[1] British Library, Thai Manuscripts, *Phrommachat* (1885), p. 50.
[2] Ibid., p. 51.

Auspiciousness also engaged in the acquirement of materials. By acquiring wood, trees should not be cut down from the 5th to the 12th months as they would have been considered the season of ordained trees.[1] A practical aspect supporting this is that the first to the forth month were suitable as the owner of a house to be built would go to a forest with neighbours to cut trees when cultivation was low, less rain, dry soil in forest, and low jungle desease.[2] When trees were cut, making them fall on the east or northeast was auspicious.[3] Once trunks for columns were acquired, the straight ones were considered the best, and each trunk's gnarls should be counted one, three, five, or seven.[4] The gnarls should not be in particular positions, e.g. at the ground level, one *Khueb* (a palm span) above ground level, one *Sok* (Elbow) above ground level, which each of them got a particular name of *Pedsai* (duck preens), *Kaitod* (hen nibbles), *Mhusi* (pig rubs), respectively. The names imply the scenarios that the column could have been harmed by such household animals because their positions.

Auspiciousness of orientation was also taken seriously. Phraya Anumanratchathon has pointed out that at early Rattanakosin period, people were not likely to orient their houses on the axis which was perpendicular to sun path, because this obstructed the Sun God's face and would bring misery.[5] As regards the orientation of houses in relation to the waterway that it faced, the Thai always aligned the long side of the house with the bank, while the Mon oriented short side towards the waterway and the front of the house towards north according to their ancient text, Tamra Lokasitthi.[6]

Orientation of bedrooms was the most important matter as it related directly to how the heads of the dwellers would be placed. There was a taboo of pointing one's head to the west, which was considered the direction of sunset and death. East was considered an auspicious direction, as it was where the sun rised and the Lord Buddha faced on the day of his enlightenment. It was also evident as early as the

[1] Pramot, *Laksana Thai: Vol. 4*, p. 468.
[2] Silpakorn University Architecture students, '*Prapheni Nai Kan Pluk Sang Ban Ruen Thai* (The Tradition in Thai House Building)', *ASA*, 3 (1969), 15.
[3] Pramot, *Laksana Thai*, vol 4, p. 469.
[4] Ibid.
[5] Anumanratchathon, *Prapheni Nueng Nai Kan Taeng Ngan Lae Prapheni Nueng Nai Kan Pluk Ruen (The Tradition of Marriage and Building House)*, p. 1–2.
[6] Wanliphodom, *Ruen Thai Ban Thai (Thai Houses Thai Homes)*, p. 85.

thirteenth century in Pho Khun Ramkhamhaeng's stone inscription of Sukhothai Kingdom that south was another auspicious direction to place the head, whereas north was for feet.[1] This principle could affect matters of urban scale. The original *Chedi* (a kind of stupa) of Wat Phra Borommathat Nakhon Si Thammarat, the most important Buddhist monastery of the seventh-century city of Ligor, was placed at the south of the old city; therefore people in the city could place their heads toward the sacred edifice.[2] People in Chiangmai, however, happened to orient their heads toward west as the most important edifice, Phrathat Doi Suthep, was at the west of the city.[3]

Furthermore, it was not popular to sleep with one's head towards the direction of doors, as the latecomers' feet would step near the head, therefore not appropriate.[4] And people tended to sleep by reclining their body at the perpendicular direction of bays. Sleeping at the perpendicular direction against the span of beams was believed to make the person possessed by a ghost.[5] In conclusion, there was a variety of practices among different regions. However, in central plain areas including Bangkok, the most suitable layout of a house was normally the one with the longitudinal side oriented along the east-west axis, the terrace facing north and the bedroom facing south.

In addition to the orientation of the head while sleeping, there were also customs about how a family should sleep in a bedroom. Evidence for the central region has not been found. However, there is a study by J. S. Tambiah about the custom in a village in northeast Thailand that persisted until at least the 1960s recording the pattern of where the husband and wife should sleep in relation to each other and their children, and what would they do when their children came of age or got married. The custom correlated to the idea of kinship and the affiliated conduct of sex and marriage.[6]

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[1] Pluluang, *Sang Ruen Hai Yu Yen Pen Suk (Building Houses for Happiness and Well-Being)*, p. 76.
[2] Ibid.
[3] Ibid.
[4] Tiptus and Bongsadadt, *Ban Nai Krungthep: Rub Baeb Lae Kan Plian Plaeng Nai Rob Song Roi Pi (Houses in Bangkok: Style and Change in 200 Years)*, p. 53.
[5] Ibid.
[6] Stanley J. Tambiah, 'Classification of Animals in Thailand' in Mary Douglas, ed., *Rules and Meanings: The Anthropology of Everyday Knowledge* (London: Penguin Education, 1973), pp. 127–166 (p. 135).

Auspiciousness also involved in proportions and dimensions of rooms, sizes of walls, structural components, and doors, for which particular formulas were used to calculate and the owners' date of birth sometimes counted.[1] Components of houses also had principles attached to them. For instance, treads were usually in odd numbers, as it was considered more auspicious.[2] It should not face west, as it was believed to be the direction of 'ghost stairs'.[3]

The wooden house's main structure, such as columns, was hardwood, i.e. *Shorea obtusa* and *Shorea siamensis*. There were a few trees which were unpopular for use as structure, due to their low strength, while some of them had inauspiciousness sticking to them. The assembling of wood components applied tenon and mortise system with pegs, which required no nails.

Once a house was going to be built, the order and how columns would be erected in particular months, and where the columns should be drilled came to the fore.[4] A book by an unknown author, but known to have been written in 1851 and belonged to Lai Prasannin, advised that

> It is advised to choose four columns, write down the name, *Kasat* [King], on one of them, and name others as *Phram* [Bhraman], *Phet* [diamond], and *Suk* [happiness] respectively. […] Then use *Kasat* column as the southeast-corner column of bedroom, bind it with a white cloth.[5] (Figure 2.1.21)

In addition to the house, the owner of a house generally built a *San Phra Phum*, the miniature replica of a house placed on a slender column, within the boundary of the plot. It served as a shrine for the spirit, who might had been disturbed by the clearing of the site or the gods that the owners invited to protect the house.[6]

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[1] *Tamnan Sathapattayakam Thai 1: Ruen Thai Doem (The Legend of Thai Architecture 1: Traditional Thai House)*, pp. 179–180.
[2] Tiptus and Bongsadadt, *Ban Nai Krungthep: Rub Baeb Lae Kan Plian Plaeng Nai Rob Song Roi Pi (Houses in Bangkok: Style and Change in 200 Years)*, p. 50.
[3] Reuthai Chaichongrak, *The Thai House: History and Evolution*, p. 64.
[4] Urakhin Wiriyaburana, *Tamra Phrommachat Chabab Luang Sombun Thisut (Royal Phrommachat: Exclusive Edition)* (Bangkok: So Thammaphakdi, 1968), p. 299.
[5] *Tamnan Sathapattayakam Thai 1: Ruen Thai Doem (The Legend of Thai Architecture 1: Traditional Thai House)*, p. 177.
[6] Waterson, *The Living House: An Anthropology of Architecture in South-East Asia*, p. 122.

Figure 2.1.21: Lai Prasannin's book, written in 1851, advising how to construct a house with auspiciousness.[1]

[1] *Tamnan Sathapattayakam Thai 1: Ruen Thai Doem (The Legend of Thai Architecture 1: Traditional Thai House)*, p. 177.

Particular food and desserts were offered to the spirit and gods at *San Phra Phum* before the construction of a house, and offerings would be regularly given after the habitation.[1] The shrine best demonstrates the evolution of the indigenous practice of worshiping land spirits by the Tai that merged with Brahmanical and Buddhist practices through time an becoming the practice of the Thai.

It has been clearly demonstrated that how much commoners in early Rattanakosin period lived intensely with social hierarchy, rituals, and auspiciousness. A brief examination of royal buildings can further provide a clearer picture.

Royal buildings

Palaces were the places that the King or royals lived and addressed their officials. Buildings in the royal palace in Bangkok were clustered in three separated areas, the outer court, the central court, and the inner court. The outer court located various ministries. The central court located the King's residence and throne halls for audiences. The inner court was reserved only for the King and his Queens, concubines, princesses, and young princes. In addition to the courts, Wat Phra Kaew, the royal Buddhist temple reserved for only the court's ceremonies, was placed next to the outer court.

One of the most important buildings in the royal palace was Phra Thinang Amarintraphisek Mahaprasat (1784), a throne hall built solely in wood, burnt down by the lightning in 1789. In the same year, King Buddha Yodfa Chulalok (reigning 1782–1809) replaced it with a new white-washed-brick-throne hall, Phra Thinang Dusit Mahaprasat (Figure 2.1.22).

Chinese and some European inspired elements were evident for the first time in the royal palace at *Suan Kwa* (Right Garden). The existing garden was renovated by the commission of King Buddha Loetla Nabhalai (reigned 1809–24) in which it incorporated gardens and pavilions inspired by those of the Chinese and European for the sake of exoticness. However, only the upper floor of a two-story pavilion of

[1] *Tamnan Sathapattayakam Thai 1: Ruen Thai Doem (The Legend of Thai Architecture 1: Traditional Thai House)*, p. 181.

a European style was used, due to Siamese custom that one's feet should not be put higher than one's head.[1]

Contemporary with the trend outside the palace, made possible by the influx of Chinese immigrants, most of the royal residence in various forms of wooden houses in the royal palace built in the reign of King Buddha Yodfa were pulled down in the reign of King Nangklao (1824–51) and replaced by Sino-Siamese style-white-washed brick residence, decorated with stucco and golden carved wood (Figure 2.1.24).[2]

It has been pointed out that the conduct of hierarchy reserved some features for temples and palaces, and not for commoners' houses. The temples and palaces could adopt the same features because the Siamese monarchy was conformed to the Brahmanical kingship model, the King's status was considered as a lived god. But hierarchy was also applied to different ranks of palaces. A few elements for roofs and walls were reserved only for high ranking royalty and the King. For the roofs, royalty of the rank of Chao Fa or higher could use two-tiered roofs, whereas those of the rank Phra Ong Chao and lower could only use single roofs.[3] For the palace walls, only the King could use *Bai Sema*-shaped merlons, *Choeng Phon*, and forts. The Vice-King who stayed at the front palace could use *Bai Sema*-shaped merlons and forts. The Prince of back palace could use *Bai Sema*-shaped merlons, and other Princes could only use ordinary walls.[4] In addition, there was a record that King Buddha Loetla Nabhalai advised the Vice-King of the reign not to construct a new ordination hall of the temple within his front palace with a special roof form of *Prasat* as he had intended. This was because, as the King pointed out, there had been no such tradition of constructing a *Prasat* in a front palace; such form was only constructed in royal palaces.[5] Moreover, hierarchy was also demonstrated in the design and the use of royal buildings' main entrances, royal halls, as well as

[1] Somphop Phirom, *Phra Merumat* (Bangkok: Boonrawd Brewery, 1977), 96–97. Quoted in Jumsai and Fuller, *Naga: Cultural Origins in Siam and the West Pacific*, p. 59.
[2] Naengnoi Suksri and Michael Freeman, *Palaces of Bangkok: Royal Residences of the Chakri Dynasty* (London: Thames & Hudson, 1996), p. 6.
[3] Hinchiranan, '*Sthapattayakam Thai* (Thai Architecture)', p. 15.
[4] Somphop Phirom, 'The Hierarchy in Thai Architecture', in *Proceedings of Chulalongkorn International conference on Thai Studies Bangkok, 22–24 Aug 1984*, (Bangkok: Chulalongkorn University), pp. 11–20 (p. 13).
[5] Horayangkura et al., *Phattanakan Naew Khwamkid Lae Rupbaeb Khong Ngan Sathapattayakam: Adit Patchuban Lae Anakot (The Development of Concept and Design in Architecture: Past, Present, and Future)*, p. 31.

ordination halls and congregation halls of royal temples. For example, if there were three entrances at the front of a building. Only the King could enter the central one, nobles and civil servants entered the other two.[1] In sum, like the elements reserved for royalty and not to be used by commoners, the hierarchy within royal buildings was an unwritten rule, accepted and practiced by the royalty.

As regards the conducts in royal buildings, up until the reign of King Nangklao (reigning 1824–51), everyone attending the King's summons had to prostate himself on the floor. Exceptions were given to only European ambassadors who started to arrive in the King's reign and were allowed to stand in distance from the throne raised approximately two feet above the floor. Despite the privileged exception, European ambassadors and retinues still had to stop in four courtyards and throne hall's spaces, in which various degrees of exclusion, tolerance, and formality relating with dress code, bearing of arms, language, and posture were negotiated before the audience.[2]

Another important type of royal buildings that was not built in any palace but is worth noting is *Phra Men*, the temporary yet gigantic pyre for royal funerals (Figure 2.1.23). Being built within the same cosmological principle, Mandala, as temples, the massiveness of *Phra Men* constructed solely with wood and bamboo before the 1870s were normally surpassed the sizes of all royal buildings built with masonry. The record of construction materials used in the construction of an 80-metre-high *Phra Men*, consuming 896 large teak tree trunks, 5,500 other tree trunks, 2,800 sheets of bamboo slats, and 400,000 or more bamboo poles, in the reign of King Buddha Loetla Nabalai illustrated its significance and its master builders and labours' advancements in wood works.[3] Before the turn of the twentieth century, materials for the constructions of *Phra Men*, which were considered contaminated and inauspicious after use, were later discarded except for some logs that were donated to Buddhist monasteries for their foundations and some maintenance.[4]

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[1] Hinchiranan, '*Sthapattayakam Thai* (Thai Architecture)', p. 15.
[2] Andrew Turton, 'Delay and Deception in Thai–British Diplomatic Encounters of the Early Nineteenth Century' in Joy Hendry and C. W. Watson, *An Anthropology of Indirect Communication* (London: Routledge, 2001), pp. 271–87; Chaichongrak, *The Thai House: History and Evolution*.
[3] Phirom, *Phra Merumat*, pp. 96–97.
[4] Pirasri Povatong, 'Phra Meru: Architectural Representation of Bhuddist Cosmology in Temporary Royal Crematoria in Siam', An unpublished paper presented in *SAHGB Annual Symposium: Transitory, Transportable, and Transformable: Temporary Conditions in Architecture* (London:

Figure 2.1.22: Phra Thinang Dusit Mahaprasat (1789), a throne hall in the Royal Palace, Bangkok.[1] The *Prasat* on top of the building, reserved only for royal buildings, symbolises Mount Phra Sumen.

Figure 2.1.23: *Phra Men*, a temporary pyre made from wood and bamboo for a royal funeral in 1866.[2] The *Prang* on top of the building symbolises Mount Phra Sumen. Note its gigantic size comparing with humans.

Society of Architectural Historians of Great Britain, 2013). For economic reason, King Chulalongkorn (reigning 1868–1910) ordered that his own pyre should not be gigantic in scale and not to be built with excessive amount of materials as the past King's pyres. Subsequently, later pyres of royal cremations were never surpassed the size of that for King Mongkut's funeral in 1869.

[1] National Archives of Thailand

[2] Ibid.

Figure 2.1.24: Three buildings in the central court of the Royal Palace.[1] Marble cladding on the left one, window frames of the one in the centre, and the form and ornaments of the right one show royal exoticism towards European and Chinese art, with a more emphasis on the latter, in early Rattanakosin Period.

[1] National Archives of Thailand

Buddhist monasteries

Buddhist monastery or *Wat* could be categorised into two sub-categories, local monastery and royal monastery. Firstly, local monasteries were built by local people. They were the centre of communities in Siam as they were used for not only religious practice but also local meetings, education, health care, festivals, etc.

Secondly, royal monasteries were built by Kings or members of royal families. They built temples not only for their faiths but also for positioning themselves as benefactors of the religion and the patrons of the communities. The buildings of both types of monastery were similar but different in scale, exquisiteness of ornamentation, and symbolic elements that some of them were reserved for only the royal ones. An example was the statue of Garuda, reserved for the King's royal monasteries.

Alongside the trend of Sino-Siamese style houses and palaces, *Baeb Nok Yang* (The style that differs from the norm) or *Baeb Phra Ratchaniyom* (The style of royal preference) was applied to the renovation and construction of royal monasteries in the reign of King Nangklao. Apart from the abundance of Chinese materials, labour and craftsmen, the style was made possible by the fact that King Nangklao found himself commissioning a number of renovations to royal temples and buildings in the royal palace due to their deterioration by the fact that they had been ornated with wooden ornaments, which was not as durable as new kinds of ornaments made with stucco and ceramics.[1]

As regards spatial practices, during ceremonies in both *Ubosot* (ordination halls) and *Wihan* (congregation halls), laymen sat on the floor while monks sat on raised floors. Laymen approached monks by crawling as they should not be in a higher position than the monks. When monks did not sit on a raised floor, the laymen would crawl even more humbly.

[1] Sakchai Saising, *Ngan Chang Samai Somdet Phra Nangklao Chao Yuhua (Craftsmanship in the Reign of King Nangklao)* (Bangkok: Matichon, 2008), p. 10.

Figure 2.1.25: Wat Phra Chetuphon Wimonmangkhalaram, one of the most important and oldest Buddhist monasteries in the capital, built by King Buddha Yodfa Chulalok (reigning 1782–1809).[1]

Figure 2.1.26: Buddhist monks and laymen sitting on the floor of a temple.[2]

[1] National Archives of Thailand
[2] Anna Harriette Leonowens, *The English Governess at the Siamese Court: Being Recollections of Six Years in the Royal Palace at Bangkok* (London: Trubner, 1870). Reprinted in Jumsai and Fuller, *Naga: Cultural Origins in Siam and the West Pacific*, p. 98.

Figure 2.1.27: The *Ubosot* (ordination hall) of Wat Ratchaorasaram built in 1820 has features and materials inspired by Chinese art.[1]

Figure 2.1.28: A Euro-Siamese style temple gate and Chinese guardian statues dressed like Europeans at Wat Phra Chetuphon Wimonmangkhalaram, a renovation in the reign of King Nangklao (1824–51).[2]

[1] National Archives of Thailand
[2] Ibid.

There was a multi-purpose building type, *Sala* (pavilion), in Buddhist monasteries. A large scale *Sala* or *Sala Kanparian* was used for both monastic activities, such as sermon and ceremonies, and community's activities, such as village meetings, festivals, and feasts. In addition, it was used by monks to educate children in both religious and secular subjects.[1]

Kuti (monk cells) was either typical timber houses or white-washed brick buildings. There was a tradition of donating houses to Buddhist monasteries. Wooden houses whose owners had died or moved out were dismantled from the sites and re-assembled in monasteries. The monks who had higher ranks lived in more-ornamented and larger white-washed brick houses.[2] Nevertheless, monk house's space was relatively small, discouraging them to accumulate material goods, the size of a monk's cell in Rule No.6 of the *Sanghatisek*, the thirteen canons of Buddhist monks, was approximately 4 x 2.3 metres.[3]

Carpenters and master builders

In Siam before the mid-nineteenth century, construction was done, if not by the owner, such as the cases of houses, by practitioners called *Chang*. A *Chang* was actually a person who did his work by hand. His expertise was informed by a more definite categorisation of his career, for example, *Chang Mai* means a carpenter, and *Chang Thong* means a goldsmith. A head of *Chang* was called '*Nai Chang*', literally means a master builder.

Besides their expertise, *Chang* were categorised socio-politically into three main groups — *Chang Luang*, *Chang Phra*, and *Chang Chaloeysak*.[4] First, *Chang Luang* were the *Chang* who were affiliated to royal ministries, where each of them had its own master builder, normally the descendant of the previous master. *Chang*

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[1] Siamese children aged from 5-6 year-old went to Buddhist monasteries to be educated by monks in arithmetic, writing, reading, and Buddhism. Some boys entered monkhood after their tonsure ceremony at the age of 13 to study Buddhism for some time. However, most of the men aged 20 year-old had entered monkhood, completing their secular and religious education, before coming out to establish their families. By doing so, it was accepted by the society that they reached their maturity. See Karl Döhring and Walter E. J. Tips, *The Country and People of Siam* (Bangkok, Thailand: White Lotus Press, 1999), p. 21.

[2] Tiptus and Bongsadadt, *Ban Nai Krungthep: Rub Baeb Lae Kan Plian Plaeng Nai Rob Song Roi Pi (Houses in Bangkok: Style and Change in 200 Years)*, p. 39.

[3] Chaichongrak, *The Thai House: History and Evolution*, p. 38.

[4] Joti Kalyanamitra, *Hok Sattawat Chang Thai (Six Centuries of Thai Craftsmen)* (Bangkok: Association of Siamese Architects, 1977), p. Forward.

Luang worked for their ministries for a particular period annually. This period ranged from six months in Ayutthaya Period to three months in early Rattanakosin period. Like other commoners who were obliged to work for the government, *Chang* were allowed to pay levy in order to get the exemption from the annual obligation. Occasionally, *Chang Luang* from different ministries worked together for significant projects of the kingdom, such as constructions of *Phra Men*.

Second, *Chang Phra* were monks who were equipped with construction skills. They were responsible for building construction in monasteries. Last, *Chang Chaloeisak* were private *Chang* whom could be hired by anyone. The category of *Chang* that firstly engaged with the transformation of the construction practice was *Chang Luang*. They worked in different ministries executing architectural projects for the Kings. There are records that drawings, mainly for estimation and supervision, and models for preliminary presentations to the King were used by the master builders yet existing evidence still exist today are rare.[1]

Once the Sino-Siamese style buildings firstly executed by the Chinese craftsmen and builders became popular the Siamese master builders gradually explored the new designs and construction techniques. Apart from the royal master builder families, a few Princes also practiced building crafts, both as a full time and a part-time basis in addition to their main duty.

For construction, high-ranking Princes or nobles were appointed to oversee and manage projects; they did not have to be *Chang* themselves but only had to be capable to deal with labours and material supplies. Before the mid-nineteenth century, the labours mostly came from the corvée system. Working process of *Chang* also engaged with auspiciousness. They did a practice called *Boek Na Phrom* by chopping the top part of a gable after reciting a spell, only got orally from a master builder, in order to ensure their own auspiciousness in the practice.[2]

[1] Pirasri Povatong, 'Building *Siwilai*: Transformation of Architecture and Architectural Practice in Siam During the Reign of Rama V, 1868–1910' (unpublished doctoral thesis, University of Michigan, 2011), p. 42.
[2] *Tamnan Sathapattayakam Thai 1: Ruen Thai Doem (The Legend of Thai Architecture 1: Traditional Thai House)*, p. 180.

Conclusion

It is possible to state that all the aspects about transience, auspiciousness, use, and foreignness in the buildings in Siam by the mid-nineteenth century were under the largest concept of hierarchy. They socio-politically and culturally reflected the way that each Siamese knew 'his/her place' in any circumstance of life. In the most intimate scale, he/she knew the place for each part of his/her body, such as head and feet, in the spatial practice. In the intermediate scale, he/she knew relations to people of different status around him/her, to the King, to the foreigners, and how he/she should behave spatially in relation to them. In the largest scale, he/she knew the human's place in relation to nature and gods.

Particularly about foreignness, even though most buildings in the early Rattanakosin period were built in traditional ways, the end of this period saw an increasing involvement of Chinese craftsmen and labour in construction works, both inside and outside the courts. The flourishing trade with China, and piecemeal contacts with Europeans and American at the end of this period, brought about Sino-Siamese style and later some mixture of imaginative European elements to Siamese buildings for the sake of exoticness. An increasing awareness of durability in buildings that required masonry construction supported the application of the new styles.

It should be noted that foreign elements in buildings of Siam was by no mean a new phenomenon as they, especially Chinese and European elements had been explicitly evident since Ayutthaya Period, especially in the reign of King Narai (1656–88), when foreign trades and contacts had extensively flourished.

Returning to Ratanakosin period, by considering the foreign arts as exotic, it should be, however, pointed out that the Siamese elite only adopted such exoticness that belonged to the cultures they considered sophisticated and/or superior. This was evident in their previous adoption of Dvaravati and Khmer art since the classical periods.

The hierarchy, in which different parties had their place in the Siamese spatial practice, started to be altered and later changed dramatically in the latter half of the nineteenth century. So did the relations and balance between the fondness of

foreign exoticness and their sophistication and superiority. After the first Opium Wars (1839–42) that China was defeated by Britain, the Siamese elite began to realise the changing centre of the world's hierarchy. This brought about a great transformation of building culture and buildings in Siam. But whether the people's perception about buildings was changed is another question.

2.2 Transforming tradition: The transformation of building culture in Siam from the mid-nineteenth century to the 1920s

It has been described in the last chapter that foreignness had not been unfamiliar in Siam since its early historic periods. Foreign commodities were a main import of Siam. One of the most important groups of foreigners who interacted with Siam that relates to the discussion in this chapter extensively is Europeans. The Europeans came to Siam for diplomacy, trade and evangelisation, becoming parts of the cosmopolitan Ayutthaya, especially at the peak of the Siamese kingdom's contact to Europe in the reign of King Narai (1656–88). They were generally called *Farang*, which was the Thai word for White people. In this research, the Europeans and Americans from the United States who came later are referred to as westerners for the convenience of readers, except when specific nationalities need to be addressed.

Towards a modernity

Originally, China had been perceived by the Siamese elite as the greatest empire. The practice of *Chimkong* (paying tributes) to the court of China, which had been done since at least the end of thirteenth century, allowed Chinese emperors to consider Siam as one of their tributary states.[1] But China never intervened in Siam's internal affairs or invaded Siam because the kingdom was perceived by China as a faraway backwater that had little benefit for the empire.[2] Therefore, the Siamese seemed to practice *Chimkong* for their huge trade benefit.[3]

But the perception about the greatest empire changed. The presence of westerners was redefined and was of increasing concern by the end of King Nang Klao's reign (1824–51) after he had experienced the westerners' advanced technology and had noticed the defeat of China by Britain in the first opium war (1842). A minimal interest in exotic western art and commodities that had been

[1] Takeshi Hamashita, 'The Tribute Trade System and Modern Asia' in Heita Kawakatsu and John Latham, eds, *Japanese Industrialization and the Asian Economy* (London: Routledge, 1994) , p. 91–107; Likhit Hoontrakul, *The Historical Records of the Siamese-Chinese Relations: Commencing from Ancient Times up to the Time When the Siamese People Formed Themselves into a State Called Siam with the Town of Sukhotai as Capital*, 2nd edn (Bangkok: Debsriharis, 1964).
[2] Krairoek Nana, '*Lhak Than Mai Thai Loek Chimkong Chin Phro Thuk Lhok* (New Evidence: The Thai Terminated Tributes to China as They Had Been Fooled)', *Silpa Watthanatham (Art and Culture)*, 11 (2012), 4–15 (p. 9).
[3] Sarasin Viraphol, *Tribute and Profit: Sino-Siamese Trade, 1652-1853* (Cambridge: Council on East Asian Studies, Harvard University Press, 1977).

overshadowed by the much greater interest in those of China was replaced by concern about their arms. At the end of his reign in 1851, King Nangklao addressed his progressive nobles, translated as follows:

> There will be no more wars with Vietnam and Burma. It is only *Farang* (the West) that we should be wary of. Take care, and do not lose out to them. Anything which they do and which we think we can learn from, then imitate them. But do not grant them your complete and devoted admiration.[1]

It was not until the next reign of King Mongkut (1851–68) that the reforms in response to the West were officially initiated by the monarch. The King had previously been a progressive Prince equipped with both a strict view of Buddhism from his twenty seven years under monkhood before his ascension to the throne, and his personal studies of western history, astrology, sciences, and geography.

Even though western mercenaries were hired to train Siamese troops to strengthen the kingdom's defense, the King embraced compromise rather than resistance that might have brought a threatening consequence. The practice of paying tribute to the court of China was ended after the last mission in 1853. Instead, two missions were sent to the courts of Queen Victoria in 1857 and Napolean III in 1861 after those two countries had sent embassies to the court of Siam in 1826, 1855, and 1856. These diplomatic relations resulted in treaties between Siam and those two countries.

The most important treaty that formally started a new page of Siam's trade and international relations was the Bowring Treaty with Britain in 1855. Followed by the one with France in 1856, this treaty was a model that entailed further agreements with the United States, Denmark, the Hanseatic Republic, Prussia, the Grand Duchies of Mecklenburg-Scherin and Mecklenburg-Strelitz, Sweden and Norway, Belgium, Italy, Austria-Hungary, and Spain, all signed by 1870. The treaties removed monopolies in international trade and taxation on import goods by the court, and imposed extraterrestrial jurisdiction. By doing this, King Mongkut opened up the country, liberalising foreign trade in Siam. The agrarian society

[1] Thiphakornwong, *Phraratchapongsawadan Krung Rattanakosin Ratchakanthi 3 and Ratchakanthi 4 (Royal Chronocles of the 3rd and 4th Reigns of Rattanakosin Period)*, p. 366.

started to engage with commercialisation. The country became a main exporter of rice, teak, and tin to global markets, but especially to British colonies.

As regards court customs, Siamese nobles were allowed to wear upper garments during the King's audience from 1852, as the previous practice of having audience bare-chested for the King's security had been criticised by western embassies as uncivilised. Herzfeld has pointed out that, not unlike the foundation period of modern Greece, the compromise in taxation, jurisdiction, and customs under unequal treaties secured the nominal independence of Siam, but at the same time implied a 'cryto-colonial' relationship between it and western powers.[1]

However, the Siamese court did not lose everything. Enormous revenue from exports, compensating the government's loss in trade monopoly, even created more wealth for the court.[2] The practice of Chinese tax concessionaires previously appointed by the King were continued and prospered even more. At the same time, consumption goods were imported enormously. Siamese's traditional practice of importing commodities, therefore, continued and even increased. The foreign business flourished in the Kingdom, making Bangkok an international trading centre in Southeast Asia. Old Siam was gradually transformed; a new page of the country's history was started.

It should be pointed out that the King's reform was, however, not a mere means to avoid the threat from western expansionism and to secure the court's economy, but also a retention of his interest in, and reception of, western knowledge and civilisation, all pursued before his ascension to the throne. He abandoned the long-established *Traiphum* cosmology, described in the Buddhist scripture, in which *Phra Sumen* Mountain is the centre of the universe and the world is flat, and he had embraced western geography by 1836.[3] Once he ascended to the throne, he hired foreigners to teach English to young Princes and Princesses; one of the foreigners was Anna Leonowens, who published her memoir: *Governess at the Siamese Court*.[4]

[1] Herzfeld, 'The Absent Presence: Discourses of Crypto-Colonialism'.
[2] Peter A. Jackson, 'The Performative State: Semi-Coloniality and the Tyranny of Images in Modern Thailand', *SOJOURN: Journal of Social Issues in Southeast Asia*, 2 (2004), 219–253 (p. 230).
[3] Winichakul Thongchai, *Siam Mapped: A History of the Geo-Body of a Nation* (Chiang Mai: Silkworm Books, 1994), p. 37.
[4] The book was later fictionalised by Magaret Landon to *Anna and the King of Siam* in 1944 and brought to a hit musical The King and I by Rodgers and Hammerstein in 1951.

He also encouraged members of royal families to have their children educated in western subjects.

Old practices were, however, not abandoned completely. The more important point is that many of them were redefined with new meanings. Mattani observed that there was a revival of *Lakorn* (plays) by King Mongkut, which previously had enjoyed less support from the court due to King Nangklao's strict interpretation of Buddhism that had led him to see it as an ostentatiously superficial art. Mattani argued that by greatly supporting the performing art once again, the King hoped it could create for Siam 'a respectable image of a civilised, peaceful, culture-rich country in the eyes of the western powers'.[1] This quality was necessary for Siam in preventing the western imperial threat, given that the western powers always claimed it was their burden to civilise uncivilised countries.

Other reforms were introduced in the fields of medicine, law, and engineering, in which dozens of foreign specialists were employed. But these were of minor scale, and the new knowledge was mainly circulated among a handful of royals and noblemen. Outside that realm, there were missionaries such as Dr. D. Bradley, an American who had set up a printing house in 1839, printing a newspaper and books on Christianity, medicine, science, and geography for the public.

In sum, the reform by King Mongkut was not only a means of fending off colonisation but also the King's adaptation to maintain the court's economy and his aspiration towards a modernity. The use of the article 'a' with modernity here implies that there was not just one version of modernity but 'multiple modernities'[2]. King Mongkut and the Siamese elite's modernity was in the form of being '*Siwilai*', indeed an indigenised form of being 'civilised' that he and his progressive elite had learnt from the western idea before his ascension to the throne.

[1] Mattani Mojdara Rutnin, 'Modern Thai Literature: The Process of Modernization and the Transformation of Values', *The Centre for East Asian Cultural Studies, East Asian Cultural Studies*, 17 (1978), 126–135 (p. 130).

[2] The concept of 'multiple modernities' explains the appropriation of institutional patterns of modern western civilisation by non-western societies that has entailed continuous selections, reinterpretations, and reformulations of these imported ideas. These processes have created new kinds of modern institutions in the non-western societies engaging a tension between conceptions of themselves as part of the modern world and ambivalent attitudes toward modernity. See *Multiple Modernities*, ed. by Shmuel N. Eisenstadt (New Brunswick: Transaction Publishers, 2002).

Figure 2.2.1: King Mongkut (reigning 1851–68) and Queen Debsirindra.[1] The King dressed in a hybrid costume and accessories inspired by European design. The Queen with a traditional hair style dressed in a traditional costume.

[1] Henri Mouhot, *Voyage dans les Royaumes de Siam, de Cambodge, de Laos et autres parties centrales de l'Indo-Chine* (Paris: Librairie de L Hachette, 1863), p. 225.

Figure 2.2.2: A mural painting at Wat Boromniwat, painted probably during the reign of King Nangklao and King Mongkut (1824–68), shows an example of curiosity about the West by Siamese artists.[1] It reflects that the Siamese did not pay attention to the West merely because of the imperial threat, but for its advanced culture in Siamese eyes.

[1] Photo by Chomchon Fusinpaiboon

Siwilai, therefore, could be seen as a kind of modernity that was set as a new goal of Siam.[1] But above all, considering the limited widespread of the modernity, Aphornsuvan has argued that this modernity was adopted not because it not only allowed the Siamese elite to reposition themselves among foreign peers but also helped them to secure their place over their subjects.[2] In this sense, modernity was to be used for retaining the traditional hierarchy of Siamese society.

After their introduction by King Mongkut, it was in the forty-two-year reign of King Chulalongkorn (1868–1910) that reforms were vigorously undertaken aiming at Siam achieving *Siwilai*. The Siamese elite's firsthand experience of *Siwilai* was, however, not derived directly from European metropoles but mainly from European colonies in Asia. Early in his reign during 1871 and 1872, King Chulalongkorn visited Singapore, Malaya, Burma, India, and Java, where he saw post offices, jails, hospitals, schools, telegraph offices, fire stations, lighthouses, botanical gardens, museums, theatres, shops and stores, orphanages, railways, and factories, and had a vision for his own kingdom to become modern without European occupation.[3]

The young King's vision could not, however, be implemented promptly as various parties of the elite, especially senior Princes and noblemen, whose power was not easily undermined by that of the young King, had different views of the appropriate level and means to achieve such a stage of *Siwilai*, making it a hard task for the King to exercise his authority over them at the beginning.[4]

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[1] T. Winichakul, 'The Quest For "Siwilai": A Geographical Discourse of Civilizational Thinking in the Late Nineteenth and Early Twentieth-Century Siam', *Journal of Asian Studies*, 3 (2000), 528 – 49 (p. 530).

[2] Thanet Aphornsuvan, 'The West and Siam's Quest for Modernity Siamese Responses to Nineteenth Century American Missionaries', *South East Asia Research* , 3 (2009), 401–31.

[3] David K. Wyatt, *The Politics of Reform in Thailand: Education in the Reign of King Chulalongkorn* (New Haven: Yale University Press, 1969), p. 40.

[4] In fact, during the first two decades of his reign (1868 –1889), amidst the encroaching colonialism, there was a power struggle between the young King and other nobilities. The King was assisted by the Prince regent for the first six years, for as he ascended to the throne, he was only fifteen. The King, therefore, gradually utilised reformations not only to respond to the imperial powers but also to build up and secure his real power at court. See Winichakul, 'The Quest For "Siwilai": A Geographical Discourse of Civilizational Thinking in the Late Nineteenth and Early Twentieth-Century Siam', p. 532.

Figure 2.2.3: 18-year-old-King Chulalongkorn with members of royal families and officials in India in 1871.[1] Their upper garments and socks and shoes were of western style while the lower garments were the traditional *Chongkrabaen*.

[1] Sahai Sachchidanand, *Ro 5 Sadet India (King Rama V in India)* (Bangkok: Toyota Thailand Foundation, 2003).

Figure 2.2.4: A painting of King Chulalongkorn, Queen Saowabha, and the Royal Princes, painted in 1899 by Edoardo Gelli (1852–1933).[1] The King and the Princes are in western uniforms. The Queen has western top and accessories with Siamese lower garment.

[1]Edoardo Gelli, 'The Royal Family' (Bangkok: The Bureau of Royal Household, 1899).

It was not until the end of the 1880s that the King appeared to be successful in centralising the kingdom's administrative system to reduce the power of the nobility. The power now was centered on the King who was consulted by his ministries, mostly his siblings, half-siblings, and cousins, instead of noblemen from different families. The centralisation of power brought Siam's first absolute monarchy.

As regards response to imperial threats, the centralisation was also aimed to prevent both Britain and France taking vassal states from the kingdom. France, however, acquired areas that had been under Siam's influence in Laos and Cambodia in 1867, 1888, 1893, 1904, and 1907. In 1893, after Britain had annexed upper Burma, a survey was conducted by a group of British and Siamese officials to demarcate the boundary between northern Siam and the British colony. Britain later acquired more lands previously under Siam's influence — the four Malay principalities in the south in 1909. The alleged loss of territories, or what more recent research prefers to call the starting point of the modern boundary system, occurred with Siam's consent, seeing it as the best measure in preventing the country falling into a British protectorate or French colony.[1]

Apart from the centralisation of power, another important reform started by the 1880s was the gradual abolition of the corvée and slavery system, contributing to the change in the Siamese social hierarchy. This was motivated by not only the benevolence of the King, but also by the increasing need for paid labour to produce rice for export, the major income of the Siamese elite after the court had been forced by the West to cease its trade monopoly.[2] The property rights in man were replaced by military conscription, a head tax, and more precise property rights in land.

[1] See Thongchai, *Siam Mapped: A History of the Geo-Body of a Nation*.
[2] See Nartsupha and Prasartset, *Socio-Economic Institutions and Cultural Change in Siam, 1851–1910: A Documentary Survey*.

Figure 2.2.5: An allegorical cartoon symbolises France threat to Siam's independence in a major conflict in 1893 regarding control over the Lao states. It resulted in a major expansion of French Indochina's boundary over areas previously under Siam's influence.[1] Britain, trusted more by Siam, did not intervene but observed closely, assuring that Siam remained an independent state — a buffer zone between British India and French Indochina. Note that Siam was depicted as a seemingly uncivilised bare-chest-and-feet-woman (originally a way Siamese women of lower class could dress in hot seasons).

[1] 'Too Kind by Half', *Punch*, 105 (1893), p. 38.

As a result, Bangkok at the end of King Chulalongkorn's reign (1910) had three main groups of urban classes. Firstly, royalty, noblemen, and Sino-Siamese business aristocrats that was a minority in numbers, yet the most powerful socially and economically. Secondly, Siamese and Chinese hawkers, servants, and labourers who were dominant in numbers, but powerless. Thirdly, the emerging middle class, mostly Sino-Siamese descendants, who were an outcome of the administrative and economic reforms that entailed a need for officials and office workers. It was the last group, who possessed cultural capital yet still lacked authority and financial capital, that would play a vital role in later reforms.[1]

In offices of King Chulalongkorn's royal government, there were European consultants and professionals. Belgian lawyers, German engineers, British comptrollers, American state secretaries, and Italian architects, among others, were employed by the Siamese elite according to their best reputation in their fields. Apart from the heads of all governmental departments, mostly chaired by members of the royal family or noblemen, the Europeans formed a large part of high and middle rank officials.

At the same time, the King started to send his cousins and later his own and his siblings' children to study in Europe from the end of the 1860s, expecting that they would return to strengthen the reforms. Within the country, educational reform was also introduced to provide more Siamese to work for the government. Apart from modern schools that taught basic subjects following western models, the School of Civil Service was established in 1899 to serve this purpose.

In the scholastic domain, the study of the history of Siam in a modern sense gradually flourished soon after the pioneering study on the history of European colonies and Siam by western scholars. In 1904, the Siam Society was founded by the Siamese elite and European expatriates to investigate and encourage the study of Siam and neighbouring countries' art, science, and literature.

Other reforms implemented by King Chulalongkorn possessed parallel rationales to those under King Mongkut's reign. The construction of railway networks started in 1891, serving the transportation of goods and people as much as

[1] Maurizio Peleggi, *Thailand: The Worldly Kingdom* (London: Reaktion, 2007), p. 70.

the prevention of imperial military actions and domestic rebellions resistant to the centralisation of the government.[1] The foundation of sanitary regulations and infrastructure in Bangkok was aimed at cleanliness and orderliness of the city in order to secure the King's dignity especially when it was viewed by foreigners, rather than at public health.[2]

In sum, the reforms by King Chulalongkorn were not quite a process of modernisation to achieve modernity similar to that adopted in the western world but rather a process by which the King and the Siamese elite mediated western civilisation with their traditional authority in order to place Siam, or, in other words, the King's kingdom, on a par with other civilised countries, while retaining the prestige given by their subjects.

Towards the end of King Chulalongkorn's reign (1900s), the path to *Siwilai* was still far from smooth, even though the King had already centralised his power successfully. Always being compared with Japan, the fellow Asian nation that had started a reform at the same time but by this time had established itself almost as an imperial power, Siam was by far inferior. Towards his last days, King Chulalongkorn himself admitted the unsatisfactory progress of his kingdom and expressed his concerns to Prince Chakrabongse, one of his sons, in a personal letter translated as:

> I lacked companions who shared the same aspiration, ambition, and goal. Even Prince Thewawong and Prince Damrong, who are more knowledgeable and sociable than me, possess less than half of my aspiration and ambition. It has been very hard to encourage them. And once I have done so, the ambition just lasted for a while, supported on my own shoulders. […] They are already much better than selfish officials. […] I always think that the things I have done in the last forty three years is only one and a half or two tenths of what I should have done. […] Our country may be hopeless, as there are no good people like those in developed countries.[3]

[1] See David F. Holm, 'The Role of the State Railways in Thai History, 1892–1932', (unpublished doctoral thesis, Yale University, 1978).
[2] See Chitrabongs.
[3] London, British Library, The Chakrabongse Collection of Royal Letters Digital Archive, Or. 15749/13 (1910 AD) Folio 19-3.

A comment from J. G. D. Campbell, an English educational advisor to the King's government, reaffirmed the King's concern but might be considered more critical as he pointed out that what might have been 'one and a half or two tenths' of the King's goal was even a superficial one. He had the experience of dealing with a minister who called him to audience in the late afternoon and then had to wait for him just to wake up and take a bath, and on another occasion the council cabinet had not been reluctant to have a break in the middle of discussion when a member brought in a European toy.[1] Comparing with Japan, he pointed out a cultural factor that prevented Siam to achieving the same stage of progress:

> [Campbell's] practical acquaintance with the country shows the reforms introduced to be for the most part half-hearted ones; they are imposed on the people from outside, and they are not taken up in the thoroughgoing and enthusiastic manner in which they have been accepted by a whole nation in Japan. […] The great contrast in national character is obvious. The Japanese are bright, quick-witted, and persevering. The Siamese too are quick in their way, but they are apathetic and indolent to a degree. […] To sum up the difference, the Siamese are a tropical people, while the Japanese are not, and here we are at the root of the matter.[2]

Campbell offered a nineteenth century-pseudo-scientific explanation that the incorrigible indolence of the Siamese was entailed by generations of living in a hot climate where the resources were so abundant and the majority's aim in life was no more than having sufficient food to eat.[3] Campbell's claim on the apathy and indolence of Siamese was not unlike the claims of colonisers about their Southeast Asian colonies, such as Malaya, Java, and the Philippines that were used to justify colonialism, and more importantly, colonial capitalism; for the apathetic and indolent natives were seen as incapable of exploiting their abundant resources.[4] More recent research, however, has suggested that Siam's delay in development was ironically a consequence of its persisting patrimonial social system, strengthened by King

[1] John G. D. Campbell, *Siam in the Twentieth Century: Being the Experiences and Impressions of a British Official* (London: Edward Arnold, 1902), pp. 106–07.
[2] Ibid., pp. 15–16.
[3] Ibid., pp. 101–03.
[4] See Hussein Alatas, *The Myth of the Lazy Native: A Study of the Image of the Malays, Filipinos and Javanese from the 16th to the 20th Century and Its Function in the Ideology of Colonial Capitalism* (London: Cass, 1977).

Chulalongkorn's reform, and the lack of value system that prioritised public achievements rather than private ones.[1]

Either way, the delay in Siam's reforms can be viewed as a modernisation that was not yet successful. As it has been suggested from the beginning that the process and rationale behind the reforms did not conform to all western principles of modernisation in the first place, this situation deserves further scrutiny.

Resistance

As we have already seen, most reforms that seemingly followed western models, as well as their delays, it is now worth scrutinising what might be perceived as 'resistance' from the Siamese elite to some of what they saw as western ideas. From what have already been discussed too, the resistance might be seen as something from conservative factions of noblemen in the early period of King Chulalongkorn's reign, but this does not mean that there was no resistant element at all from the King himself. Let us start with a speech in Thai by the King, given to his subjects before his Europe Tour in 1897:

> [The King stated that] We should neither prefer only foreign things to Thai's nor prefer only Thai's to the foreigners' because every place and everyone has both good and bad points. We therefore need to adopt good things from elsewhere but at the same time need not only preserve but also develop our country's good things and admirable manners, and customs.[2]

After that, the King embarked on thirteen countries in Europe, ensuring his status among the western peers and first-hand experience of the *Siwilai*, which he could use to further reform his kingdom. It happened that the first-hand experience by no means stimulated the King to make a wholesale import of western ideology but carefully selected what he thought as appropriate. For example, he dismissed

[1] Jacobs Norman, *Modernization without Development: Thailand as an Asian Case Study* (New York: Praeger Publishers, 1971); E. B. Ayal, 'Value-Systems and Economic-Development in Japan and Thailand', *Journal of Social Issues*, 1 (1963), 35–51 (p. 50).
[2] *Phra Ratchadamrat Nai Phrabatsomdet Phra Chulachomklao Chaoyuhua Tang Tae Po So 2417–2453 (Speeches of King Chulalongkorn, 1874–1910)* (Bangkok: Rong Phim Sathan Songkho Ying Pakkret, 1967), p. 121.

democracy because he saw it as unsuitable for his kingdom.[1] The King had already rejected the petition for establishment of a constitutional monarchy in 1885. Accordingly, the resistance was not only a matter of what was considered suitable and what was not, but who considered them; who were in control and who were controlled. These issues of how to balance old and new things in relation to power in the reform of Siam were carried into the next reign.

Royal nationalism

It can be said that King Vajiravudh (reigning 1910–25) ascended to the throne when absolute monarchy had centralised the administrative power, the country had maintained its independence, quite a few modern infrastructures had been laid, and the King's dignity was somehow recognised by the western royal peers. However, what also came with the reforms by his father was an increasing number of the educated middle class, as well as Sino-Siamese descendents whose parents were Chinese migrants previously deemed by the government to be political inactive. Some of these social groups had liberal ideas that might threaten the absolute monarchy. So seeing the threat of global abolitions of monarchy, ranging from China (1911), Russia (1917), to Germany, Austria-Hungary, and the Ottoman Empire, King Vajiravudh, a Sandhurst and Oxford graduate, in addition to pursuing further reforms, ran a royal nationalist policy to ensure the survival of absolute monarchy in Siam.

His further reforms were mostly a continuation of educational, legal, transportation, and healthcare reforms from the last reign. In addition, the King also promoted cultural reforms following a western line, for example, equality of women and men, monogamous marriage, introducing the surname, and western style beauty for women. He also led the country to participate with the Allied Powers in World War I. These actions were aimed to further promote an equal status of Siam with other civilised countries.[2] Furthermore, it helped the government in negotiation with the western nations about unequal treaty amendments that had lingered for more than sixty years.

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[1] This had been previously seen in the case of Thianwan (Thian Wannapho), a lawyer and columnist, who had promoted political and social reforms along the line of European ideology, and in 1882 had been found guilty of les majesté and had been sentenced to be flogged and imprisoned.

[2] Walter F. Vella, *Chaiyo!: King Vajiravudh and the Development of Thai Nationalism* (Honolulu: University Press of Hawaii, 1978), p. 159.

Like his father at the end of his reign, King Vajiravudh claimed that he did not import western culture wholesale, but selected elements he deemed appropriate for Siam. He even had doubts about *Siwilai* that it could also bring decline of wisdom and morals, for example, as he claimed the Siamese started to be increasingly obsessed with alcohol and prostitution after contact with westerners.[1] Politically, like his father, he insisted that democracy and socialism were not suitable for Siam.[2]

At the same time, the King stimulated the study of national history, revived and reinvented Siamese arts — old and new, ranging from literature to crafts, in order to create a sense of national pride among Siamese. Siamese culture, he stated, had nation, religion, and monarchy as its three pillars. This statement was the heart of his nationalism. King Vajiravudh's nationalism, therefore, differed from nationalism in the West from the eighteenth to the twentieth century and in European colonies after World War II. On the contrary it was a combination of nationalist and imperialist ideas, aiming at encouraging citizens to recognise the nation's unity under the absolute monarchy.[3]

By the end of King Vajiravudh's reign (the first half of the 1920s), economic difficulty emerged as a consequence of the imbalance between increasing expense and decreasing income. The enormous expense came from the ongoing administrative, juridical, and educational reforms and railway expansion, which involved both construction and administrative costs. More importantly, the expense of luxurious court affairs drew criticism that became more problematic in the next reign. The complex situation in mediating old and new ideas and practice in order to secure the country's independence was achieved, the Siamese elite's dignity among international peers and their prestige among their subjects established. It is now time to examine the building culture that operated under this seventy-year-period of dramatic change and mediation in Siam.

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[1] Natthaphon Chaiching, '*Siam Bon Thang Song Phaeng: Nung Satawat Patiwat Ro So 130* (Siam on a Divergence: Centenary Anniversary of the 1912-Revolution)', *Sinlapa Watthanatham* , 4 (2012), 76–94.

[2] *Chotmaihet Raiwan Nai Prabat Somdet Phra Mongkutklao Chaoyuhua (Daily Memoire of King Rama VI)* (Bangkok: Rong Phim Sophana Phiphatthanakon, 1923). Quoted in *Kan Muang-Kan Plian Plaeng Thang Kan Muang Thai Po So 2411–2475 (Politics and Changes in Thailand, 1868–1932)* (Bangkok: The Association of Social Sciences of Thailand, 1976), 54–73.

[3] Benedict R. Anderson, *Imagined Communities: Reflections on the Origin and Spread of Nationalism* (London: Verso, 1991), pp. 94–95.

Figure 2.2.6: King Vajiravudh in his coronation ceremony in 1911.[1] The traditional procession, progressing to the venue of the coronation ceremony attended by members of royal families from Europe and Japan, with entourage dressed in both traditional and modern uniforms.

[1] From an undated postcard 'Royal Procession, Siam', http://2bangkok.com/procession.html [accessed date 9 August 2013].

Chinese and Siamese builders

Continuing from the period under King Nangklao's reign, Chinese migrants played an important part in the building practice in Siam. From the second half of the 1850s, China's defeat of the second Opium War (1856–60) led to the opening of more ports, and the abolition of laws prohibiting Chinese citizen to travel abroad accelerated the migration of Chinese to Siam. The trend increased dramatically with the construction, and tin mining in Siam, which expanded and needed more labour at the turn of the century.[1] Not only were buildings going up, but also infrastructure, such as roads, railways, canals, and 448,300 Chinese arrived in Siam from 1882 to 1917.[2] The Chinese were paid-labourers and not included in the corvée system while it persisted. They became increasingly popular as they were easier to control and many of them were capable of delicate craftsmanship.

Once European style buildings had become preferred by King Mongkut as a result of his interest in the West, Chinese entrepreneurs were engaged more in royal projects in mid-century that were more complex in their management.[3] As a result, the Siamese master builder families and Princes, in charge of royal construction projects, were learning new design and construction techniques from the Chinese as well as from prints and travel to European colonies.

An important Siamese master builder in King Mongkut's reign was Prince Jumsai (Figure 2.2.7) who designed and built Phra Apinao Niwet, Phra Thi Nang Phuwadon Thatsanai, and Phra Thi Nang Chai Chum Phon, all new mansions in the royal palace built during 1852 and 1857. He took a photo, posing with a compass, to indicate his skill with a modern tool.[4]

[1] Niels Mulder, *Inside Southeast Asia: Religion, Everyday Life, Cultural Change*, p. 160.
[2] Chee-Beng Tan, *Chinese Transnational Networks* (London: Routledge, 2007), p. 404.
[3] See Povatong, 'Building *Siwilai*: Transformation of Architecture and Architectural Practice in Siam During the Reign of Rama V, 1868–1910', pp. 63–70.
[4] Joti Kalyanamitra, '*Nai Chang Aek Nai Rob 200 Pi Haeng Krung Rattanakosin (Master Builders of Bangkok in the Last 200 Years)* (Bangkok: Faculty of Architecture, Silpakorn University, 1983), p. 61.

Figure 2.2.7: Prince Jumsai in a traditional costume, posing with a compass (approximately in the 1860s).[1]

[1] Chungsiriarak, *Sathapattayakam Baeb Tawantok Nai Siam Samai Ratchakanti 4 Tueng Po So 2480 (Western Architecture in Siam: Rama IV's Reign to 1937)*, p. 32.

European builders

In the first two decades of King Chulalongkorn's reign (1868–89), increasing interest and awareness towards *Siwilai* by the Siamese elite as well as the free trade situation made possible by consecutive treaties with foreign countries, now brought in European builders to work hand in hand with Siamese master builders and Chinese builders under the patronage of the Siamese elite.

One of the most important figures was John Clunis, a British builder from Singapore, who was employed as only '*Akhitek Luang* (royal architect)' of the Siamese government from 1871 to 1889 (note the direct transliteration of the word 'architect', which means it was a new concept unprecedented in Siam).[1] One of his most important works was Phra Thinang Chakri Mahaprasat, a new throne hall in the royal palace to mark the centenary of the capital and the dynasty. The construction was supervised by Chao Phraya Panuwongmahakosathibodi (Tuam Bunnag).

Another important figure was Joachim Grassi, an Austrian builder, who established his construction office in Bangkok in 1874. His company was responsible for a great variety of public and private projects. Examples ranged from Burapa Palace (1877), Ministry of War (1882–90), Saint Joseph's Church (1883), The court of justice (1882–85), and the custom house (1888). In 1882, his firm employed five architects, two engineers, two draughtsmen, and twelve native clerks.[2] The construction of these projects involved not only Siamese royal master builders but also Siamese and Chinese subcontractors, Siamese, Chinese, Vietnamese, Lao, and Dawai labour. New design and construction techniques were, therefore, gradually disseminated to a wider range of practitioners.

As well as the first two European builders mentioned, Stefano Cardu was another who played a relatively less outstanding role in the first two decades of King Chulalongkorn's reign. His company was responsible for a few projects initiated by the government, such as shop houses and the military college.

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[1] Pirasri Povatong, *Chang Farang Nai Krung Siam: Ton Pan Din Phra Phutthachao Luang (European Builders in Siam: The Begining of King Chulalongkorn's Reign)* (Bangkok: Chulalongkorn University, 2005), pp. 81–107.

[2] 'Professions & C Merchants', in *The Directory for Bangkok Siam 1883* (Bangkok: The Bangkok Times Office, 1883), p. 313. His successful business brought him a great fortune. He, with members of the Siamese and Chinese elite, later invested in a huge irrigation and agricultural estate business.

All these European builders with unrecorded educational backgrounds, who worked under the traditional Siamese patronage system, brought with them to Siam a limited knowledge of architectural design and construction practice during the 1870s and 1880s and introduced practices of competition, tender, and estimate, passing them on to the Siamese elite, royal master builders, and Chinese builders.[1]

Department of Public Works

King Chulalongkorn's favour of European style building of a greater standard compatible with that in Europe, previously unachievable by using European builders with uncertain educational background, brought in European architects and engineers with a professional education to work in the Department of Public Works, established in 1889 as part of the King's administrative reforms.[2]

The influx of the Europeans, whom the King trusted to commission new projects of European standard, affected the royal master builders' careers in the traditional ministries and gradually resulted in their descendants' departure from the field for other careers in newly established ministries such as the Royal Navy and the Royal Air Force.[3] Being promoted to be a ministry in 1892, there were almost twenty European architects, engineers, painters, and sculptors at the office in 1910.[4] A brief account of the important European architects is worth providing.

Italian architects

Even though the first chief architect of the Department of Public Works in 1889 was a German architect, Carl Sandreczki (1847–1929)[5], those who arrived after Sandreczki were mostly Italians from Turin, the avant-garde northern city of Italy, famous for its automobiles and design. They graduated from the Accademia

[1] Povatong, 'Building *Siwilai*: Transformation of Architecture and Architectural Practice in Siam During the Reign of Rama V, 1868–1910', p. 131.
[2] Ibid., pp. 132–33.
[3] Ibid., p. 37.
[4] 'The Public Works Department', in *The Directory for Bangkok Siam 1897* (Bangkok: The Bangkok Times Offcie, 1897), p. 313.
[5] Bangkok, National Archives of Thailand , R 5 B 2 Kh 1/43 (Misecellaneous) Sandreczki was responsible for prestigious work, such as Phra Thinang Borommaphiman (1897), a mansion within the royal palace, and Ministry of Public Instruction (1902–1905), which was worth between 100,000 and 120,000 baht or 5,263 to 6,316 pounds. Such a prestigious position entailed a good salary of 960 to 1,200 baht (5–63 pounds sterling) per month. See Bangkok, National Archives of Thailand, R 5 Kh 5.2/3 (Ministry of Finance)

Albertina di Belle Arti, a prestigious fine art school.[1] The alumni of the Accademia were drawn to Siam by the network among them, encouraged by the competitive situation of the profession in their own country.[2]

The first Italian architect to arrive in Siam was Mario Tamagno (1887–1941) (Figure 2.2.8). After graduating from Accademia Albertina di Belle Arti, Turin, in 1898 and working briefly in the office of Carlo Ceppi, he signed a twenty five-year-contract with the Siamese Government in 1900. He served as an architectural assistant for the Department of Public Works, substituting for Sandreczki.[3] His first work at the department was Makkhawan Rangsan Bridge (1900–03) (Figure 2.2.29).[4] A large number of works that followed were Phra Thinang Ambara (1901–06) and Phra Thinang Abhisekdusit (1902–04); both were royal mansions in Suan Dusit, development of a palace complex outside the city.

In 1903, Tamagno, with Mr. Scotch and Mr. Bayrolery, designed Parussakawan Palace for Prince Chakrabongse. In the same year he also designed Bang Khunphrom Palace for Prince Paribatra. In 1904, he assumed the position of superintendent architect of the Technical Office, the highest position of the Design Department in the Ministry of Public Works.[5]

Annibale Rigotti (1870–1968) (Figure 2.2.9) was another important Italian architect in Siam's transforming period of building practice, but his name appeared even more in the transforming scene of European architecture at the transition

[1] Architectural education in Italy at the time was conducted in either fine art or engineering schools. As both had their disadvantages, a new law about education in Italy was proposed to the senate in 1889. However, the first school of architecture in Italy was not opened until the 1920's. See Richard A. Etlin, *Modernism in Italian Architecture, 1890–1940* (Cambridge: MIT Press, 1991), pp. 8–9.

[2] Francesca Filippi, 'Le nouveau palais du trône à Bangkok (1907–1916) et l'introduction du béton armé au Siam', in Robert Carvais, André Guillerme, Valérie Nègre and Joël Sakarovitch, eds, *Edifice et artifice: Histoires constructives* (Paris: Picard, 2010), 241–48 (p. 242).

[3] After Sandreczki moved to take charge for the construction of Suan Dusit, development of a palace complex outside the city, the government wanted to save money by hiring only an architectural assistant instead of a chief architect. See Bangkok, National Archives of Thailand, R 5 Kh 4.4 File 12 (Ministry of Finance). Accordingly, Tamagno's salary in 1903 was 48 pounds per month, which was lower than that received by Sandreczki. See Bangkok, National Archives of Thailand, R 5 B 9/43 (Misecellaneous)

[4] Elena Tamagno, '*Mario Tamagno: 25 Pi Haeng Kan Pen Sathapanik Nai Ratchasamnak Siam (2443–2468) (Mario Tamagno: 25 Years of an Architect in the S*iamese Court)', *Muang Boran*, 2 (1998), 23–45 (p. 30).

[5] After finishing Bang Khunphrom Palace in 1906, Tamagno requested an increase in salary to 70 pounds, mentioning that Sandreczki, the former chief architect, had received 72 pounds. See Bangkok, National Archives of Thailand, R 6 B 5/16 vol. 3 (Misecellaneous)

between the nineteenth and twentieth centuries.[1] After graduating from Accademia Albertina di Belle Arti, Turin, in 1890, he worked with Raimondo D'Aronco until 1896. His designs ranged from a house, an elementary school, a town hall in Italy, Ottoman Agriculture-Industrial Exposition and a railway station in Turkey to theatres in Bulgaria. By the invitation of Mario Tamagno in 1907, Rigotti signed a two-year contract with the government of Siam.

Three years later, Ecole Manfredi (1883–1973) (Figure 2.2.10) joined the team. He had been to Lagrange Royal Technical Institute (1894–98), then the San Carlo Technical College (1898–99) before completing a professional Diploma from the Royal Accademia Albertina di Belle Arti, Turin, in 1907.[2] He had been promoted without examination to attend the higher 2-year-course in Architecture at the same institute, where he had been awarded a gold medal 'Cum Laude' for the design of Turin's palace restoration and new buildings in 1909, as well as gaining a scholarship and fifteen other prizes and testimonials of artistic merit.[3] After that, he had worked at the Department of Public Works, Turin Municipality, the Marandri Technical Office, and at P. Fenoglio C.E. Engineers and Architects.[4] He had been finally selected by the Committee of the Albertina to work at Siam's Ministry of Public Works at the end of 1909.[5]

Unlike normal European expatriates' contracts in Siam at the time, Manfredi's contract required that he had to achieve a good understanding of Thai conversation and writing within the first year.[6] This was perhaps a consequence of delays and pitfalls in construction resulting from miscommunication among the earlier generation of Italian architects and engineers, who used English, and the Siamese court officials, many of whom did not speak it.[7] This requirement was

[1] See a detailed account about Annibale Rigotti in Francesca Filippi, 'Un architetto tra otto e novecento. Annibale Rigotti, disegno e pratica di architettura 1882–1925 (An architect in the Nineteenth and Twentieth Centuries. Annibale Rigotti, Design and Practice of Architecture 1882–1925)', (unpublished doctoral thesis, Politecnico de Turin, 2004).
[2] Leopoldo Ferri de Lazara, Paolo Piazzardi, and Alberto Cassio, *Italiani alla corte del Siam (Italians at the Court of Siam)* (Bangkok: Amarin Printing and Publishing, 1996), p. 118.
[3] Luigi Bressan, 'Ercole Manfredi: One of the Great Architects of Bangkok (1883–1973)', in *Proceedings of the First International Conference on Italian-Thai Studies: From the Nineteenth Century to the Present* (Bangkok: National Museum, 1997), pp. 1–11 (p.2).
[4] Lazara, Piazzardi, and Cassio, *Italiani alla corte del Siam (Italians at the Court of Siam)*, p. 118.
[5] Ibid.
[6] Bressan, 'Ercole Manfredi: One of the Great Architects of Bangkok (1883–1973)', p. 3.
[7] Povatong, 'Building *Siwilai*: Transformation of Architecture and Architectural Practice in Siam During the Reign of Rama V, 1868–1910', p. 187.

perhaps the starting point for his commitment, much greater than that of other European officials, to mingle with the Siamese and Chinese, having a Siamese wife and two daughters, eating Thai food, and becoming a master in speaking and writing Thai.[1] He even adopted a Thai name, Ekkarit Manfendi. In the view of contemporary Europeans, whose prejudice still included belief in their racial superiority, it was perhaps no exaggeration to dub Manfredi's behaviour with the derogatory term, 'going native'.

After his three years at the Department of Public Works, Manfredi assumed position of designer at the Royal Household of King Vajiravudh's court, where he became the Chief designer and the 3rd Court officer in 1917, rising to 1st Court officer in 1921. His service at the court of King Vajiravudh was considered outstanding, as he was knighted Commander of the Crown of Siam (1913), received the Mala Dusadi Medal for artistic merit (1915), was awarded a gold medal at the Bangkok Fine Arts Exhibition (1917), received the Order of the White Elephant, the grade of Prime Court Official and the post of Junior Lieutenant in the Royal Naval Flotilla (1920). Apart from official works, he also designed residential buildings mainly to commissions of the King or members of the royal family, such as Prince Chakrabongse's new palace (1909–10) and Prince Nares' palace (1917).

In actuality, in the last ten years of King Chulalongkorn's reign (1900–10), the three Italian architects always formed a team with other Italian architects and engineers designing prestigious projects such as Phra Tamnak Chitlada, Phanfa Lilat Bridge, Phra Thinang Ratcharit Rungrot, Prince Urubhongs's palace (1906–07), Phraya Suriyanuwat's Residence (1906–08), and temporary triumphal arches for King Chulalongkorn's return from the second trip to Europe (1907). They were also in charge of projects carried over into the following reign, including Phraya Thai Palace, Wat Rachathiwat (1909–12), Suan Kulap Palace (1910–13) and Hua Lampong Railway Station, the Bangkok terminal (1910–16).

[1] For a Chinese friend of his, see *The Singapore Free Press and Mercantile Advertiser*, 20 January 1930, p. 20.

Figure 2.2.8 (left): Mario Tamagno (1887–1941)[1]

Figure 2.2.9 (right): Annibale Rigotti (1870–1968)[2]

Figure 2.2.10: Ecole Manfredi (1883–1973)[3]

[1] Elena Tamagno, '*Mario Tamagno: 25 Pi Haeng Kan Pen Sathapanik Nai Ratchasamnak Siam (2443–2468) (Mario Tamagno: 25 Years of an Architect in the S*iamese Court)', p. 25.
[2] Lazara, Piazzardi, and Cassio, *Italiani alla corte del Siam (Italians at the Court of Siam)*, p. 84.
[3] Ibid., p. 102.

One of the Italian architects' most important works was Phra Thinang Anantasamakhom, a new Throne Hall commissioned in 1908. Assuming the position of *Nai Chang Okbaeb* (Design master builder) for the project, Tamagno was assisted by Rigotti, *Nai Chang Yai Phuchuai* (Assistant master builder). Manfredi's main duty was dealing with the copper roofing of the domes. Carlo Allegri was the engineer. E. G. Gollo was the assistant engineer. They were supervised by a Siamese official, Chao Phraya Yommarat (Pan Sukhum), who served as *Mae Kong Chat Kan Ko Sang* (Chief construction manager) and the assistant, Phraya Prachakonphichan (Ao Amatayakula).[1]

Rigotti returned to Italy in 1909. Upon his return, he was appointed as a consultant architect of the government of Siam, cooperating with Tamagno who was still based in Bangkok, coordinating the supplies and delivery of materials from Italy for the ongoing construction of Phra Thinang Anantasamakhom until its completion.

When King Vajiravudh re-adjusted the administrative system in 1912, the Department of *Chang Mahatlek* (Craftsman pages) in the Ministry of Palace and the Department of Museum in the Ministry of Public Instruction were transferred to the newly established the Department of Fine Arts.[2] The Department of Public Works was abolished and the Italian painters, sculptors, and some architects were transferred to work in the newly established Department of Fine Arts, while Tamagno was transferred to the Local Sanitary Department, Ministry of Local Government. Their works, both cooperatively and privately designed, went on. They ranged from Nielson Hayes Library (1920–22), Norasing House (1923–25), Banthomsin House (1923–25), Phraya Prasoetsuphakit's House, Chulalongkorn Hospital, to Chitlada Railway station and many more bridges.[3]

Rigotti returned to Siam in 1923 and worked for three more years, cooperating on various projects. In 1924, Manfredi left his court position to work at the Department of Fine Arts.[4]

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[1] Pussadee Tiptus, *Chang Farang Nai Krung Siam (European Architects in Siam)*, 2nd ed. (Bangkok: Chulalongkorn University Press, 2002), p. 66.
[2] 'Department of Fine Arts: History and Roles', http://www.finearts.go.th/node/453 [accessed 19 July 2013].
[3] 'Our Siam Letter', *The Singapore Free Press and Mercantile Advertiser*, 15 February 1929, p. 13.
[4] Bangkok, National Archives of Thailand, R 6 B 5/79 (Misecellaneous).

Karl Döhring

Apart from Sandreczki and the Italians, there was the German architect Karl Döhring (1879–1941) (Figure 2.2.11).[1] He started his career in Siam in 1901 working at the Engineering Division in the Department of Northern Railway. In 1906, he moved to the Ministry of Interior.[2]

While serving at the ministry, he was commissioned by King Chulalongkorn to design Ban Puen Palace (1910) in Petchaburi Province. The project involved other Europeans, including Dr. Bayer, a German engineer and three western draughtsmen. G. Cluzer was the contractor.[3] Siamese officials were also involved in it. Site selection, management, accountancy, and inspection were the responsibility of the Governor of the province, Phraya Surintraruechai. Survey and measurement were the responsibility of Prince Aphakorn. In addition, there were eight clerks on the project. All works were under Prince Damrong's supervision.

After finishing Ban Puen Palace, Döhring designed Varadis Palace for Prince Damrong, the supervisor of the previous project, in 1911. However, he experienced severe stress from his wife's sudden death and rivalry from foreign professionals, mostly Italian. This situation caused him to return to Germany. During the following two years, he wrote and published an academic paper about Buddhist stupas in Siam.[4]

Döhring returned to Siam in 1913, working in the Department of Public Works and conducting archaeological excavations in the Northern region. He designed several projects including the Queen mother's Mansion in Bangkhunphrom Palace, but most of his projects, including Bangkok Railway Terminal, the Navy Headquarters, and the Navy Hospital, were never realised. He experienced neurotic sickness again and went back to Germany for good.

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[1] For detailed accounts about Karl Döhring, see Krisana Daroonthanom, *Das architektonische werk des Deutschen architekten Karl Döhring in Thailand* (Berlin: Verlag, 1998); Krisana Honguthen, 'Karl Döhring and His Architecture in Siam', *Muang Boran*, 1 (1999), 8–31.

[2] His salary here was 585 baht per month. See Bangkok, National Archives of Thailand, R 6 M 7/1 (Ministry of Interior).

[3] G. Cluzer won the bidding with the cost of 428,800 baht just for labour. The final cost including banqueting hall, covered ways, interior decoration, electrical appliances, water tank, feed pump, and water pipe system was 1,347,158 baht. See Ibid.

[4] Karl Döhring and Walter E. J. Tips, *The Country and People of Siam* (Bangkok, Thailand: White Lotus Press, 1999)., originally published as Karl Döhring, 'Der Prachedibau in Siam', *Zeitschrift für ethnologie*, (1912), 693–806.

After World War I, Döhring quit his architectural career and became an art historian and archaeologist. His interest in Siam's art and architecture lingered, therefore he published three more books on the country and its people, its temples, and its crafts in 1920, 1923, and 1925.[1]

Edward Healey

The demography of European architects in Siam was made more diverse by the presence of Edward Healey (Figure 2.2.12), who had studied art teaching with a major in Architecture at the Royal College of Arts, London, and had graduated in 1907.[2] A record of his early career has not been found, but he did not register himself with RIBA as he is unlisted in *The Directory of British Architects 1834-1914*. Among fifty alumni of the RCA who went on to be headmasters of art schools in British colonies[3], Healey headed to Siam, chairing as the first headmaster of the newly established Po Chang School (The Craftsmen's Training School) in Bangkok. He worked there from 1910 to 1912 under the Department of Education.[4] Apart from the teaching career, Healey also ran a private construction office — Siam Architect.

Like the other European architects mentioned, Healey received private commissions from the Siamese elite. After designing a second floor and tower extension to Prince Chakrabongse's Palace, previously designed by Manfredi, he was commissioned to design a seaside teak wood-villafor the Prince[5], who later became his close friend.[6] In 1914, he designed an extension of Chao Phraya

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[1] Karl Döhring, *Buddhistische Tempelanlagen in Siam* (Bangkok-Berlin: Asia Publishing House-Walter de Gruyter & Co., 1920); ———, *Siam: Land und Volk* (Darmstadt: Folkwang Verlag, 1923); ———, *Art and Art-Industry in Siam* (Bangkok: Asia Publishing House, 1925). The last two that were originally available only in German have been published in English almost eighty years later as Döhring and Tips, *The Country and People of Siam*.

[2] For the record of Healey and the curriculum at RCA that he experienced, see 'Report of the Departmental Committee on the Royal College of Art with Appendices' (London: Departmental Committee on the Royal College of Art 1911), p. 6; Hilary Cunliffe-Charlesworth, ''The Royal College of Art: Its Influence on Education, Art and Design, 1900–1950', (unpublished doctoral thesis Sheffield City Polytechnic, 1991); Andrew Brighton and Paul Huxley, *Exhibition Road: Painters at the Royal College of Art* (Oxford: Phaidon, 1988).

[3] Christopher Frayling and Claire Catterall, *Design of the Times: One Hundred Years of the Royal College of Art* (Somserset: Richard Dennis Publications/Royal College of Art, 1996), p. 81.

[4] Bangkok, National Archives of Thailand, S Th 50.5/21(Mr. Healey gave Consultation about Yaowaman Uthit Building)

[5] Prince Chula Chakrabongse, *The Twain Have Met or an Eastern Prince Came West* (London, G T Foulis & Co., 1956), p. 85.

[6] Eileen Hunter and Narisa Chakrabongse, *Katya & the Prince of Siam* (Bangkok: River Books, 1994), p. 124.

Thammasakmontri's (Director of the Department of Education, Ministry of Public Instruction) house. During 1914 and 1918, his Siam Architects Company Limited designed and supervised the construction of the main mansion at Devavesm Palace of Prince Devavongse.[1] Also in 1914, he won the design competition of the prestigious School of Civil Service over Karl Döhring. In 1918, he travelled to China, Japan, and Canada with Katya (Ekaterina Ivonovna Desnitsky), Prince Chakrabongse's Russian wife and her servant, returning to Siam in January 1919.[2] Upon his return, he designed a chemical laboratory next to Wat Phra Chetupon at Tha Tien, Bangkok, with Mr. Marcan and the United Engineer Ltd., completed in 1919.[3] In the same year, he signed a three-year contract with the Ministry of War, where Prince Chakrabongse was a senior officer, as consulting architect from 1919. His private company still received commissions such as Pasteur Institute (1922) and Chakrabongse Building (1923), a building in Chulalongkorn Hospital dedicated to his close friend, Prince Chakrabongse, who untimely died in 1920. The engineer was E. G. Gollo of the Department of Sanitary.

Healey returned to England in 1921 for a vacation. A record of the Ministry of War indicated that the minister did not want to continue Healey's contract after his vacation, for the ministry no longer had any important construction projects and Healey's salary was deemed too high (1,200 baht per month), while the architect also ran his private office.[4] When he returned to Siam in 1922, Healey therefore worked only for his private office. He designed and erected a British War Memorial, the first structure at the new site of the British Legation in Bangkok in 1923.[5] He also designed and supervised the construction of the new office for The Borneo Company at New Road, Bangkok, in 1924, cooperating with the United Engineer Ltd., which had won the contract.[6] For residential projects, he designed Manangkhasila House for Tho Sucharitkun at the end of the reign of King Vajiravudh (1925), who sponsored the project. By 1929, he also designed Tamnak Thip, a new residence for Princess Athonthipphayanipha.

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[1] Bank of Thailand, *Wang Devavesm (Devavesm Palace)* (Bangkok: Bank of Thailand, 2004), p. 173.
[2] Hunter and Chakrabongse, *Katya & the Prince of Siam*, pp. 140–44.
[3] 'Mr. A. Marcan' *The Straits Times*, 4 April 1932, p. 16.
[4] Bangkok, National Archives of Thailand , R 6 B 5/130 Vol.6 (Misecellaneous)
[5] The memorial, described by Siam Observer as 'simple and dignified', was made with Aberdeen granite and bronze. See 'British War Memorial', *The Straits Times*, 19 January 1923, p. 3.
[6] The three-story building, whose structure was mainly reinforced concrete, had two electric lifts. See *The Singapore Free Press and Mercantile Advertiser*, 9 February 1924, p. 3.

Figure 2.2.11 (left): Karl Döhring at an inner gate of Wat Phra Chetuphon, Bangkok[1]

Figure 2.2.12: Edward Healey (the third from the right) on a tour to China with Prince Chakrabongse's wife, Katya.[2]

[1] Döhring and Tips, *The Country and People of Siam*, p. 287.
[2] Hunter and Chakrabongse, *Katya & the Prince of Siam*, p. 142.

Charles Beguelin

Charles Beguelin's (1888–unknown) (Figure 2.2.13) background and his early career in Siam are unclear.[1] The Swiss Institute of Engineers and Architects has confirmed Beguelin's membership but any documents that were related to him are supposed to have been lost during a fire in the 1960s.[2] An official record indicates that Beguelin, originally a Frenchman not Swiss, arrived in Siam as part of a French political initiative in April 1919 and worked at the Division of Engineering of the newly established Department of Public Health as *Nai Chang Yai*.[3] The position was described in English as Chief Engineer but, in direct translation of the Thai term, it was rather Chief master builder. It therefore reflected a persisting tradition of *Chang*, the construction practitioner, with no separation between engineering and architectural professions.

As the Department of Public Health was responsible for health care services, the nature of Beguelin's works was, therefore, leaning toward emphasis on functional and hygienic aspects. Apart from his official work, a brief study on the architect by Tiptus and other accounts indicate that he designed a few private projects such as Prince Rangsit's new palace.[4]

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[1] The information from the Swiss National Archive indicates his year of birth but not the year of his death. See 'Béguelin, Charles Albert, 1888– (Autoritätseintragungen)', http://www.helveticarchives.ch/detail.aspx?ID=200057 [accessed date 5 August 2013].

[2] Communication with Judith Bosco of Schweizerischer Ingenieur- und Architektenverein by email, 8 December 2012.

[3] Bangkok, National Archives of Thailand, S R 0201.19/5 (Foreign Builders). Beguelin's wife and children came to live with him in Siam by 1927 at the latest. See 'Passengers Arrived' *The Singapore Free Press and Mercantile Advertiser*, 10 May 1927, p. 12. And 'Passengers' *The Straits Times*, 17 June 1930, p. 10.

[4] Apart from the important European architects already discussed, quite a few designers, engineers, and technicians of various nationalities, but predominantly Italians, were working in King Chulalongkorn's royal government. They included B. Moreschi (architect and painter), O. Tavela (architectural technician), Mr. Hale (interior designer), Cesare Ferro (fresco painter), C. Allegri (chief engineer), E. G. Gollo (engineer), Mr. Roberti (engineer), G. Cannova (engineer), Mr. Cegod (builder), William Bancley (electrical engineer), Mr. Mayola, Mr. Pasmo, and Mr. Shaw. See Tiptus, *Chang Farang Nai Krung Siam (European Architects in Siam)*, pp. 83–117. Other European designers, engineers, and technicians who worked in the reign of King Vajiravudh belong to a similar demographic of those worked in the reign of King Chulalongkorn; many of them continued their career from the previous reign. A few newcomers were Mr. Gittins (chief engineer), Mr. Gothart (engineer), Charle Bodar (sanitary technician), R. Belleholme (sanitary engineer), L. R. De La Mahotiere (sanitary engineer), A. B. Spigno (engineer), N. Sperotti (engineer), Fausto Pistono (engineer), Carlo Quadrelli (draughtsman), Mario Galletti (quantity surveyor, designer, sculptor), A. Rigazzi (architect), C. Rigoli (painter), Corrado Feroci (sculptor), Emilio Forno (painter), F. Montalenti (architect), and G. Salvatore (architect). See Therese Albertine Louise von Jacob Robinson, *Bangkok and Siam, Directory (Volume Yr.1914)* (Bangkok: Bangkok Times Press, 1914).

Figure 2.2.13: Charles Beguelin[1]

[1] Oskar Scharz and Rudolf Wyss, *Hoch- und Tiefbau AG Interlaken, 1850–1975* (Interlaken: Hoch- und Tiefbau AG), p. 47.

The political initiative relating to Beguelin's career was the series of conflicts and negotiations following the Franco-Siamese War in 1893, under which subsequent transfers of territories previously under Siamese influence to French Indochina occurred, and other requirements from France were fulfilled regarding juridical matters, including employment of French engineers for the construction of railways, Bangkok's sewage system and water works.[1] Amidst the requests, which gained no satisfactory responses from the French government, the Siamese government offered extra proposals such as establishing a Sanitary School to employ French teachers, granting teak forest concessions, establishing a French language school (Assumption College) to employ French teachers and professors, and opening the Bangkok — Saigon route to the use of French ships.[2]

Apart from the important European residents already discussed, works by overseas architects were also evident. Palmer and Turner, a British architectural firm in Hong Kong, designed the new Hong Kong and Shanghai Bank, opened at the end of 1921.[3] E. G. Gollo was the engineer. Bangkok Dock Company was the contractor.

The issue of local conditions

Even though King Chulalongkorn was generally satisfied by the performance of the Europeans, he was sometimes concerned over their understanding of the local conditions as they were totally different from those in Europe.[4] The King's concern was evident as early as the time when Clunis was designing Phra Thinang Chakri Mahaprasat and several mansions in the 1870s and 1880s,[5] whose construction and maintenance appeared to be not smooth and practical.[6] King Chulalongkorn later claimed that this was the consequence of working without good planning, knowledge and skills.[7] This concern was also evident in the Department of Public Works, where, up to 1905, records of incompetence of the newly graduated European

[1] Bangkok, National Archives of Thailand, R 5 Kh 19/1 (Ministry of Finance)
[2] Ibid.
[3] 'Hong Kong Bank' *The Straits Times*, 16 December 1921, p. 11.
[4] Povatong, 'Building *Siwilai*: Transformation of Architecture and Architectural Practice in Siam During the Reign of Rama V, 1868–1910', pp. 186–89.
[5] Naengnoi Suksri, *Phra Ratchawang Lae Wang Nai Krungthep (Royal Palace and Palaces in Bangkok)* (Bangkok: Chulalongkorn University, 1982), p. 81.
[6] Pirasri Povatong, *Chang Farang Nai Krung Siam: Ton Pan Din Phra Phutthachao Luang (European Builders in Siam: The Begining of King Chulalongkorn's Reign)*, pp. 92–96.
[7] London, British Library, The Chakrabongse Collection of Royal Letters Digital Archive, Or. 15749/13 (1910 AD) Folio 19-3.

architects were reported. Siamese ministers reported to the King that the young architects, who had only theoretical knowledge, committed many errors and had to depend on Chinese carpenters' and masons' experience.[1] Their unfamiliarity with the local condition also produced designs with unnecessary western features, such as chimneys and basements. The architects later adapted their designs to suit the climate and working conditions more, adopting features to suit local uses: for example, shading devices and louvered fenestration.[2]

Contractors

The people who executed the works designed by European architects, engineers, and supervised by Siamese officials, which involved large size and complexity, were mostly European contractors based in Bangkok; some of them had worked in government offices before founding their businesses. One of the most prominent firms was G. Cluzer Company Limited.

Quite a few Siamese and Chinese carpenters and builders who worked with European architects became contractors, designing and building private projects.[3] But soon afterward, the Chinese started to dominate the small and medium-scale-construction industry. The domination of Chinese carpenters by 1890 might be observed in a primary school text, *Baeb Rian Raew (Quick learning text)*, published in that year, showing examples of how to create Thai sentences describing everyday life translated as follows:

> Children who are severely guilty must be flogged. Chinese carpenters use trolleys to transport wood on the road. Chinese kill pigs for sale. […] Bells are rung at the temple in the evening.[4]

The Chinese carpenters learnt modern design and technology, resulting in a hybrid style in their works. The new styles and techniques were gradually disseminated around Bangkok and later to provincial cities; therefore old styles and techniques of carpentry became less popular.

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[1] Bangkok, Thailand, R 5 Y Th 1/32 (Ministry of Public Works)
[2] Tiptus, *Chang Farang Nai Krung Siam (European Architects in Siam)*, p. 12.
[3] Tiptus and Bongsadadt, *Ban Nai Krungthep: Rub Baeb Lae Kan Plian Plaeng Nai Rob Song Roi Pi (Houses in Bangkok: Style and Change in 200 Years)*, p. 180.
[4] Somdet Kromphraya Damrongrachanuphap, *Baeb Rian Raew (Quick Learning Lesson)*, vol 1 (Bangkok: Department of Public Instruction, 1890), p. 29.

Siamese officials and master builders

Once more European architects were involved with royal projects after 1889, as Siamese royal master builder families faded away. A few Siamese officials, however, remained in their positions, albeit with adaptations and leaning towards the new system, supervising the Europeans. Apart from the ministers, the officials who collaborated between the King and the architects, artists, and engineers were Under-secretary (*Palad Krasuang*) and Director-general (*Chao Krom*) of the ministry, and in some few cases, remaining Siamese master builders.[1]

Among the Siamese officials who cooperated with the Europeans, the most important one who collaborated with the Italian team at the Department of Public Works was Prince Naris (1864–1947) (Figure 2.2.14), serving as minister from 1889 to 1893 and again from 1899 to 1905. The Prince did not have any architectural training, but was talented in art and literature. The cooperation between him and the Europeans created a transcultural dialogue about building design for the first time in Siam.

Theorising building design

Even though there was no formal discourse about theories in building design in Siam yet, because a formal training in a form of school and publication particularly about building construction, let alone 'architecture' was not established before the 1930s, some discussion among European architects who possessed theoretical knowledge about architecture from their professional training must have existed. But as there is no evidence of this type of discussion, another type of discussion is worth examining instead. It was the transcultural dialogue regarding theory in building design within the cooperation between the European architects and Siamese master builders.

[1] Povatong, 'Building *Siwilai*: Transformation of Architecture and Architectural Practice in Siam During the Reign of Rama V, 1868–1910', p. 186.

Figure 2.2.14: Prince Naris[1]

[1] Phraya Anumanratchathon, *Phra Ratchalanyakon Lae Tra Prachamtua Prachamtamnaeng (The Royal Seals and Seals)* (Bangkok: Phra Chan Publishing House, 1950), p. *Ko*.

Prince Naris's cooperation with the Italians resulted physically in a new direction of Siamese building design, where ideas were more significant than traditional principles and practices.[1] This was evident in the Prince's second term in the ministry that he cooperated with the Italians in Wat Benchamabophit in Suan Dusit, developing a new idea of Siamese monastery design, including an application of grid system and reinforced concrete structure.[2]

The Europeans too had a chance to create a new Siamese art under the supervision of Prince Naris. For example, Manfredi's main contribution in the design of Wat Benchamabophit was the design of Khmer style marble lion sculptures.[3] The exchange also happened between other pairs of European architects and Siamese officials, such as Edward Healey and Phra Smitlaekha, who designed four halls of the Royal Pages School in 1917. Other Siamese officials who interacted with the Europeans and were likely to have had the exchange were Phraya Athorn Thurasin (M. L. Chuang Kunchorn), Director of the Department of Fine Arts, and Phraya Wisukam Sinlapa Prasit (Noi Sinlapi), who was in charge of the construction of halls and residences in Sanam Chan Palace.[4]

An account regarding how a building should be designed was evident in Prince Naris' discussion with Manfredi. The Prince's recall of what the Italian architect stated is translated as follows:

> A theatre should be built as a theatre; a court should appear as a court. It is inappropriate to build a theatre or a court like *Contes* house.[5]

As regards discussion about the traditional house, one of the earliest discussions about the Siamese house could have been the one between Prince Naris

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[1] For sources about the life and work of Prince Naris, see Manop Itsaradet, *Sathapattyakam Fi Phrahat Somdetchaofa Kromphraya Naritsaranuwattiwong (Architectural Works of Prince Naris)* (Bangkok: Silpakorn University, 1995); Sucharit Thaworasuk, *Phraprawat Lae Phonngan Sinlapa Khong Somdet Phrachaoborommawongthoe Kromphraya Naritsaranuwattiwong (Life and Artistic Work of Prince Naris)* (Bangkok: Thai Watthana Panich, 1968).

[2] Surasak Charoenwong, *Somdet Chaofa Kromphraya Naritsaranuwattiwong: "Somdet Khru" Nai Chang Yai Haeng Krung Sayam (Prince Naris: "The Prince Teacher" The Great Master Builder of Siam)* (Bangkok: Matichon, 2006), pp. 70–74.

[3] Lazara, Piazzardi, and Cassio, *Italiani alla corte del Siam (Italians at the Court of Siam)*, 125.

[4] Tiptus and Bongsadadt, *Ban Nai Krungthep: Rub Baeb Lae Kan Plian Plaeng Nai Rob Song Roi Pi (Houses in Bangkok: Style and Change in 200 Years)*, p. 260.

[5] Somdet Chaofa Kromphraya Naritsaranuwattiwong and Somdet Kromphraya Damrongrachanuphap, *San Somdet (Princes' Correspondence)*, vols 20 (Bangkok: Kurusapha, 1962), pp. 50–51.

and Carl Sandreczki. Regarding the Siamese roof form, Prince Naris quoted Sandreczki as follows:

> [Sandreczki stated that] steep roofs of Thai houses are good, the heat transmits to both sides not through the ceilings; gentle sloping roofs like *Farang* (western) style let the heat be transmitted through ceiling, heating the rooms underneath.[1]

This scientific opinion by the European architect was among the earliest scientific notions about the Siamese house in a somewhat academic way, unlike general observations by European travelers about the house's main features previously recorded in various books. And now Prince Naris, who served as the Minister of Public Works, learnt it from the European.

At the same time, this was also an early notion to define the identity of Siamese buildings. It was true that the Siamese house had steep roofs but to put it as an extreme opposite to western roofs, claiming that the latter had gentle slopes, was misleading, as there were also steep western roof forms such as Gothic or Mansard. This half-accurate comparison was therefore operated within the Orientalist practice that aimed to create an 'other' that differs from 'us'.[2] Ironically, this case was rather an 'Occidental' notion posited by a European himself that over-generalised European roof forms as all gently sloped in order to be the opposite to the Siamese steep roof.

Apart from the conversation about the house, research about other Siamese building types was also conducted. The first outcome of the research happened to be published in 1912 in Germany as it was the German architect Karl Döhring's survey of *Phra Chedi* (Buddhist stupas) in Siam.[3] This 113-page article, written in German, with 48 picture plates was originally published as a chapter in an Ethnological journal in Germany, which had been preceded by his lecture at the Ethnology and Anthropology Society. Döhring conducted surveys, carried out research, and composed this writing on Buddhist stupas because he was not able to find Thai literature directly devoted to it, despite the fact that many literatures on the

[1] Ibid., 65.
[2] See Said, *Orientalism*.
[3] Döhring, 'Der Prachedibau in Siam'.

other topics such as medicine, animals, and astrology had been found.[1] This was because, as Döhring understood quite accurately, the tradition of Siamese construction practice had relied on apprenticeship and oral transmission of knowledge. In carrying out his research, he aimed to encourage the Siamese government to distribute the knowledge of good forms that he hoped would enhance contemporary stupa designs, as he suggested that some of them had been executed unsatisfactorily, due to the fading popularity of the practice and lack of good skilled designers and labours.[2]

Döhring researched Bhuddist temples in Siam and his book on the subject was published in 1920.[3] The research and writing showed a similar approach to the first one, with the change of subject from stupa to the other building types in the Buddhist monastery. The book comprised 353 pages with 116 plates. These two titles do not seem to have been widely circulated. They were not translated into English until 1999, and a Thai version has never been published.[4]

Döhring also observed Siamese traditional houses and included them in his *Siam: Land und Volk (The Country and People of Siam)* (1923), with a preface admiring the country's art and natural beauty as well as the people's simple life. Even though he considered domestic buildings inferior to temples and palaces, and did not considered them to be able to represent the uniqueness of Siamese art, he scientifically described Siamese houses' appropriateness for the tropical climate by mentioning natural ventilation and protection from heat and rain.[5] This was, therefore, another example of scientific analysis about the Siamese house by a foreign architect.

[1] Döhring, 'Der Prachedibau in Siam'.
[2] Döhring and Tips, *The Country and People of Siam*, p. 4.
[3] Döhring, *Buddhistische Tempelanlagen in Siam*.
[4] Döhring and Tips, *The Country and People of Siam*.
[5] Ibid., p. 54.

Figure 2.2.15: Two typical pages from the English edition of Karl Döhring's *Buddhistische Tempelanlagen in Siam*, showing plans of Buddhist temples in Siam.[1]

[1] Karl Döhring, *Buddhist Temples of Thailand*, pp. 116–117.

It is worth pointing out that despite Sandreczki and Döhring's notion about the advantage of the Siamese house's steep roof and climate responsiveness, none of their designs for their elite clients happened to be in a form of the Siamese house. And even though some of their works show a climatic responsiveness in some degree, they were unquestionably designed in European styles.

Döhring gave the explanation that: 'for modern palaces in Siam, where utility and convenience were the case, western culture which stood higher and had produced significant developments in this field, was victorious'.[1] For him, the 'developments' in utility and convenience claimed as achieved in western buildings seemed to be difficult to separate from their 'style'.

Dismissing a possible use of the Siamese house design for high-end-clients, Döhring focused on in-depth study in Siamese art and monastic buildings. He saw their importance because, as he pointed out, since the Prussian Expedition to Siam in 1862, no particular literature about Siamese 'architecture' had been produced. His contribution to the study of Siamese art was therefore a result of an enlightened western man's curiosity about an exotic culture, supported by his self-appointed generosity that he did it to encourage the Siamese government in support of more study of the national art, which risked extinction due to the excessive popularity of western style buildings — the scenario that, ironically, he had admitted elsewhere as undeniable.[2] In this sense, Döhring's concern and action were not unlike what was thought and done by European colonial scholars who compiled research about the traditional art of colonised countries that had been claimed to deteriorate because of the native's ignorance, and that needed civilised colonisers to assist them to save their heritage and learn about it systematically.[3]

Another example showing the victory of western civilisation in modern buildings can be seen in Manfredi's opinion at the end of his life about the designs for Norasing House and Banthomsin House of 1923, both in Venetian Gothic style, which had been intended to reflect the nickname of Bangkok — Venice of the East.

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[1] Karl Döhring, *Buddhist Temples of Thailand*, p. 1.
[2] Ibid.
[3] The idea about Europeans' colonial attitude towards the study of colonies' heritage is taken from Thongchai Winichakul, 'Keynote Speech' (presented in *Siam/Thai Nai Asia Tawan Ok Chiang Tai Suksa Khwam Ru Rueng Thai Tham Klang Phumiphak (Siam/Thai in Southeast Asian Studies: The knowledge about Thailand among the region)*, Thammasat University, 18 July 2013).

Figure 2.2.16: The unbuilt design of Norasing House (1923–25) from Mario Tamagno's archive.[1]

Figure 2.2.17: Front elevation of Norasing House (1923–25), recorded as a design by Annibale Rigotti[2] This scheme was built.

[1] Tamagno, 'Elena Tamagno, '*Mario Tamagno: 25 Pi Haeng Kan Pen Sathapanik Nai Ratchasamnak Siam (2443–2468) (Mario Tamagno: 25 Years of an Architect in the S*iamese Court)', p. 30.
[2] *Government House* (Bangkok: The Secretariat of the Cabinet, 2007), p. 12.

Figure 2.2.18: Back elevation of Norasing House (1923–25) recorded as a design by Annibale Rigotti[1] This scheme was built.

Figure 2.2.19: The back of Banthomsin House (1923–25), like Norasing House, built in Venetian-Gothic style (the structure with a hipped roof was an extension).[2]

[1] *Government House* (Bangkok: The Secretariat of the Cabinet, 2007), p. 12.
[2] National Archives of Thailand

Figure 2.2.20: The ground floor plan of Banthomsin House, consisting of a series of rooms like a contemporary European nobleman's house such as drawing room, smoking room, and billiard room.[1]

Figure 2.2.21: The first floor plan of Banthomsin House.[2]

[1] National Archives of Thailand
[2] Ibid.

By designing a modern house for members of the Siamese elite in the Venice of the East, Manfredi and his Italian colleagues had to give way to the style of Venice of the West. In 1967, long after he had already embraced Modernist ideas, he admitted being ashamed of the Venetian designs because they were not right for the climate.[1] Despite knowledge about climatic responsive design, the superiority of European style as perceived by the architects, and the aspiration of the clients to have European style houses, made them to stick with such style.

Manfredi also had a discussion regarding the difference between Siamese design principles and western ones with Prince Naris. The Prince recalled as follows:

> Regarding ornamentation, I am impressed by what Mr. Manfredi said about ornamentation in western buildings. He said ornaments cannot be put just anywhere, but only at particular places such as eaves for exterior and frieze for interior. […] Ornaments in the middle of a wall are unsuitable as it is not a norm. I agree with him but this is different from the Thai way, as we are normally allowed to ornament any part.[2]

All the discussions between Sandreczky, Manfredi and Prince Naris were not likely to be known outside their circles by the 1920s. Nor were Döhring's observations on the Siamese house and monastery that were not published in English until 1999, and are still not available in Thai.

Another discussion between Prince Naris and Prince Damrong about a right way to build a house by considering comfort before the house's shape and decoration, reiterates the absence of the modern discussion among the Siamese elite outside the scholastic circle. In this discussion Prince Damrong criticised two noblemen who had copied a design of Chao Phraya Rattanathibet's (Phum Srichaiyan) house for their own at the turn of the twentieth century simply because of that nobleman's auspicious destiny.[3]

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[1] B. A. Freeman, 'Manfredi - Architect of the Old Bangkok', *Bangkok Post*, 28 April 1967, p. 24.
[2] Naritsaranuwattiwong and Damrongrachanuphap, *San Somdet (Princes' Correspondence)*, vols 20 (Bangkok: Kurusapha, 1962), 50–51 (p. 24).
[3] Ibid.

This demonstrates a clash between old and new knowledge and practice. While their desire for auspiciousness remained the most important goal in house building, the two noblemen perhaps found that principles indicating how to build an auspicious traditional wooden house, inscribed in *Tamra Phrommachat*, were unfitted to many features, style, and construction methods of the modern house. They, therefore, had no choice except to follow a good example.

It is, therefore, no exaggeration to state that the modern theory of building design was almost unknown to the Siamese public in the 1920s. But despite the absence of the distribution of theory in general at the time, there was a particular issue, which is supposed to be related to theory, that seemed to matter for the Siamese elite.

The matter of style

The matter of style seemed to matter, despite the absence of a theoretical discussion. The styles of buildings appearing in Siam, especially in Bangkok in this period, ranged from Neo-classical to Gothic Revival during the 1870s and 1880s, and from English Tudor to Khmer Revival during the 1910s to the 1920s (Figure 2.2.28, Figure 2.2.30, Figure 2.2.31). The question regarding that how a style was chosen for a project came to the fore.

As formal discussion about the matter of style was yet to be established, the selection of style was done case by case with a specific rationale each time. A few examples here should help. At the beginning when a serious interest and concern in European civilisation was first shown in the design of Phra Apinao Niwet, a new set of royal apartments (1854), Phra Tinang Anantasamakhom (Figure 2.2.22), a new throne hall among other buildings in the complex was used for receiving foreign guests and for exhibiting *Khrueng Ratchabannakan*, the diplomatic presents, received from western ambassadors.

Figure 2.2.22: Phra Tinang Anantasamakhom (1854)[1]

[1] Phipat Pongraphiphon, *Phap Mumkwang Khong Krungthep Mahanakorn Nai Samai Ratchakan Thi 4: Kan Khonphop Mai* (Bangkok: Mueng Boran, 2001), p. 34.

The King was concerned that such presents needed to be exhibited properly in a western style building, not a traditional hall that did not match with the presents and might subsequently undermine his prestige in the eyes of foreign diplomats.[1] It did not necessarily mean that the King acknowledged western superiority, as it was clearly shown that he used the word '*Krueng Ratchabannakan*' with the presents from the West. It was the same word as was used for the presents the King traditionally received from equal and subordinate kingdoms. It was also the word used for the presents the King presented to the monarchs of Britain and France, therefore, it signified equal status between them. The main reason here was that the King's dignity should not be undermined.

Another building in the complex was Phra Tinang Phuwadon Thassanai (Figure 2.2.23), a five-story mansion with a clock tower that told the time in the western system because King Mongkut was afraid to be disdained by foreigners if the Siamese traditional system of clock that had only indicated large intervals of an hour was still in use.[2] These buildings were designed in a European style by the royal master builders' imagination assisted by sources from photos, books, and postcards. The rationale behind the construction of western style buildings in the palace, no matter which western style, was therefore to maintain a good image of the Siamese King in the eyes of western powers.

Once European architects were employed to ensure proper designs of western style buildings from 1889, an example that exhibits the matter of style could be seen in Döhring's design for Ban Puen Palace (1910) (Figure 2.2.24). This design was described in the government gazette as '*Baeb Yang Chao Yurop Riak Wa Modoen Satai* [Europeans' style that is called Modern style] [that] emerged in Europe in approximately 1900'.[3] This statement can be examined in two ways. The fact that it was recorded in Thai by a literal transliteration from English, '*Modern Style*' implies that it was perceived literally as a 'style'. How the Modern style of Ban Puen Palace was associated with modern time needed to be deduced.

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[1] Somdet Kromphraya Damrongrachanuphap, *Prachum Pong Sawadan (The Chronicles)*, 14 vols (Bangkok: Ongkankha Kurusapha, 1964), pp. 261–62.
[2] '*Phra Ratchakamnot Rung Narika* (The Royal Act About the Clock)', Bangkok (1868). Published in Charnvit Kasetsiri, ed. *Prachum Prakat Ratchakan Thi 4 (Collections of Royal Proclamation of the 4th Reign)* (Bangkok: Toyota Foundation, 2004), p. 525.
[3] '*Ratchakitchanubaeksa* (The Royal Thai Government Gazette)', vol 1 (Bangkok: The Royal Thai Government, 1911), p. 5.

Figure 2.2.23: Phra Tinang Phuwadon Thassanai (1854) with a clock tower in the Royal Palace, Bangkok[1]

Figure 2.2.24: Ban Puen Palace (1910) by Karl Döhring[2]

[1] Anaek Nawikkamun, *Samut Phap Mueng Thai (Photo Book of Thailand)*, vols 1–3 (Bangkok: Nora, 2000), p. 39.
[2] Tiptus, *Chang Farang Nai Krung Siam (European Architects in Siam)*, pp. 75, 77.

It might have been self-evident in its name 'Modern style' that such style was associated with modernity, but more reassurance of that quality was evident in its brief explanation — 'emerged in Europe in approximately 1900'. The fact that the gazette indicated when the style had emerged was as important as that it had emerged in Europe. That is to say, it was justified as a style for modernity because it had emerged from Europe, and had emerged just less than a decade ago. This interpretation is supported by an account stating that the style was similar to that of the *Kaiser*'s summer palace, which had impressed King Chulalongkorn during his second visit to Europe.[1] Having Ban Puen Palace built in the Modern style not only made King Chulalongkorn a more modern Siamese monarch but made him a Siamese monarch as modern as European monarch(s). It assured the King's dignity among his European peers.

Another crucial example can be seen in the shifting of styles in Annibale Rigotti's works both outside and inside Siam. Rigotti's early works after his graduation ranged from Viennese and neo-Rococo to neo-Gothic. From 1902 to 1906, he embraced a modern style, producing quite a few works in *Stile Liberty* manner (Figure 2.2.25).[2]

Rigotti's experiment in the new style was eclipsed when he came to Siam cooperating with other Italians to design the Italian Renaissance Phra Thinang Anantasamakhom. His solo work, Siam Commercial Bank (Figure 2.2.26), the first bank in Siam owned by the Siamese and completed in 1910, employed a Neo-classical manner, ensuring the first financial institution's trustworthiness. However, despite all of his works in Siam being designed with a classical language, there was a reinforced concrete structure (Figure 2.2.27), one of the most modern materials at the

[1] Tiptus, *Chang Farang Nai Krung Siam (European Architects in Siam)*, p. 73.

[2] The starting point of this direction was the Prima Esposizione Internazionale d'Arte Decorativa Moderna, the world's first international exhibition of modern decorative art, in Turin. The exhibition aimed to explore a new possibility in decorative art; therefore the buildings of the exhibition were also expected to express this idea. In search of the appropriate style, both Rigotti and his boss, D'Aronco, submitted competition designs for the buildings of the exhibition. D'Aronco, with his series of bold and exuberant Art Nouveau designs won first place, while Rigotti's more-simple designs, mostly of white wall surfaces decorated with coloured and guilded ornaments, and flags and banners, received second place. The organisers decided that both architects should develop a final design together. One of the most important buildings was the central pavilion, and D'Aronco took the greater contribution in this building. On the other hand, Rigotti took the main role in designing the Oil and Wine Pavilion and the Banfi Pavilion. But after all the final designs were approved, Rigotti was left in charge of almost all of the constructions, as D'Aronco had to go back to Constantinople. Rigotti was also the editor of *L'artista modern* in 1902. See Richard A. Etlin, 'Turin 1902: The Search for a Modern Italian Architecture', *The Journal of Decorative and Propaganda Arts*, 13 (1989), 94–109.

time both in Siam and internationally, employed under the facade in support of the historic, conservative, and reassuring style.

Rigotti's experiments in the new style restarted after his final return to Italy. He assumed a teaching post in Turin and continued his practice in Italy until the 1960s. Together with his son, Giorgio, he embraced rationalist ideas in the later decades of his career. They designed Palazzo a Vela, a reinforced concrete-shelled arena in Turin between 1959 and 1961.

The last example in this digression is the palace for Prince Paribatra designed in 1903 by Mario Tamagno in a German Baroque style at the time that the Prince was studying in Germany (Figure 2.2.32).[1]

We should note also that amidst the erection of buildings seemingly or intentionally in a certain style, there were also buildings that difficult to categorise under any definite style. The most common examples were residential projects. Sandreczki's own houses had teak structure designed on a 3-metre-module, gable roofs, verandahs and wood balustrades on the first floor.[2] Tamagno's houses bore similar components (Figure 2.2.33). And from 1909 to 1910, Manfredi designed Prince Chakrabongse's new palace near the Royal Palace with a wide tiled verandah overlooking the river.[3]

In sum, not only practical issues but also the matter of style was the issue over which the Europeans had to compromise with their local clients, mostly their own employers. The matter of whether what style should be applied to a building was less about ongoing discourse in Europe and more about the King's preference, the client's aspiration, or the supposed nostalgia of Princes after their graduation from abroad.

[1] Tiptus, *Chang Farang Nai Krung Siam (European Architects in Siam)*, p. 69.
[2] Ibid., p. 63.
[3] Hunter and Chakrabongse, *Katya & the Prince of Siam*, p. 204.

Figure 2.2.25: Wines and Oil Pavilion at Prima Esposizione Internazionale d'Arte Decorativa Moderna (1902), Turin, by Annibale Rigotti.[1]

[1] *L'architettura alla Prima Esposizione Internazionale D'arte Decorativa Moderna* (Torino: Crudo & Lattuada, 1902), p. 134.

Figure 2.2.26: Front elevation of Siam Commercial Bank (1910) by Annibale Rigotti[1]

Figure 2.2.27: The banking hall of Siam Commercial Bank showing reinforced concrete structure decorated with classical elements[2]

[1] National Archives of Thailand
[2] Ibid.

Figure 2.2.28: Photos of government offices in Bangkok, built in various styles by the end of the nineteenth century[1]

[1] Arnold Wright and Oliver T. Breakspear, *Twentieth Century Impressions of Siam: Its History, People, Commerce, Industries and Resources* (Bangkok: White Lotus, 1994), p. 102.

Figure 2.2.29: Makkhawan Rangsan Bridge (1900–03) by Mario Tamagno[1]

[1] National Archives of Thailand

Figure 2.2.30: Manangkhasila House (1920s) by Edward Healey[1]

Figure 2.2.31: Maliwan Palace (1917) in a Khmer Revival style designed by Ecole Manfredi[2]

[1] *Government House*, p. 176.
[2] '*Thatsaniyakhan Akhan Anurak Khong Samnakngan Sapsin Suan Phra Mahakasat* (*Thatsaniyakhan:* Listed Buildings of the Crown Property Bureau)', p. 27. http://ebooks.dusit.ac.th/sdubook/openbook.nsp?view=IKNOW&db0=RareBook&cid_bookid=20060822111006625000000981 3&cid_chapid=10000000001&recid=&numresults=10 [accessed date 4 August 2013].

Figure 2.2.32: Bang Khunphrom Palace (1903) by Mario Tamagno[1]

Figure 2.2.33: Mario Tamagno's residence[2]

[1] '*Wang Bang Khun Phrom* (Bang Khunphrom Palace)', http://www.bot.or.th/Thai/BOTMuseum/Palace/Pages/Bangkhunprom.aspx [accessed date 4 August 2013].
[2] Tamagno, 'Elena Tamagno, '*Mario Tamagno: 25 Pi Haeng Kan Pen Sathapanik Nai Ratchasamnak Siam (2443–2468) (Mario Tamagno: 25 Years of an Architect in the S*iamese Court)', p. 32.

Construction industry

A brief and final remark about the contemporary construction industry is worth providing. As mentioned before, most public buildings were originally built either with load-bearing wall-structure of masonry, or with timber. After Ferro-concrete work had been introduced at the turn of the twentieth century, the post and lintel system was more widespread. At relatively the same time, foreign construction companies also brought in new engines, such as steam powered pile driver, motor-driven crane, and feed pump. Materials were both from domestic sources and imported, steel frame and steel bar from England and Germany, cement from Singapore, marble plates from Italy, glass from Belgium and France.[1] Some of the materials were ordered via foreign supply companies which had been established in Bangkok. The establishment of the Siam Cement Company in 1913 contributed to a further transformation of modern construction in Siam. Once reinforced concrete was increasingly used in buildings, their spans (of post-and-lintel system instead of load-bearing system) were wider, their columns' dimensions were smaller, and their fenestrations were larger. In addition, reinforced concrete eaves and decorative elements were popular. Metric units were introduced for measurement by the promulgation of a law in 1923. The traditional units such as *Neo*, *Khueb*, *Sok*, *Wa*, based on human body, were, however, still used alongside the new ones.[2]

Conclusion

In conclusion, even though an architectural professional practice in western sense was introduced as a result of Siamese monarchs and elite's quest for a particular version of modernity which aimed mainly to put themselves on par with western peers and retain their prestige upon their subjects, architectural knowledge in the ideological and practical sense as that in the West was far from widely disseminated in Siam by the 1920s. Discussion about such subject was sparingly done among the limited number of European architects, Siamese master builders,

[1] Sukhavadhana, '*Kansuksa Itthiphon Khong Sathapattayakam Tawantok Thi Mi to Baeb Yang Khong Ngan Sathapattayakam Nai Prathet Thai Po So 2208–2475* (A Study of the Western Architectural Influences on Styles of Architecture in Thailand During A.D. 1665–1932)', (unpublished master's thesis, Chulalongkorn University, 1977), p. 150.
[2] Erik Seidenfaden, *Guide to Bangkok. With Notes on Siam* (Bangkok: Royal State Railway Department of Siam, 1927), p. 37.

other officials, and the Kings who were involved with the transcultural interactions in prestigious construction projects.

Now it is timely to examine the outcome of this complex transformation of the building culture in Siam from the mid-nineteenth century to the 1920s and to examine how the users perceived and inhabited these new forms and spaces.

2.3 Change and continuity: Buildings in Siam from the mid-nineteenth century to the 1920s

Before examining the transformation of buildings, as well as their meanings and use, a general picture should be given of how Bangkok was transformed in the last thirty years after the Bowring Treaty had been signed. In 1898, J. Hoche described the hectic change in the city as follows:

> A people whose spirit no longer has time to reconcile itself amidst the reforms which are each day introduced to public institutions and every facet of practical life, amidst their crumbling superstitions, their broken traditions, the interesting metamorphosis of their streets where the electric trams make way in between pagodas and sacred elephants, where bicycles run into the noblemen's palanquins, upsetting every law of movement known to them. […] The two towns, the nautical and the land-based, badly sewn together, contradict one another strangely and duplicate each other's functions. […] It is evident that the former will sooner or later give way to the latter and when that happens, the rhetorical geographers will have to renounce the cliché Venice of the East.[1]

Even though this view was constructed within a hegemonic framework of modernisation assuming all processes of modernisation that were taking place elsewhere outside Europe would soon follow the same European path, and although Bangkok did not yet quite conform to that path, the account perfectly portrays a dynamic change in Bangkok's urban scene at the time. This dynamic situation was further described in 1902 by Campbell who saw Bangkok as a hybrid city like no other town in the Far East:

> [Bangkok] can boast the same combination and variety of interest. […] Close juxtaposition a thriving bustling European community side by side with an oriental court, still keeping up the formalities of bygone centuries; none such a quaint mixture of the ancient and modern, of the grotesque and the commonplace, of material comfort and squalid barbarism; nowhere else are

[1] J. Hoch, *Le Siam et les Siamois* (Paris: [n.pub.], 1898), p. 112. Quoted in English from Sumet Jumsai and R. Buckminster Fuller, *Naga: Cultural Origins in Siam and the West Pacific*, p. 170.

to be seen such diversities of life and nationality, such picturesque incongruities.[1]

Regulations were imposed to transform the city and also to control its population's habits. The first regulation about sanitary matters, controlling the cleanliness of canals and toilet construction along the canals, had been already implemented in 1870. After 1889, there were more regulations about the same issues, as well as the regulations restricting the construction of temporary and inflammable shelters, i.e. those using bamboo and nipa leaves, in order to beautify the sceneries along some canals, improve sanitation, and prevent fire in congested areas.[2] In addition, a regulation about dead body disposal was also implemented; a modern equipment, like that was used at Golders Green crematorium, was bought from London.[3]

However, as mentioned briefly before, Chitrabongs argued that the regulations implemented by King Chulalongkorn's government were not a mere modernisation following western models, especially in the hygienic aspect, which had aimed for the improvement of the public health in the West. On contrary, the King's main aim in the implementation of the regulations was to improve the cleanliness and orderliness of the city, as part of his own agenda of reform to confirm his dignity, especially as viewed by foreigners, and to secure his kingdom's independence.[4] Furthermore, to what extent the regulations were effective was another story. Records illustrate that their implementation was disrupted by both bribery of officials and inspectors, and the fact that some people simply refused to follow the regulations.[5]

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[1] Campbell, *Siam in the Twentieth Century: Being the Experiences and Impressions of a British Official*, pp. 51–52. By comparing Bangkok with other cities of the Far East he inserted 'Tokio and Kioto may have finer works of art. Peking may strike the political imagination more forcibly. Shanghai shows evidence of its enormous commercial importance, while Hong Kong and Singapore appeal to Britons especially as outposts of their great Empire'.

[2] Bangkok, National Archives of Thailand , R 5 Y Th 1/4 (Ministry of Public Works); R 5 Y Th 9/10 (Ministry of Public Works). Up until at least 1908, the network of canals was used as the open drainage system in Bangkok. It flowed into the river and was flushed daily by rise and fall of the tide. Street drains to carry surface water were available. Night soil was collected by a pail system. House refuse was removed in carts. See Wright and Breakspear, *Twentieth Century Impressions of Siam: Its History, People, Commerce, Industries and Resources*, p. 132. (First edition 1908)

[3] Chitrabongs, pp. 4–90.

[4] Ibid., pp. 56–58.

[5] Ibid.

By the turn of the twentieth century, Bangkok had gradually changed from a semi-aquatic city to a land-based one. More roads were laid out, along which two-story-shop houses were gradually added on both sides. With the help of multi-national experts employed by the royal government, electricity, telephone, postal service, hospitals, and railways were also introduced. Water works were not, however, completed until the end of 1914 by French engineers.[1]

However, by the 1920s, not all the infrastructure laid in the last decades worked satisfactorily. The telephone service was reportedly unsatisfactory up until 1928.[2] New Road, the first thoroughfare surfaced with tarmac at an extensive scale, faced problems of sinking, with pitted and holed surfaces, as inadequate stone foundations had been laid.[3] Footpaths along streets were extremely rare and those that existed were usually occupied by the shophouses' stocks.[4] Telegrams were always delayed.[5]

Public versus private space and time in the Siamese elite's domestic buildings

Amidst the unique circumstance regarding the building culture, the ideas of selecting style and the introduction of new practices, infrastructure, and building types, the appearance of the Siamese elite's residences seemed to be changed dramatically, but a closer examination reveals a rather more complicated transformation, if not an abrupt change of everything. One of the most important transformations that will be discussed here is the creation of a clearer division between public and private, not only in spaces, but also in time.

[1] 'Bangkok Water Supply', *The Straits Times*, 6 November 1914, p. 7. Apart from the information about French engineer, this account recorded the execution and various facilities of this project, portraying the typical nature of infrastructure work in Siam at the time, in which multi-national foreign professionals and enterprises were involved.
[2] 'Notes from Siam', *The Straits Times*, 18 September 1928, p. 12.
[3] 'Passing of the Eclipse', *The Straits Times*, 17 May 1929, p. 5.
[4] 'Notes from Siam', *The Straits Times*, 20 January 1927, p. 3.
[5] Ibid., 12 March 1927, p. 11.

Figure 2.3.1: A map of Bangkok shows the city by the end of the 1920s expanding northward and eastward.[1] Compare this with the map of 1854 (Figure 2.1.12).

[1] 'Map Showing the Bangkok Area (1938)' in London, British Library, Cartographic Items Maps X.2780. By checking the presence and absence of particular buildings in the map, I am reassured that it was surveyed by 1930.

Figure 2.3.2: Views of Bangkok at the turn of the twentieth century showing the denser city with more roads and remaining canals[1]

[1] All photos from the National Archives of Thailand

During the mid-nineteenth century, members of the royal family and nobles followed King Mongkut's trend, inhabiting seemingly western style residences. Like typical missionaries and foreigners' houses in the same period, most of the western style houses of the Siamese elite were constructed with wood. Only a few were built with bricks. Most other materials, such as stone plate and terracotta tile, were acquired domestically, while decorative materials, such as ceramic tiles, marble, float glass, stained glass, metal bars, and metal bolts, were imported.

All of these types of houses and palaces resembled what was called 'bungalow', a suburban and rural house type, initially adapted from the indigenous Bengal house to suit the life style and standard of comfort and hygiene of the staff of British East India Company by the end of the eighteenth century. This type of house, normally having a verandah in front or surrounding the rooms, had spread across Indian sub-continent and then to British Strait Settlements in the nineteenth century. In this respect, the Siamese elite seemed to join the trend adopted by Indian aristocrats and merchants in seeing the house form, as Anthony D. King has pointed out, as 'the basis of "Western-style" developments, manifesting in style and scale, the ranking and status of its occupants'.[1]

Beyond the matter of western style and its associated construction method that entailed the employment of predominantly Chinese builders rather than Siamese carpenters, the question of how the Siamese elite perceived and dwelt in their houses was another story, for it happened that in most so-called western style houses, the use of space still conformed to Siamese beliefs and dwelling practice. Putting it the other way, they preferred to build the same old Siamese houses with some adaptations to make them perceived as western styles.

For example, the stairs of those buildings built during the 1850s to 1870s were still outside the houses, for the Siamese still believed that entering the house via the space underneath was inauspicious.[2] But the stairs were now covered with a gentle-steep-gable as a porch, symbolising a new kind of prestige.[3] The *Rabiang* (gallery), like that of the traditional house, was still there but was now in the form of

[1] King, *The Bungalow: The Production of a Global Culture*, p. 59.
[2] This account is from a correspondence between Prince Naris and Prince Damrong. See Somdet Chaofa Kromphraya Naritsaranuwattiwong and Somdet Kromphraya Damrongrachanuphap, *San Somdet (Princes' Correspondence)*, vols 20 (Bangkok: Kurusapha, 1962), p. 72.
[3] Ibid.

the bungalow's verandah (Figure 2.3.3). Despite the presence of reception and dining rooms in a western model, in which imported furniture and other commodities were located to impress both Siamese and foreign guests, the elite dwellers at the time were still likely to use *Rabiang*, mostly at the back of the house, as the main space for living in their private time, just like they had used *Rabiang* in traditional Siamese houses.

The way the Siamese elite inhabited the space in their private time could have been as described in *Si Phaendin (Four reigns)*, a novel by M. R. Khukrit Pramot, a scholar and descendant of a royal family, in one scene Ploy, the leading character, describes her father's house:

> The *Chaliang* [gallery/verandah, comparable to *Rabiang*] at the back was my father's favourite place. He always stayed there. He also dined and relaxed there. His familiar guests were received there. […] He sat there on a small carpet.[1]

A good example of the western-style houses and palaces built in the mid-century was Phra Tinang Itsaret Rachanusorn (Figure 2.3.4), a mansion of the second King (as appointed by King Mongkut), Prince Pinklao. Despite differences in style, size, and materials, and more western style furniture in use, the hierarchy of spaces with *Rabiang* in front and at the back of a series of room on the first floor was arguably similar to bungalows but also not unlike the second King's previous residence, a traditional wooden Siamese *Ruen* that was still located nearby (Figure 2.3.5).

There is no evidence indicating whether Prince Pinklao also preferred sitting at *Rabiang* in his private time. But even if he felt comfortable to use the rooms, this must have not been much different from the way some Siamese elite had used *Ho Klang* or *Ho Nang*, a pavilion or a room with at least one side completely open towards *Rabiang* in their traditional houses. What was different was that, apart from the western style furniture and decoration, the new kind of living space became more enclosed. However, the larger volume and greater area of fenestration must have assured that the airiness of the space was similar to the traditional one.

[1] M. R. Khukrit Pramot, *Si Phaendin (Four Reigns)* (Bangkok: Nanmee Books, 2005), p. 20. Even though the novel was first published in 1953, scenes in the story, in which had taken place during the 1880's and 1940's were claimed to be based on historical accuracy benefiting from the author's real experience in his childhood and his research within the circle of the Siamese elite, of which he was a member.

Figure 2.3.3: A bungalow style house of a foreign official in the mid-nineteenth century, after which the Siamese elite normally modeled their residences.[1]

[1] National Archives of Thailand

Figure 2.3.4: Phra Thinang Itsaret Rachanusorn. Not unlike the traditional wooden house, the Prince's quarters was upstairs. The stairs were outside. A terrace worked like a *Chan,* while a *Rabiang* between it and rooms was like that of the traditional house.[1]

Figure 2.3.5: A comparison between the spaces and scales of *Rabiang* of Prince Pinklao's new (left) and old (right) residences[2]

[1] National Archives of Thailand
[2] Photos by Chomchon Fusinpaiboon

Despite the fact that the style of houses was developed in relation to the original styles in Europe due to the employment of European architects, the inherent continuity of the traditional sense of space usage in the Siamese elite's residences continued into the end of the nineteenth century and the first two decades of the twentieth century. Ernest Young, an English teacher who worked in Siam from 1892 to 1897, described how the Siamese elite lived in their western-style houses at the end of the century:

> They may be described as living also a kind of double life. Their houses are divided into two parts; in one quarter they live their own native life after their own native fashion; in the other portion an attempt is made to reproduce the European style of living. This latter part is the only one shown to the European visitor. He is received in a drawing-room with tables and chairs, piano and pictures; he dines in a room where the dishes are of European pattern, the servants have the habits of European waiters, and the menu contains only such dishes as are known to be palatable to the white man. All the surroundings are of such an unmistakably foreign origin, that the visitor looks in vain for any trace of the life and manners of the native in the house of his wealthy host. Were he permitted to pass beyond the bounds set by modern fashion; he would possibly find much to interest and amuse in the real house of the native prince or noblemen. As this is more or less unusual or impossible, he is forced to seek his information in those poorer dwellings, which the forward march of so-called civilization has, as yet, left completely untouched.[1]

In Varadis Palace, designed by Karl Döhring, where Prince Damrong lived from 1911 to 1932, the western style reception and dining room were used for formal occasions while a *Rabiang* at the back was used for relaxation, chatting with familiar guests and having dinner with his family (Figure 2.3.9, Figure 2.3.10).[2]

In the wooden palace of Prince Rangsit where he resided from 1913 to 1928 too, the *Rabiang*, in front of the main room on the first floor intended to be used as study and breakfast room, was normally used instead of the room for both breakfast and other meals when 'there was no guest or other people at all.[3]

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[1] Ernest Young, *The Kingdom of the Yellow Robe: Being Sketches of the Domestic and Religious Rites and Ceremonies of the Siamese*, 2nd edn (Westminster: Archibald Constable, 1900), p. 104.
[2] Varadis Palace Museum, 'Varadis Palace' http://www.prince-damrong.moi.go.th/varadis_palace.htm [accessed date 12 August 2013].
[3] M. C. Piyarangsit Rangsit, *Koed Wang Mai (Born in the Wooden Palace)* (Bangkok: Aksorn Thai, 1985), p. 43.

Figure 2.3.6: The minor mansion (top), the grand mansion (middle), and the reception (bottom) of Phra Sapphakan Hiranyakit, a wealthy nobleman, built from 1905 to 1908, clearly show the *Siwilai* image of the owner.[1]

[1] The set of photos from Wright and Breakspear, *Twentieth Century Impressions of Siam: Its History, People, Commerce, Industries and Resources*, p. 256.

Figure 2.3.7 (left): The menu of the reception on 6 April 1923 for a foreign guest of Prince Devavongse at Devavesm Palace depicts the western-style grand mansion of the palace above the French cuisine.[1]

Figure 2.3.8 (right): The menu of the wedding reception of Chao Phraya Rammarakhop and Prachuab Sukhum on 18 August 1924 at the residence of the bride's family depicts at the bottom.[2] **The future residence of the couple, Venetian Gothic style-Norasing House, is depicted at the top. The Euro-Siamese menu is written in Thai.**

[1] *Wang Devavesm (Devavesm Palace)*, (Bangkok: Bank of Thailand, 2004), p. 209.
[2] *Government House*, p. 26.

Figure 2.3.9: The front view of the main mansion of Prince Damrong's Varadis Palace (1911) designed by Karl Döhring and a motor car, all signifying modernity[1]

Figure 2.3.10: Three photos of *Rabiang* at the back of the main mansion of Varadis Palace taken from Varadis Palace Museum's website.[2] **According to the museum's statement, the room is set out as it was originally during the time Prince Damrong resided here. There is a Chinese armchair on which the Prince was supposed to sit, socialising with familiar guests of lower status who sat on the floor or on the raised floor with a lower table. The Prince possibly sat on the raised floor with the low table, when he socialised with guests of equal status. A round table behind a partition was provided for him to dine at.**[3] **According to the usual practice of royal families still practiced until at least the 1940s, fathers dined first on their table, while children dined afterwards on a low table and the rest of the food went to servants.**[4]

[1] National Archives of Thailand
[2] Museum, 'Varadis Palace'
[3] Ibid.
[4] Interview with M. R. Naengnoi Saksri by Chomchon Fusinpaiboon. 30 December 2011.

Figure 2.3.11: Servants' quarter of Varadis Palace.[1] Even though the style of the building is not Siamese, the presence of *Rabiang* with a raised floor resembled that of the traditional house. While Prince Damrong only used the *Rabiang* at the back of his mansion for relaxing, his servants still used it as the main space for almost all daily activities.

[1] National Archives of Thailand

All these examples demonstrate that the seemingly westernised manners of Siamese aristocrats were neglected once they drew into their private sphere as J. G. D. Campbell observed that: 'such things as shoes and stockings and tables and chairs are once more relegated to the category of unnecessary superfluities.'[1]

Apart from the examples discussed, the issue of public and private space and time is also demonstrated in an extreme way in an unusual project of King Chulalongkorn. It was *Ruen Ton*, a traditional house he built within Suan Dusit in 1904 (Figure 2.3.12), a well-designed vernacular house popular among the nobility and the prosperous merchant class.[2] Unlike other examples that show the mediation of public and private spaces and time in the same building, this traditional house was a place the King could completely retreat to a more relaxing life with his concubines and children. But he occasionally received guests who were actually commoners from the provinces, whom the King had met when he had made a domestic tour in disguise at the beginning of his reign. The traditional house was therefore solely associated with an informal, relaxing, and provincial atmosphere, as opposed to the formal, civilised and urban lifestyle of inhabiting in western style mansions.

This traditional house in the western style suburban palace was the place where concubines and young Princes dressed in traditional loose garments playing with cameras by the lake that had swans, animal of non-Siamese origin, swimming about (Figure 2.3.13). Even though the Siamese elite had already adopted spoon and fork to dine with instead of using hands as traditionally required, in order to be civilised yet not as complicated as the westerners who used a wide range of forks, knives and spoon[3], it was in this house that the King must have been more than comfortable to abandon such implements and use his hands as traditionally required.[4] No evidence was more extreme than a photo of the King taken by one of his favourite concubines, Oeb, showing him dressed only in *Phanung*, a traditional form of clothing without upper fitting, relaxingly cooking at the *Rabiang* of the house (Figure 2.3.15).

[1] Campbell, *Siam in the Twentieth Century: Being the Experiences and Impressions of a British Official*, p. 125.
[2] Aasen, *Architecture of Siam: A Cultural History Interpretation*, p. 139.
[3] Khukrit Pramot, *Laksana Thai*, vol 4, p. 10.
[4] Ibid.

Figure 2.3.12: King Chulalongkorn's traditional house, *Ruen Ton* (1904) in Suan Dusit[1]

[1] National Archives of Thailand

Figure 2.3.13: King Chulalongkorn's concubines and sons, dressed in traditional garments and dining traditionally at a *Rabiang* of *Ruen Ton*[1]

Figure 2.3.14: Oeb, a favourite concubine of King Chulalongkorn, was playing with a camera among servants at *Ruen Ton*[2]

[1] National Archives of Thailand
[2] Ibid.

Figure 2.3.15: King Chulalongkorn dressed in only *Phanung*, a traditional lower garment, cooking at a *Rabiang* of *Ruen Ton*[1]

[1]Prince Damrong Library and Archive

Once it came to the reign of King Vajiravudh (1910–25), the issue of public and private sphere in domestic space and time could still be seen in at least one of the King's residences. Contrasting with palaces in Bangkok, Maruekkhathaiyawan Palace (1923–24) (Figure 2.3.16, Figure 2.3.17) was built as a seaside resort at Cha-am, unmistakably signifying its association with the privacy and relaxation of the King.[1] The royal residence in the palace comprised three main groups of buildings. They were arranged according to the traditional planning into three zones — front, middle, and inner courts.[2] The King's formal dining and receptions took place at the front court *Ho Sawei* (dining hall), where western meals cooked by western chefs were served on Chippendale furniture (Figure 2.3.18). But for breakfast and lunch, the King liked to have it at the inner court's dining hall sitting on a raised floor (Figure 2.3.19). The food was prepared and served in the traditional way. It was cooked in the kitchen. After testing for taste and security, it was then covered with *Fa chi*, a porous-dome-shaped cover, which was covered again with *Tad Ngoen Tad Thong* cloths and then covered again with *Yiarabab* cloth stamped with a *Din So Phong*, the powder seal, before being transported to the hall. Before the meal, the King washed his hands with salted lavender perfumed water and then used them to eat.

In sum, the traditional spaces and the traditional sense of their use did not actually disappear. They were only transformed by the new norm of the Siamese elite's society affecting how they received their guests as opposed to how they lived their private life, and the introduction of new spatial articulations derived from the so-called western style house to accommodate such norms. At the same time, the new spatial articulations and use were indigenised by the traditional sense of space. Furthermore, dichotomies between traditional and modern modes of space planning and use were constructed. They were formal/informal, serious/relaxed, in charge/retreat, on duty/retired, and urban/rural — all of which constituted, more than before, the dichotomy between public and private spaces and times.

[1] The palace was designed by Tamagno and Manfredi. Chao Phraya Yommarat (Pan Sukhum) Minister of the Ministry of Interior was the construction director (*Phuamnuaikan Kosang*). The construction was done mostly by Chinese carpenters and labour. The King only stayed there twice in the summer of 1924 and 1925 before his death. After that the palace was abandoned.

[2] The main floor was elevated above the ground. Most of the buildings had their own stairs from ground floor, except for the royal buildings, which needed special security. Important court officials had their separate houses west of the royal compound. The masonry kitchen, the servant quarter, and the service area were also separate buildings at the south (rear) of the royal compound.

Figure 2.3.16: The entrance and Thong Phrarong (Audience Hall) of Maruekkhathaiyawan Palace[1]

Figure 2.3.17: Plan of Maruekkhathaiyawan Palace. The beach is at the north. From west to east are the Audience Hall (1), the Front Court (2), and the Inner Court (3) respectively.[2] **Kitchens and the servant quarters are at the back (south and not shown in the plan).**

[1] '*Phra Ratchaniwet Maruekkhathaiyawan (Ma*ruekkhathaiyawan Palace)', http://mrigadayavan.or.th/history.php [accessed 29 July 2013].
[2] Chungsiriarak, *Sathapattayakam Baeb Tawantok Nai Siam Samai Ratchakanti 4 Tueng Po So 2480 (Western Architecture in Siam: Rama IV's Reign to 1937)*, p. 333.

Figure 2.3.18: The reconstructed setting of the front court's dining hall at Maruekkhathaiyawan Palace used for the King's dining and receptions[1]

Figure 2.3.19: The reconstructed setting in the inner court's dining hall at Maruekkhathaiyawan Palace used for the King's breakfast and lunch[2]

[1] Photo taken at Maruekkhathaiyawan Palace by Chomchon Fusinpaiboon 12 December 2010
[2] Ibid.

Continuity and change in commoners' houses

Unlike the elite, most commoners still lived in traditional houses up until the 1920s. However, those with better economic status, yet not as much as the nobles and businessmen, lived not in western-style houses but in traditional houses with some modifications by modern features and material use, such as corrugated zinc sheets for roofing instead of nipa leaves, machine-processed wood that allowed more variety of dimension, iron bars at windows instead of wooden bars, modern louvred windows instead of traditional windows, using nails instead of mortise, tenon, and peg, and decoration with gingerbread style wood carving — all of which contributed to the modern image of the occupiers in their own right (Figure 2.3.20).[1]

As Bangkok became more congested, the principle of orientation according to auspicious direction was more relaxed. Commoners' houses were therefore oriented more according to the conditions of the site.[2] However, the practice of erecting a spirit house within the premises of a house was still common. So were the domestic practices that ensured the inhabitants' well-being such as the fixing of *Yan*, a square paper with holy Pali inscription, on the main upright and corner posts that curried favour with the spirit of earth into which the posts had intruded.[3] Similar inscripted paper was affixed to the ridge-beam to apologise to the spirit of the air and lightning whose territory had been occupied by the house's roof. The spatial articulation of these houses still followed the old way, i.e. multifunctional and flexible. The kitchen was normally separated. The toilet, if included, was also separated, otherwise the inhabitants could use a public toilet. Given that less changes were evident in commoners' houses, there was no doubt that the continuity of traditional ways of inhabiting space was more prevail than in elite's residences.

[1] Tiptus and Bongsadadt, *Ban Nai Krungthep: Rub Baeb Lae Kan Plian Plaeng Nai Rob Song Roi Pi (Houses in Bangkok: Style and Change in 200 Years)*, pp. 144–47.
[2] Ibid., p. 166.
[3] Wright and Breakspear, *Twentieth Century Impressions of Siam: Its History, People, Commerce, Industries and Resources*, p. 223. (1st edn 1908)

Figure 2.3.20: Examples of traditional houses with modern features and materials such as corrugated zinc sheet roofing, vaulted roof, iron supports for eaves, iron bars, etc.[1]

[1] Tiptus and Bongsadadt, *Ban Nai Krungthep: Rub Baeb Lae Kan Plian Plaeng Nai Rob Song Roi Pi (Houses in Bangkok: Style and Change in 200 Years)*, p. 147.

Change and continuity in the design and meaning of royal and monastic buildings

Apart from domestic buildings, other two traditional building types are worth examining. In the first two decades of King Chulalongkorn's reign (1868–89), the most important example of the change in style within the concept of royal buildings was perhaps Phra Thinang Chakri Mahaprasat (Figure 2.3.21), a new throne hall commissioned by the King in 1874. It was completed in 1882, just on time for the centenary celebration of Bangkok as capital city and the establishment of Chakri Dynasty.

It was initially designed by the British architect John Clunis, in Italian Renaissance style topped with three Mansards roofs, but the roof's final design was changed to the form of *Prasat*, according to the advice of the ex-regent. The ex-regent argued that, instead of building the throne hall in a completely western way, the King should follow the tradition of building *Prasat* in the palace as the past Kings with glorious prestige had done in Ayutthaya period. So three *Prasat* roofs were designed by the royal master builder That Hongsakun to fit the western body.

The function and interior designs also showed hybrid qualities. Only the main floor in the middle of the seemingly three story building was used for state rooms, including an audience hall, a banqueting hall, and a smoking room. It was accessed by external stairs, the traditional way of entering a Siamese building. The ground floor was used by court staff and servants for service purposes. Only the hall in the middle of the upper floor was used for keeping the past King's ashes. This arrangement of functions conformed to the principle that no one could stay above the King's head. While the overall decoration and furniture was western, some Siamese elements could be found and the throne in the audience hall was topped with nine-tiered *Sawetrachat*, the Siamese element for a King's throne that originally symbolised his heavenly power.

The change in style but the use and meaning was evident in the designs of Buddhist monastic buildings too. A seemingly extreme example was seen in the Neo-Gothic style-*Ubosot* (ordination hall) of Wat Niwetthammaprawat (1877–78) (Figure 2.3.23), a Buddhist monastery commissioned by King Chulalongkorn, designed by Joachim Grassi, who also designed various other buildings in Neo-Classical, Second-Empire French, and Swiss chalet styles, as well as Phra Thinang

Aisawan Thippayaat, a Thai pavilion on a European base at Bang Pa-in Palace that he designed with a royal master builder.

Regardless of style, a Buddhist temple was supposed to be built as an offering to Lord Buddha. This Neo-Gothic edifice was no exception. And regardless of the strong association between Gothic architecture and Christianity in the western world, the King declared that he only wanted to give an exotic offering to Lord Buddha and by no means to express any sympathy for Christianity.[1] Another example, the *Ubosot* of Wat Atsadanganimit (1892) (Figure 2.3.24), which Grassi also designed to the King's commission, had the ordination hall in a *Chedi* form, traditionally used only for keeping Buddha's relics and unaccessible for people. Despite the *Chedi* form and circular space, unusual for an ordination hall, it was still an ordination hall, in which regular rituals as originally performed in this building type took place.

Povatong stated that, after the establishment of the Department of Public Works in 1889, the next defining moment of building culture and practice in Siam in this period was King Chulalongkorn's eight-month-tour of Europe in 1897.[2] Upon his return, the King initiated many projects that would transform Bangkok into a capital city nearer to the standard of a western metropolis. However, the process that created the civilised image still depended on persisting traditional ideas of the elite rather than western ideology.[3]

This was demonstrated in Suan Dusit. As the centre of Bangkok became more congested, King Chulalongkorn initiated his summer palace project in the northern periphery of the city, to be built as a Europeanised suburban area with a well-planned road and canal system. The road and canal grid was laid by Carlo Allegri, the chief engineer of the Department of Public Works, and Octave Fariola de Rozzoli, the city engineer. A new boulevard connecting the suburb with the royal palace was laid by Carl Sancdrecski, the former chief architect of the department, who had been transferred to assist this project.[4]

[1] *Wat Niwetthammaprawat*, (Ayutthaya: Thian Watthana, 1985), p. 5.
[2] Povatong, 'Building *Siwilai*: Transformation of Architecture and Architectural Practice in Siam During the Reign of Rama V, 1868–1910', p. 173.
[3] Ibid., p. 174.
[4] Ibid., pp. 190-91.

Figure 2.3.21: Phra Thinang Chakri Mahaprasat (1874–82)[1]

[1] National Archives of Thailand

Figure 2.3.22: The Throne Hall[1] (left) and a gallery[2] (right) in Phra Thinang Chakri Mahaprasat

[1] Wright and Breakspear, *Twentieth Century Impressions of Siam: Its History, People, Commerce, Industries and Resources*, p. 88.
[2] Seidenfaden, *Guide to Bangkok. With Notes on Siam*, p. 138.

Figure 2.3.23: The Gothic style-*Ubosot* (ordination hall) of Wat Niwetthammaprawat (1877–78)[1]

Figure 2.3.24: The *Ubosot* (ordination hall) of Wat Atsadanganimit (1892) in a *Chedi* form with Gothic elements.[2]

[1] Prakitnonthakan, *Kanmueng Lae Sangkhom Nai Sinlapa Sathapattayakam: Sayamsamai Thaiprayuk Chatniyom (Politics and Society in Architecture: Siam Era, Transforming Thai, and Nationalism)*, p. 152.
[2] Ibid., p. 141.

Along the central part of the boulevard, named Ratchadamnoen (Royal progress), twenty-metre-wide pieces of land were bought in order to build department stores and apartment blocks for the Bangkok elite in the future.[1] Two small roads were also laid out behind the strips of land, marking the boundary between the intended luxurious complexes and the mess of huts and shelters.[2] Even though the luxurious complex was not realised in this reign, a regulation controlling the construction in this area was already put in place. It prohibited houses on stilts, nipa thatched roofs, bamboo fences, and houses built with Singapore wood (imported wood or *Krayaloei* wood), which was of low quality. Moreover, it required that owners should have properly painted fences and consult the standard design code of the Sanitary Department if they wanted to build buildings next to the boulevard.[3]

Unlike the traditional division of zones by walls in the traditional royal palace, Suan Dusit's zoning of outer, central, and inner court remained, but was separated with water courses and tree fences.[4] A garden city design was transformed to suit Siamese court tradition.

Following the construction of the King's masonry mansions, princely palaces, the court nobles' houses, were also built in Suan Dusit by the first decade of the twentieth century. The Italian architects were now responsible for the designs, exploiting various architectural styles, ranging from neo-Baroque to neo-Rococo, Italian Art Nouveau to neo-Classic. Planning and appearances moved closer to what might have been seen in Europe rather than in bungalows in colonies. This must have been made possible also by the requirement of the owners, who became more aware of authentic European styles. Apart from the King, quite a few Princes who were educated in Europe endorsed the new styles and planning. Then the nobles quickly adopted what their peers had appreciated.

[1] Pirasri Povatong, '*Thanon Ratchadamnoen: Prawat Kan Kosang* (Ratchadamnoen Boulevard: The History)', *Faculty of Architecture, Chulalongkorn University Academic Journal of Architecture*, 56 (2007), 35–62 (p. 40).
[2] Ibid.
[3] Bangkok, National Archives of Thailand, R 5 Kh 4 Vol.3 (Ministry of Finance)
[4] Suksri and Freeman, *Palaces of Bangkok: Royal Residences of the Chakri Dynasty*, p. 10.

Figure 2.3.25: A leafy atmosphere of Suan Dusit[1]

[1] National Archives of Thailand

In 1908, King Chulalongkorn commissioned the project of a new throne hall, the greatest one to be built in his reign. Its location was the centerpiece of Suan Dusit, marking the destination of the vista view along the axis of Ratchadamnoen Boulevard. The king allegedly wanted the throne hall to be designed in a Siamese style.[1] However, the only prominent royal master builder available at the time was the semi-retired Phraya Ratchasongkhram (Kon Hongsakun), therefore the King was concerned that the huge task would not be accomplished properly.[2]

Finally, the King decided the throne hall should be built in a western style like buildings appreciated in Europe on his two tours.[3] The King, however, expressed his concern, as recorded by Chao Phraya Thammasak Montri (Sanan Devahastin), that people might accuse him having mania for western style buildings. This demonstrates the King's sensitivity, more obvious towards the end of his reign, about a proper balance between the acquisition of western modernity and the maintenance of Siam's own individuality as an independent Asian nation.[4]

The throne hall was finally designed and built by the Italian team of the Ministry of Public Works in Italian Renaissance style (Figure 2.3.26). The hall was roofed with seven copper-clad concrete domes. The main structure was ferro-concrete and load-bearing walls were clad with white marble from Carara, Italy. The foundation was a reinforced concrete floating foundation supported by five hundred and one piles.[5] Labour was both Thai and Chinese.[6] It was only finished at the beginning of the next reign (1916).

[1] Chungsiriarak, *Sathapattayakam Baeb Tawantok Nai Siam Samai Ratchakanti 4 Tueng Po So 2480 (Western Architecture in Siam: Rama IV's Reign to 1937)*, p. 126.
[2] Tiptus, *Chang Farang Nai Krung Siam (European Architects in Siam)*, p. 66.
[3] *Saranukrom Phrabat Somdet Phra Mongkutklao Chao Yuhua (Encyclopedia of King Vajiravudh)*, (Bangkok: The committee for the celebration of King Vajiravudh's centenary, 1980), pp. 938–39.
[4] *Bangkok Times* 26 Jan 1898. Quoted from David K. Wyatt, *Thailand: A Short History*, 2nd ed. (New Haven: Yale University Press, 2004), p. 197.
[5] Chungsiriarak, *Sathapattayakam Baeb Tawantok Nai Siam Samai Ratchakanti 4 Tueng Po So 2480 (Western Architecture in Siam: Rama IV's Reign to 1937)*, p. 132.
[6] Prasong Sukhum, *Chak Yommarat to Sukhumvit (From Yommarat to Sukhumvit)* (Bangkok: Chulalongkorn University, 2004), p. 56.

Figure 2.3.26: A photo of Phra Thinang Anantasamakhom (1908–16) with motor cars signifying that Siam was progressing towards *Siwilai*[1]

[1] National Archives of Thailand

Figure 2.3.27: Plans of Phra Thinang Anantasamakhom[1]

[1] Architecture Division, Department of Fine Arts

Like other mansions discussed above, within complete European facades, some traditional principles of spatial articulation persisted. The throne hall was separated into two main parts, the central throne hall and the inner court throne hall, according to Siamese practice. The latter part was private, to be used only by the King and the members of the inner courts, i.e. the Queens, consorts, concubines, and female officials. Connected to this part was a staircase leading to the Ambara Villa, the King's residence. Another element signifying a hybrid persistence of the traditional practice was painting on the seven domes, depicting the King and his ancestors' prestige. The one with the painting of a great Buddha image was located at the Westside dome. The location of the painting mimics the location of Buddha images in Buddhist temples, the images at the west facing east.

The style and layout of all the royal and monastic buildings discussed were a consequence of an intermingling between old and new ideas and practice. The new ideas were not, however, architectural ideas being discussed in the West, but the ideas related to the superiority of western civilisation as perceived by the Siamese elite. Like the gradual reforms in politics and culture, the Siamese elite selected and appropriated western architectural vocabulary to suit the situation that secured their power upon their subjects, maintaining their prestige among their peers, as well as repositioning themselves on the changing world stage.

By doing this, the Siamese elite by no mean intended to reform the whole ideology of the society yet; democracy was still not discussed widely, slavery was still present until the turn of the century, formal education in a modern sense was just started, and the word architecture was not yet translated, not to mention any scholastic discussion about it.

Figure 2.3.28: The painting of Buddha image on the ceiling of a dome of Phra Thinang Anantasamakhom faces East like the direction of the Buddha image in Buddhist temples. The offerings and furniture on the floor were prepared for a Buddhist ceremony to celebrate the opening of the throne hall.[1]

[1] National Archives of Thailand

Figure 2.3.29: A temporary pavilion for the Brahmin ceremony to celebrate the opening of Phra Thinang Anantasamakhom[1]

Figure 2.3.30: A royal white elephant, a traditional symbol of Siamese King's prestige, in front of Phra Thinang Anantasamakhom[2]

[1] National Archives of Thailand
[2] Ibid.

Change and continuity in the representation of hierarchy in buildings

The traditional aspect of hierarchy in building culture of Siam is worth examining regarding its change and continuity. By the turn of the twentieth century, even though the higher the rank of Princes, the larger and more elaborate the designs of their residences might be, the houses of nobles, i.e. commoners, shared the same styles of those belong to the Princes. This indicated the changing idea of hierarchy in architectural elements in Siam — the custom of reserving some Siamese elements for use only with particular types of royal residences did not seem relevant in the use of western style elements. The western elements were new and symbolically irrelevant to the traditional ideology, therefore it might be difficult for the Siamese elite to align them with the traditional hierarchy.

As regards the hierarchy of head versus feet, some spatial articulations according to the traditional custom were relaxed at the turn of the century. For example, most of the palaces and nobles' houses now had a porte-cochere leading to an entrance hall with a main staircase inside the house; unlike those built before the 1880s that normally had the main staircase outside, according to the traditional disapproval of entering one's house from underneath. Rooms on the ground floor were designated to be used more for proper functions.

Apart from these changes, persisting practices regarding hierarchy are clearly evident — for example, the separation of kitchen and servant quarters from the house — both humble and luxurious. In Parus Palace, where a Thai kitchen and servant quarters was definitely separated, a European kitchen, in which a Russian chef worked and lived, was well built in Swiss Chalet style but separated from the main mansion (Figure 2.3.31).[1] Accordingly, the practice of separated kitchen was likely to be still associated with not only a symbolic dirtiness, but also a class differentiation between owners and servants.

[1] Chula Chakrabongse, *The Twain Have Met or an Eastern Prince Came West*, p. 84.

Figure 2.3.31: Parus Palace with its separated western cuisine kitchen at the right side of the photo.[1]

[1] Chula Chakrabongse, *The Twain Have Met or an Eastern Prince Came West*, p. 84.

Public Buildings

The last building type in this period that is worth examining is public buildings, most of them accommodating modern functions unprecedented in Siam before the mid-nineteenth century. Apart from several ministries, the courts of justice, and other main government offices in Bangkok, there were town halls, provincial halls, schools, and courts of justice built around the country by the end of the nineteenth century as a result of administrative, educational, and juridical reforms. Hospitals, both public and private, were built mostly in timber. The royal mint was built with trussed roof.

Commercialisation resulted in the opening of stores, many of which provided imported goods not only for foreigners but also for Siamese elite to sustain their modern image. Completed in 1903, Ratchadamnoen Boulevard, the tree-lined-imposing artery in the middle of Bangkok was intended by King Chulalongkorn to be lined with luxurious stores, houses and offices. After the first building was rented out to Badman Store in 1905, the Department of Privy Purse initiated the project for a second building at the opposite end of the boulevard in 1906 to be rented out to John Sampson & Son, a branch of the luxurious outfitter and tailoring store, Sam & Sampson & Son, from London's Bond Street, which had initially opened its business in Bangkok in 1898 by invitation of the King (Figure 2.3.32). It was completed in 1912 in the next reign. Symmetrical in plan with two wings stretching along two diverging streets, the building was neo-classical in style. A porte-cochere welcomed arriving customers on rickshaws, carriages, and cars, protecting them from monsoon rain. Grand stairs were at the centre of both main floors. Service corridors, stairs, and offices were at the back.

Railway stations were also another important representation of modernity. They were built along the railway lines from 1900, firstly with only small wooden buildings, except for the station used by the King. However, the Bangkok terminal project marked an important moment for the building type. The project was initiated in 1903, and the preliminary design was later done by Karl Döhring in 1906, in a Jugendstil style (Figure 2.3.33).[1] He also designed another terminal at the end of the

[1] Chungsiriarak, *Sathapattayakam Baeb Tawantok Nai Siam Samai Ratchakanti 4 Tueng Po So 2480 (Western Architecture in Siam: Rama IV's Reign to 1937)*, p. 220.

northern line at Uttaradit in the same style. Only the latter was realised. For some reason Mario Tamagno took over the job of designing the Bangkok Terminal from Döhring (Figure 2.3.34).[1]

The platform hall roofed with a wide-spanned truss structure was designed by A. Gerber, a German engineer of the Royal Railway Department (Figure 2.3.36).[2] The steel was imported from Germany. The platform roof structure spanned fifty metres, making it the widest hall in Siam. The glass wall on the front façade was also the largest glass wall in the country. It was opened at 25 June 1916.[3] A hotel integrated with the terminus building at the east side of the platform was opened in 1928.[4]

Public buildings in the reign of King Vajiravudh, like houses, were built with the same method and styles of the last decade of King Chulalongkorn's reign (1889–1910). Some exceptions were evident in the buildings that exploited newer technologies such as reinforced concrete for their structure. The construction of higher commercial buildings, such as the 6-floor Tang To Kang Goldsmith, were, therefore, possible (Figure 2.3.37).

[1] Chungsiriarak, *Sathapattayakam Baeb Tawantok Nai Siam Samai Ratchakanti 4 Tueng Po So 2480 (Western Architecture in Siam: Rama IV's Reign to 1937)*, p. 440.
[2] Ibid., 441; Robinson, *Bangkok and Siam, Directory (Volume Yr.1914)*, p. 357.
[3] *Chalong 36 Pi Rot Fai Luang (36th Anniversary of the Royal Railways)* (Bangkok: Royal Railways Department, 1932), p. 28.
[4] 'Our Siam Letter', *The Singapore Free Press and Mercantile Advertiser*, 4 February 1928, p. 8.

Figure 2.3.32: John Sampson Store[1] (1912)

[1] Chungsiriarak, *Sathapattayakam Baeb Tawantok Nai Siam Samai Ratchakanti 4 Tueng Po So 2480 (Western Architecture in Siam: Rama IV's Reign to 1937)*, p. 465.

Figure 2.3.33: The unbuilt design of Bangkok Railway Terminal (1906) by Karl Döhring[1]

Figure 2.3.34: Mario Tamagno's design for Bangkok Railway Terminal[2]

[1] State Railways Authority of Thailand
[2] Chungsiriarak, *Sathapattayakam Baeb Tawantok Nai Siam Samai Ratchakanti 4 Tueng Po So 2480 (Western Architecture in Siam: Rama IV's Reign to 1937)*, p. 442.

Figure 2.3.35: Bangkok Railway Terminal (A clock was to be added on the facade)[1]

Figure 2.3.36: Interior space under the trussed roof of Bangkok Railway Terminal[2]

[1] National Archives of Thailand
[2] '*Raingan Kong Banchakan Khrangthi 20 Klao Duai Kan Doen Rotfai Luang Thang Khanand Yai Nai Krung Siam (The 20th Report of the Royal Railways department of Siam)*', (Bangkok: Royal Railways Department, 1917), unnumbered p. 4.

Figure 2.3.37: Tang To Kang Goldsmith[1]

[1] Chungsiriarak, *Sathapattayakam Baeb Tawantok Nai Siam Samai Ratchakanti 4 Tueng Po So 2480 (Western Architecture in Siam: Rama IV's Reign to 1937)*, p. 468.

Siamese-style public buildings

An important style in public buildings, built in the reign of King Vajiravudh, was the Siamese revival. Its foundation had already been initiated by King Chulalongkorn. Since his ascension to the throne in 1868, he had built only two new Buddhist monasteries before 1900. However, many renovation projects of existing royal temples had been executed by the remaining royal master builders. No matter how much King Chulalongkorn inclined toward western custom and taste, Buddhism was still embraced by the monarch as an important pillar of the kingdom and of Siamese culture. With the creation of Suan Dusit, the royal suburban enclave, the King had an opportunity to build Wat Benchamabophit, a new monastery, in order to maintain his status as defender of the religion. As all the Italian architects were busy with the new mansions and villas, the King commissioned Prince Naris, the Minister of the Public Work, directly. However, the Prince was assisted by Kon Hongsakun, the royal master builder, and later on by Italians, especially for the Carara-marble cladding.

The *Ubosot* (ordination hall) of Wat Benchamabophit had a crucifix plan with an unorthodox position of its cloister (Figure 2.3.38). The cloister interlocked with the *Ubosot*, creating a vacant courtyard at the rear side of the building, unlike the conventional design of the Rattanakosin period in which a main stupa, such as a *Prang*, or *Chedi* should have been put in the centre of the cloister. Furthermore, the cloister was intended to function as a museum by exhibiting Buddha images from various regions, a modern purpose without any predecessor.[1]

In many respects the design was a reinterpretation of pre-Ratanakosin era's Buddhist arts. Many of its spatial articulations, such as the relation between the cloister and *Ubosot* and elements such as roof tiles, capitals, and exposed roof structure with delicate decoration in the *Ubosot*, were influenced by those of Wat Phra Sri Rattana Mahathat in Phitsanulok, an important city in Ayutthaya period.

[1] See Chatri Prakitnonthakan, *Phra Phutthachinnarat Nai Prawatsat Somburanaya Sitthirat (Phra Phutthachinnarat in the Absolute Monarchy's History)* (Bangkok: Matichon, 2007). Quoted in Prakitnonthakan, *Kanmueng Lae Sangkhom Nai Sinlapa Sathapattayakam: Sayamsamai Thaiprayuk Chatniyom (Politics and Society in Architecture: Siam Era, Transforming Thai, and Nationalism)*, p. 76.

Figure 2.3.38: *Ubosot* (ordination hall) of Wat Benchamabophit (1899–1900)[1]

[1] Prakitnonthakan, *Kanmueng Lae Sangkhom Nai Sinlapa Sathapattayakam: Sayamsamai Thaiprayuk Chatniyom (Politics and Society in Architecture: Siam Era, Transforming Thai, and Nationalism)*, pp. 170, 77.

The application of neo-traditionalist ideas was presumably a response to the King's wish that he wanted to create a temple with the finest and most authentic Thai art, which was becoming extinct with the increasingly influx of western arts and crafts, in order to be a great example for the next generation.

Interestingly, by creating the neo-traditionalist design in order to resist the domination of western art, Prince Naris was later assisted by the Italians' expertise in reinforced concrete construction and marble cladding. The modern technique was later used also in the design and construction of Wat Rachathiwat (1916), also Prince Naris' design. Here, Tamagno helped the Prince to execute the design of Khmer-style reliefs at the front façade in pre-cast Ferro concrete.

The King's concern about the extinction of Siamese arts and crafts due to the influx of western art at the end of his reign was passed to the next reign when King Vajiravudh's royal nationalist policy correlated well with the revival of Siamese art.

In King Vajiravudh's reign, the beginning of the revivalist idea was first seen in the construction of Phra Thinang Samakkhi Mukkhamat and Phra Thinang Watchari Rommaya, both mansions at Sanam Chan Palace in Nakhon Pathom (Figure 2.3.39 - Figure 2.3.41). The connected throne halls and the King's residence were planned according to traditional principles, and built in 1912 and 1917 respectively. The throne hall had a large hall with a raised floor at the centre and its one end. The elements were traditional, with ornaments of wood. The roof structures were mixed between traditional *Tukta* system and modern rafter system. But the main structure of Phra Thinang Watchari Rommaya was reinforced concrete.[1] The master builder was Luang Phitak Manop (Noi Sinlapi). He was later entitled Phraya Wisukam Sinlapa Prasit.[2]

[1] Sunan Palakawong Na Ayutthaya, '*Laksana Sathapattayakam Khong Phra Ratchawang Sanam Chan* (The Architectural Character of Sanam Chan Palace)', in *Phra Tamnak Chali Mongkhonat Lae Phra Ratchawang Sanamchan (Chali Mongkhonat Mansion and Sanam Chan Palace)* (Bangkok: Silpakorn University, 1996), pp. 180–199 (p. 194).
[2] Ibid., p. 187.

Figure 2.3.39: The ground floor plan (left) and first floor plan (right) of Phra Thinang Samakkhi Mukkhamat and Watchari Rommaya at Sanam Chan Palace[1]

Figure 2.3.40: Elevations[2] **and sections**[3] **of Phra Thinang Samakkhi Mukkhamat and Watchari Rommaya. The latter shows a combination of Siamese and modern roof structure.**

[1] Chungsiriarak, *Sathapattayakam Baeb Tawantok Nai Siam Samai Ratchakanti 4 Tueng Po So 2480 (Western Architecture in Siam: Rama IV's Reign to 1937)*, p. 307.
[2] Ibid.
[3] Palakawong Na Ayutthaya, '*Laksana Sathapattayakam Khong Phra Ratchawang Sanam Chan* (The Architectural Character of Sanam Chan Palace)', p. 196.

Figure 2.3.41: Ornamented reinforced concrete columns and beams on the first floor of Phra Thinang Watchari Rommaya (1917)[1]

[1] *Phra Ratchawang Sanamchan Kab Suapa Lae Kanraksa Khwammankhong Khong Chat (Sanamchan Palace, Wild Tiger Corps, and the National Security)*, (Bangkok: Silpakorn University, 2007), p. 20.

Royal Pages School

King Vajiravudh wanted Siamese style to be used for wider purposes.[1] Therefore, the revival idea was also used in quite a few educational buildings. The first example was the Royal Pages School, an English style public school, established by the King in 1911. The King was breaking with tradition when he built this school in place of a royal temple. He suggested that past Kings had built enough royal temples and that contemporary education needed to be conducted in modern schools by lay-teachers rather than by monks.[2]

The King donated a piece of land in Suan Dusit for the school. The permanent buildings started to be designed in 1912. But it was speculated that the construction would take some years because it should have been 'permanent, beautiful, and celebrating the royal conviction'.[3] Therefore, temporary buildings were initially used.[4] The architect who laid the master plan and the buildings' plans was Edward Healey, who was serving as the headmaster of Po Chang School (Craftsmen Training School) at the time.

The construction of permanent buildings, *Ho Suad* (Buddhist chapel and auditorium) and *Khana* (buildings for teachers and students to live in and review their lessons) was finally started in 1915 and completed two years later in Siamese style (Figure 2.3.43 - Figure 2.3.48). By building it in such style, the King stated that he wanted to create an example of Siamese art for future reference.[5] Soon after the construction of the foundations of *Ho Suad* and *Khana* was finished, the King attended *Ko Phra Roek* ceremony, a Brahman and Buddhist rite ensuring auspiciousness of construction and use, on 20 December.[6] The construction was done by the Department of Fine Arts. The final designs were executed by Phra Samit Lekha (Plang Wipatsinlapin).[7] Chao Phraya Thammathikorn Thipbodi (M. R. Pum

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[1] M. R. Naengnoi Suksri, *Sathapattayakam Phra Borommaharatchawang (The Architecture of the Royal Palace)* (Bangkok: The Royal Secretary Office, 1988), p. 81.
[2] See *Krasae Phra Ratchaongkan Sueng Banchu Wai Nai Sila Phra Roek Rongrian Mahadlek Luang* (The Royal Announcement Inscripted in the Foundation Stone of the Royal Pages School) in '*Ratchakitchanubaeksa* (The Royal Thai Government Gazette)', vol 32 (1915), p. 2266.
[3] '*Ratchakitchanubaeksa* (The Royal Thai Government Gazette)', vol 1 (1911), pp. 1106–09.
[4] Ibid.
[5] '*Ratchakitchanubaeksa* (The Royal Thai Government Gazette)', vol 32 (1915), p. 2271.
[6] Ibid.
[7] Ibid.

Malakun), the Minister of Palace, was *Mae Kong* (Director of works).[1] Phraya Wisukam Silpa Prasit (Noi Silpi or later entitled Phraya Chinda Rangsan), was *Nai Ngan* (Manager of Works).[2]

For the first thirty years, classrooms and teachers' offices were still located in temporary thatched-roof buildings due to limited budget.[3] A permanent building accommodating classrooms was not finished until 1933. As had been done with traditional wooden buildings, the thatched roofed buildings were later dismantled and reassembled as teachers' and workers' houses.[4]

Conforming to King Vajiravudh's royal nationalism, the school's ethos stressed the loyalty to the three pillars of the kingdom — nation, religion, and the King. Each night, students sang the royal anthem after praying. The King's action was, therefore, not a mere substitution of a temple by a school, but a hybridised institution symbolising both school and monastery, aiming to educate future pages to serve the monarch, uphold the religion, and develop the nation. The ethos was embedded in the physical manifestation and use of the first permanent building — *Ho Suad*.

Ho Suad sat on 2-metre-high-reinforced-concrete columns, making it resemble a typical *Sala Kan Parian* in Bhuddist monasteries where activities beyond worshiping, such as preaching, teaching, and meeting, were conducted in temples. Here, it was used as a place of worship and an auditorium, similar to chapels in English public schools. It was located on the site as the most prominent building, facing east. East was not only the front side of the school but the normal direction for the ordination hall of Buddhist monasteries.

Apart from other Siamese ornaments, *Chofa*, *Bai Raka*, and *Hang Hong*, all the elements normally reserved for only royal buildings and monasteries, were used. The building was, therefore, literally aimed at symbolically representing a royal temple of the monarch.

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[1] '*Ratchakitchanubaeksa* (The Royal Thai Government Gazette)', vol 32 (1915), p. 2271.
[2] Ibid.
[3] *Thiraruek Nai Ngan Phraratchathan Ploeng Sop Phraya Prichanusat (Memorial for the Funeral of Phraya Prichanusat)*, (Bangkok: Thinwo, 1974), p. 2.
[4] Ibid., p. 3.

Like Phra Thinang Watchari Rommaya in Sanam Chan Palace, the upper floor and roof structure of *Ho Suad* were timber, mostly traditionally constructed with some modern adaptations.[1] The columns sat on reinforced concrete foundations and 3-metre-timber piles.[2] During 1926 and 1933, when Phraya Prichanusat was the headmaster, there was a special lecture every Thursday afternoon where all the students attended and the headmaster or a guest speaker gave a lecture on current news or other particular subjects. A memoir of an alumnus described the event as follows:

> At 2pm, *Chek Sok* (Sok, the Chinese) rang a bell, hung above the first floor's eave at the west side of the building, starting with a slow rhythm then faster, and finishing with three bangs. Students entered the auditorium and sat on chairs in their positions, juniors at the front and seniors at the back. Teachers sat in the front row. The head master in white *Ratchaprataen* with blue lower garment or speakers later entered the hall by the stairs at the east proceeding to the podium. The students stood, paying respect, and sat when he reached the podium.[3]

Another practice in the same period was Sunday preaching by a Buddhist monk once a month. Students wore white suits with five buttons and a dark blue lower garment, and sat crossed-leg on the floor in rows.[4] The monks sat crossed-leg and preached on the elaborate *Thammat*, an elevated podium.[5] It meant that, unlike the Thursday lecture events, the chairs were removed during this Siamese ceremony, requiring the traditional mode of sitting on the floor so no one could sit at a higher level than that of the monk.

As regards *Khana*, the accommodation of the students, each one has a typical plan with prep rooms, bedrooms, teachers' rooms, Buddhist altar in main buildings, while canteen, kitchen, and bathrooms were separated in humble buildings behind. Ornaments in each building were derived from different eras of Siamese art, but they were hardly defined and rather mixed up and adapted.

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[1] Chungsiriarak, *Sathapattayakam Baeb Tawantok Nai Siam Samai Ratchakanti 4 Tueng Po So 2480 (Western Architecture in Siam: Rama IV's Reign to 1937)*, p. 391.
[2] '*Ratchakitchanubaeksa* (The Royal Thai Government Gazette)', vol 32 (1915), p. 2271.
[3] *Thiraruek Nai Ngan Phraratchathan Ploeng Sop Phraya Prichanusat (Memorial for the Funeral of Phraya Prichanusat)*, p. 4.
[4] Ibid., p. 7.
[5] Ibid.

Figure 2.3.42: A map surveyed in 1925 shows the Royal Pages School located in a square site surrounded by ditches and canals.[1] The buildings rendered in black were of wood construction. The crucifix-plan one near the centre of the site was *Ho Suad* (Buddhist chapel and auditorium). The complex adjacent to it was classrooms. The buildings rendered in red at four corners of the site were *Khana* (Students' accommodations).

[1] *Phinit Phranakorn 2475–2545 (Observing the Capital 1932–2002)* (Bangkok: Department of Military Map; Chulalongkorn University, 2006), p. 3.

Figure 2.3.43: *Ho Suad* (Buddhist chapel and auditorium) of the Royal Pages School under construction (1917)[1]

[1] National Archives of Thailand

Figure 2.3.44: Plans and an elevation of *Ho Suad* (Buddhist chapel and auditorium) of the Royal Pages School (1917)[1]

Figure 2.3.45: The roof structure at the crossing part of *Ho Suad* combining traditional and modern construction techniques.[2]

[1] Chungsiriarak, *Sathapattayakam Baeb Tawantok Nai Siam Samai Ratchakanti 4 Tueng Po So 2480 (Western Architecture in Siam: Rama IV's Reign to 1937)*, p. 388.
[2] Ibid. p. 391.

A memoir of a student in 1926 recorded a schedule showing how they used buildings of the school as follows:[1]

6.00 Waking up, making bed

6.30 A big bell rang, taking a bath, dressing

7.00 A small bell rang, lining up, walking to the canteen to have a Chinese style breakfast

8.00 Another bell ringing, going to classroom, five-minute break at every hour

10.00 Running from the classroom to the *Khana* to have snacks

10.30 Back to the classroom

13.00 Class finished, having lunch, free time

15.30 A small bell rang, lining up, checking names

16.00 A big bell rang, playing sport

17.00 Taking a bath, wearing Chinese white trousers and white undershirt

At dusk. A small bell rang, lining up, having dinner

19.00 Doing homework in the prep room

20.00 Lining up, praying, singing the royal anthem, going to bed, junior students slept on wooden beds, senior students on iron beds, there were mosquito nets.

As far as the buildings, the rituals of inhabitation, and the King's nationalism were concerned, the school, as King Prajadhipok stated in 1930, aimed to produce graduates who not only worked for their country's progress but also admired and followed their traditions, which 'had been proved a most excellent thing, inherited by their ancestors'.[2] The 'traditions' were definitely not only the Siamese art manifested by the building style, but also the religion and perhaps the most importantly, monarchy, which was supposed to be upheld forever.

[1] *Thiraruek Nai Ngan Phraratchathan Ploeng Sop Phraya Prichanusat (Memorial for the Funeral of Phraya Prichanusat)*, p. 2.
[2] Horace Geoffrey Quaritch Wales, *Siamese State Ceremonies: Their History and Function* (London: Quaritch, 1931), p. 6.

Figure 2.3.46: Khana Dusit, Royal Pages School[1]

[1] National Archives of Thailand

Figure 2.3.47: Plans and front elevation of Khana Dusit[1]

Figure 2.3.48: Plans and front elevation of Khana Chitlada[2]

[1] Chungsiriarak, *Sathapattayakam Baeb Tawantok Nai Siam Samai Ratchakanti 4 Tueng Po So 2480 (Western Architecture in Siam: Rama IV's Reign to 1937)*, p. 396.
[2] Ibid., p. 394.

Conclusion

There were both transformation and persistence of ideas about what were palaces, temples, and houses as perceived and used by the Siamese elite. As regards the domestic space of the Siamese elite in particular, despite the change in style and materials, spatial articulations and perception, the habitation in many particular spaces resembled what had happened before in traditional houses. Not unlike contemporary Japanese houses that were normally built with two parts, a reception in western style and a living quarters in a traditional way, or a whole western style that still included a Tatami room serving the traditional yet reforming habit[1], the Siamese tended to adapt and integrate themselves to fit into the new forms more. For example, they could use the back verandah in a western style house as they had done with the *Rabiang* of the traditional house. Flooring materials did not seem to affect the practice of taking shoes off, because, no matter what the floors were made of, wood, tiles, or marble for instance, the Siamese could still walk barefoot and could even sit on the floor if they wished, as they were never too cold or too hot.

Given that the traditional design of step changes, defining sitting areas that had been higher than circulation, was not adopted in most of the western style houses, it is possible to assume that the design did not matter as long as people, especially those of lower status, crawled on the floor instead of walking past a person sitting, or the person sitting occupied a western-style chair that raised him/herself above the people of lower status. Such conduct must have been reassured by a famous book, *Sombat Khong Phudi (Manners for good people)*, published by Phraya Sadet Surenthrathipbodi (M. R. Pia Malakul), the Minister of Public Instruction, in 1912. The book covered desirable manners of physical, verbal, and mental conduct, including the discouragement of walking past and standing while others, especially those of higher status, are sitting.[2]

[1] Tatami rooms were more perceived as leisure rather than formal after the Meiji Restoration. See Jordan Sand, 'At Home in the Meiji Period: Inventing Japanese Domesticity' in Stephen Vlastos, ed., *Mirror of Modernity: Invented Traditions of Modern Japan* (Berkeley; London: University of California Press, 1998), pp. 191–207 (p. 207); Ken Tadashi Ōshima, *International Architecture in Interwar Japan: Constructing Kokusai Kenchiku* (Seattle: University of Washington Press, 2009).
[2] Phraya Sadet Surenthrathipbodi, *Sombat Khong Phudi (Manners for Good People)* (Bangkok: Rong Phim Phrachan, 1967).

Figure 2.3.49: The hierarchy of people at Varadis Palace, sometime during 1911 and 1932, defined by where they sat, is evident in a photo from the exhibition commemorating 150th anniversary of Prince Damrong at the National Museum Bangkok.[1]

Figure 2.3.50: The Siamese elite sitting on chairs and a servant sitting on the ground at the turn of the twentieth century[2]

[1] Photo taken from an exhibition board by Chomchon Fusinpaiboon
[2] Wright and Breakspear, *Twentieth Century Impressions of Siam: Its History, People, Commerce, Industries and Resources*, p. 142.

These scenarios might seem to conflict with the fact that King Chulalongkorn had terminated the practice of prostration when officials attended the King's audiences since 1873, and encouraged a termination of this practice in all officials' houses in which servants had prostrated and crawled.[1] It happened that the real situation behind formal ceremonies, which foreign diplomats attended, could have been a different story as H. G. Quaritch Wales, who had an insight service in the Siamese court, recorded his experience in the 1920s:

> Bodily prostration still lingers to some extent. […] Siamese servants often crouch in the presence of their masters, officials lie almost full length when they are offering anything to the King on his throne, and I have seen ladies of the older generation crawling on their hands and knees when in the presence of a prince of high rank with whom they had conversation with their faces parallel to the ground, while the prince was seated in a chair.[2]

In sum, the persisting perception about building types and spatial conduct maintained traditional practices related to hierarchy within the new forms and spaces, and vice versa. It is, therefore, no exaggeration to state that what mattered more were users, not the space. The meanings of building types depended on who the users were and how they wanted to use them as much as their supposed function. The final example here will sum up these issues perfectly.

The grand mansion of Sa Pathum Palace was the residence of Queen Sawang Watthana, a widowed consort of late King Chulalongkorn, after its completion in 1916 until her death in 1955 (Figure 2.3.51). The Queen had designed the plan of the mansion herself before giving it to an Italian architect to design other things.[3] This demonstrates that the owner had thought she had known best how she would live in the mansion. The architect's duty was therefore only to make the building beautiful, of course in a western style suitable for the owner's status, its durability, and hygiene. The mansion was erected with a reinforced concrete structure, having a row of rooms on both floors facing north and a *Rabiang* (gallery) facing south.

[1] '*Ratchakitchanubaeksa* (The Royal Thai Government Gazette)', vol 1 (1873), p. 22
[2] Wales, *Siamese State Ceremonies: Their History and Function*, p. 24.
[3] *Sri Sawarinthiranusorani: Nom Ramruek Thueng Somdet Phra Panwasa Aiyika Chao (Sri Sawarinthiranusorani: Memorial of the Queen Grandmother)*, (Bangkok: Phra Panwasa Aiyika Chao Foundation, 2008), p. 69.

The western style living room on the first floor which the Queen mostly used had western furniture, including chairs for her and her guests to sit on. But after her retirement in her later years, she used the *Rabiang* in front of her bedroom upstairs, sitting on a traditional cushion on the floor everyday.

In 1950, the royal wedding of King Bhumibol, a grandson of Sawang Watthana, and M. R. Sirikit Kittiyakara, was organised not in any great hall of the royal palace but on the *Rabiang* of the Queen Grandmother's mansion (Figure 2.3.52). This was because the space did not matter as much as the person who used it. The Queen Grandmother was now the most senior surviving member of the royal family and the only person who deserved the position to bless the King and the future Queen. And once she had insisted on sitting on the floor of the *Rabiang* during the ceremony (or perhaps she could only sit there because of her physical limitations), the ceremony had to take place there.

Not only western style domestic buildings, but also public buildings served their practical function as well as a symbolic notion of modernity. At the same time, some modern functions were symbolically hybridised with traditional functions, as in the case of the Royal Pages School that was built instead of the King's Buddhist monastery. What changed the most within seventy years after the Bowring Treaty had been signed was perhaps building practice. The traditional practice in the city was abandoned almost completely. This helped to spark off the revival of Siamese art in royal and public buildings in the reign of King Vajiravudh (1910–25), correlated with his policy of royal nationalism. The Siamese elite also became aware that the Siamese had almost completely lost their jobs in construction. One measure to solve this was sending students to study modern building design and construction abroad, in the hope that they would come back to work instead of foreigners, as well as teaching Siamese students. And not until that time was an architectural discourse in the western sense established. The discourse as emerging was of course greatly dependent on what the Siamese students learnt in Europe. And this was the starting point of the transplantation of the concept of architecture from Europe to Siam.

Figure 2.3.51: The grand mansion (1916) of Sa Pathum Palace[1]

Figure 2.3.52: The Queen grandmother Sawang Watthana was blessing King Bhumibol and M. R. Sirikit Kittiyakara in their wedding ceremony (1950) at the *Rabiang* on the first floor of the grand mansion, Sa Pathum Palace.[2]

[1] *Sri Sawarinthiranusorani: Nom Ramruek Thueng Somdet Phra Panwasa Aiyika Chao (Sri Sawarinthiranusorani: Memorial of the Queen Grandmother)*, p. 67.
[2] Ibid., p. 61.

Figure 2.3.53: 'Roman Garden' in Phrayathai Palace (1919–20). This photo taken from an English guide book for Bangkok published in 1927 well encapsulates the situation of the building culture and production in Siam by the 1920s.[1] The classical features were erected in the palace not because of any association with the Roman Empire in the past, its Imperial ambitions, or the Romantic fondness of antiquity, which was the basis of such features in Europe in the eighteenth and nineteenth century, but rather as part of the quest for '*Siwilai*', a kind of modernity seemingly following western models but actually selected by the Siamese elite themselves. Other features of modernity such as the electric cables lying quite clumsily on the stairs were not unlike Siam's modern infrastructure that was gradually laid amidst many limits and obstacles. The 'Siamese classical dance on a gala night' was not unlike the Siamese revival buildings that adapted traditional forms to express new meanings related to the modern concept of national heritage and nationalism.

[1] Seidenfaden, *Guide to Bangkok. With Notes on Siam*, p. 54.

3 The Transition

3.1 Encountering an unknown: Architectural education of Siamese students in Europe, 1900s–1930s

It has been discussed in previous chapters that architectural culture was not systematically established in Siam until the 1930s. Before examining the foundational period of the architectural culture in the country, we should first understand the architectural education of Siamese students in Europe who were to become the purveyors of the architectural culture in Siam. This is necessary for a further examination of their application in Siam of the knowledge and principles they had learnt from Europe, that involved translation, and reinterpretation to suit local context.

The architectural education of six Siamese students who went to study in France and England from the 1900s to the 1930s is examined here (Figure 3.1.1). Three of the students were descendants of royal families in the rank of Mom Chao (HSH Prince, i.e. grandchildren of a King). They were Mom Chao Itthithepsan Kridakorn (1890–1934), Mom Chao Samaichaloem Kridakorn (1895–1967), both on private funding, and Mom Chao Vodhyakara Varavarn (1900–81), who received the King's scholarship. The other three were commoners. Sarot Sukkhayang (1895–1950) and Nat Phothiprasat (1901–54) received scholarships from the government, while Mew Aphaiwong (1905–63), who was a son of a prominent nobleman, used private funding.

In their early years these Siamese students, who were born between 1890 and 1905, had witnessed the multifaceted and muti-faced reforms of the kingdom by King Chulalongkorn (reigning 1868–1910) and King Vajiravudh (reigning 1910–25) as discussed in the last chapter. At this period, prestigious projects in the government were mainly in the hands of foreign architects, especially Italians. The Siamese, both as bosses and assistants of the European architects, were involved with the practice so they learnt the modern approach. Siamese assistants and Chinese builders, who also had chances to work with the European architects, applied the skills they got to their subsequent business, which was normally the

construction of middle-class houses in western styles. Prince Naris, who served as Minister of Public Works supervising the projects of the European architects, learnt a modern approach in building design as well as technology, and designed Wat Benchmabophit, the marble temple, to which he applied modern ideas and technology such as the grid system and concrete construction.[1] Apart from Prince Naris, only a couple of master builders had a chance to cooperate with the Europeans. None of them had had architectural education in a modern sense.

Early generations of Siamese students, both descendants of royal families and commoners, had started to embark to Europe to study, firstly in education, military affairs, law, and forestry, as early as the end of the 1860s, in order to come back to work alongside foreign expatriates employed by the royal government, and hopefully gradually to take over the jobs. Building construction, despite being a priority in achieving the stage of *Siwilai*, was, however, left mostly in the hands of foreigners up until the 1920s. The concept of buildings by the 1920s remained largely unchanged despite the transformation of style. Palace was palace, house was house. Mom Chao Itthithepsan Kridakorn, with the support of his family's fortune, perhaps headed to Europe to equip himself with knowledge for building new styles of palace. At the same time, public buildings, a brand new building type, were needed due to the administrative reforms and the introduction of modern education, health care, and technology. The government finally realised by 1913 that it needed the Siamese to study how to cope with this building type too.

Unlike the case of Japan, that employed British architect Josiah Conder to teach Architecture at the Imperial College of Engineering in Tokyo as early as 1877, the Siamese government's plan to produce Thai practitioners for the design and construction of future public buildings followed the practice with other subjects: was sending a few Siamese students to study this subject in Europe and hoping that they would come back to teach the Siamese at home. Sarot Sukkhayang and Nat Phothiprasat were sent to England in 1913 and 1923 respectively.

[1] Prakitnonthakan, *Kanmueng Lae Sangkhom Nai Sinlapa Sathapattayakam: Sayamsamai Thaiprayuk Chatniyom (Politics and Society in Architecture: Siam Era, Transforming Thai, and Nationalism)*, pp. 165–69.

Figure 3.1.1: Pioneering Siamese architects[1] Graduates from France (upper row from left to right): M. C. Itthithepsam Kridakorn, M. C. Samaichaloem Kridakorn, and Mew (Chittrasaen) Aphaiwong. Graduates from England (lower row from left to right): Sarot Sukkhayang, Nat Phothiprasat, and M. C. Vodhyakara Varavarn.

[1] All photos from *Saen Thang Sathapanik Siam* (The Routes of Siamese Architects) research project, Chulalongkorn University

Contemporary with the architecture students, and in all subjects, there were two hundred and twenty two Siamese students abroad in 1918 and three hundred and three in 1922.[1] These statistics not only show that building construction was merely a small part in the attempt to modernise Siam following western models, but also implied a lack of professionals in this field for the coming decades.

Despite potential differences in their initial purpose of study, all Siamese students, both royals and commoners, encountered a new concept regarding building and construction. Some buildings were not just buildings but architecture — a new concept that had no translation into Thai language when the first two students embarked for Europe.

Three schools of architecture in Europe and their Siamese students are examined here. They are the Ecole des Beaux-Arts, Paris; the School of Architecture, University of Liverpool; and the Department of Architecture, University of Cambridge. Although a few research studies have explored the nature of the training as well as its contribution to contemporary architectural practice in France, USA, and Britain (the most comprehensive concern the Ecole des Beaux-Arts and the least are about Cambridge), few have touched this education's extended contribution to international practice outside the western world.[2] By looking at the way overseas graduates, or British and French graduates from these training systems, applied their knowledge and skills to their local contexts outside the western world, we will see not a mere issue of style transposition, but — due to such local contexts being significantly different from England and France in cultural, political, technological, economic background, and climate — a multi-dimensional understanding of global architectural approach and practice. Now the first architecture school where the first Siamese student encountered the concept of architecture will be examined.

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[1] Suwadi Thanaprasitpatthana, '*Naew Phraratchadamri Khong Phrabatsomdet Phrapokklao Chaoyuhua Kiew Kab Sangkhom Thai Po So 2468–2475* (King Rama VII's Thoughts About Thai Society 1925–1932)', in *Thai Society in the reign of King Rama VII* (Bangkok: Chulalongkorn University, 1994), pp. 11–22 (p. 17).

[2] See Mark Crinson, *Modern Architecture and the End of Empire* (Aldershot: Ashgate, 2003); Mark Crinson and J. Lubbock, *Architecture--Art or Profession?: Three Hundred Years of Architectural Education in Britain* (Manchester: Manchester University Press, 1994); Alan Powers, 'Architectural Education in Britain 1880–1914' (unpublished doctoral thesis, University of Cambridge, 1982); J. Sharples et al., *Charles Reilly & the Liverpool School of Architecture, 1904–1933: Catalogue of an Exhibition at the Walker Art Gallery, Liverpool, 25 October 1996-2 February 1997* (Liverpool: Liverpool University Press, 1996).

Ecole des Beaux Arts des Paris and Siamese students, 1900s–1930s

Three Siamese students studied at the Ecole des Beaux Arts in Paris from the end of the 1900s to the beginning of the 1930s. Access to information about their exact periods of studies is limited. The only architect whose biography indicates exactly the period he spent at the Ecole is Mom Chao Samaichaloem Kridakorn. A search on 'Accès global et organisé aux ressources en histoire de l'art', an online database created by Institut National d'Histoire de l'Art in France has not shown any records for the Siamese students, though it has yet fully covered all records of the Ecole.[1] Therefore, this research has to rely on the periods of their studies mentioned in secondary accounts, i.e. biographies and existing research about them. The first Siamese student to arrive at the Ecole was Mom Chao Itthithepsan Kridakorn, whose period of studies spanned from approximately the second half of the 1900s to 1916.[2] The second was Mom Chao Samaichaloem Kridakorn, who was there from 1918 to 1927.[3] The last was Mew Aphaiwong, who was there at approximately the beginning of the 1930s.[4]

Originally established as Academie Royale d'Architecture in 1671 by Louis XIV, the institution had gone through various stages of transformation before becoming École Nationale Supérieure des Beaux-Arts after World War I. Even though the school's last period of true greatness was believed to be from 1890 to the dawn of the war, one might say that in the 1920s École Nationale Supérieure des Beaux-Arts was still the finest architecture school in the world, despite its gradual decline.[5] So M. C. Itthithepsan was able to experience the last period of the institution's greatness before the war, while M. C. Samaichaloem and Aphaiwong experienced the prestigious institution during a transformative period regarding the emergence of Modernism outside the school.

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[1] 'Agorha: les bases de données en histoire de l'art de l'inha', http://www.inha.fr/spip.php?article3471 [accessed date 12 July 2013].
[2] Chungsiriarak, *Sathapattayakam Baeb Tawantok Nai Siam Samai Ratchakanti 4 Tueng Po So 2480 (Western Architecture in Siam: Rama IV's Reign to 1937)*, p. 500.
[3] *Ngan Sathapattayakam Khong Mom Chao Samaichaloem (Architecture of Mom Chao Samaichaloem)* (Bangkok: Rong Pim Phra Chan, 1967).
[4] ———, *Sathapattayakam Baeb Tawantok Nai Siam Samai Ratchakanti 4 Tueng Po So 2480 (Western Architecture in Siam: Rama IV's Reign to 1937)*, p. 513.
[5] T. M. Prentice, 'Quatz-Arts - My Experiences as a Student at the Ecole-Des-Beaux-Arts in Paris 1924–1928', *Journal of the Society of Architectural Historians*, 4 (1985), 384–87 (p. 384).

Apart from the majority that was French students, there were Greeks, Russians, Italians, Egyptians, Americans, South Americans, and Scandinavians attending the school.[1] Students had to enroll in one of the ateliers associated with the school to learn basic skills and subjects to take an entrance examination to enroll to the school. However, those who did not pass the exam could enroll in the school too, but were not eligible to receive the Diplôme entitled D.P.L.G., which stands for Diplôme par le Gouvernment Français that allowed them to practice as architect in France without any further examination. This, however, did not mean that those who did not pass the entrance examination would necessarily be less successful in later career. One of such students in the 1920s was Louis Skidmore who later set up Skidmore, Owings, and Merrill in the USA. M. C. Samaichaloem was the only Siamese architect of the three who had D.P.L.G. clearly indicated in his biography.

The three Siamese students experienced the same general curriculum. It was divided into three parts — second class, first class, and thesis. After an entrance exam, newcomers were categorised as second class. In order to achieve first class, they had to pass two types of assessment — studio works and exams. Studio works comprised six architectural exercises with various objectives, namely *projet*, *esquisses-esquisses*, and *concours*, each year. *Projet* was the main exercise to design a building or a group of buildings. *Esquisses-esquisses* required students to provide a complete plan or perspective representation in twelve hours. Two *concours*, Godboeuf and Rougevin, were organised each year for decorative problems such as monumental staircases or doorways. M. C. Samaichaloem won a second prize in the *concours* Godboeuf in 1927 (Figure 3.1.2). The architectural design subjects aimed to provide students with a culture of architecture that was necessary for them to create their works. For the Ecole, Architecture was an art, and the conception of good architecture was that which exemplified the beauty of form based on 'fixed' principles of taste, which were 'universally' agreed by those 'qualified' to judge their merit and were teachable.[2] It is clear here that the Siamese students were studying these universal and fixed principles of art in order to be qualified to transplant them to Siam.

[1] T. M. Prentice, 'Quatz-Arts - My Experiences as a Student at the Ecole-Des-Beaux-Arts in Paris 1924–1928', p. 385.
[2] Donald Drew Egbert and David Van Zanten, *The Beaux-Arts Tradition in French Architecture: Illustrated by the Grands Prix de Rome* (Princeton; Guildford: Princeton University Press, 1980), p. 99.

Figure 3.1.2: Mom Chao Samaichaloem Kridakorn's work at Ecole des Beaux-Arts, winning the second price of *concours* Godboeuf in 1927.[1]

[1] École nationale supérieure des Beaux-Arts (France), *Concours d'architecture de l'année scolaire 1926–1927 / Ecole nationale superieure des Beaux-Arts, Paris* (Paris: Auguste Vincent, 1927), p. PL 37.

Figure 3.1.3: Mom Chao Samaichaloem Kridakorn's work at the Ecole des Beaux-Arts (date unknown)[1]

[1] *Ngan Sathapattayakam Khong Mom Chao Samaichaloem (Architecture of Mom Chao Samaichaloem).*

Apart from studio work, there were exams in architectural design, construction, and scientific subjects such as physics, chemistry, mathematics, descriptive geometry, statics and strength in materials, stereotomy (the art or technique of cutting solids), world history, and the French Civil Code. There were six exams on architectural design each year. Their problems were compositions of classical elements. Together with design exercises, the exam on the classical elements not only allowed students to be familiar with historic elements, but developed their attitudes towards them in a way that allowed history to become theirs to be used, manipulated, distorted, or rearranged.[1] Especially in the circumstance of post-World War I when Modernism started to emerge, the school probably hoped that if students were to decide to discard all the elements one day, they would have done so out of as Calhian put it, *connaissance de cause*, not sheer ignorance.[2]

Among all the other subjects, construction was the most difficult for students. Only one exam was organised each year, when lectures were given culminating in an oral examination and presentations of an elaborate construction project comprising structural drawings, working-drawing type details, accurate dimensioning and calculations. Lectures on electricity, heating, and lighting were not included in the construction course until as late as 1932.[3]

Each student did not have to take all exercises and exams in a single year, as they had unlimited time for their studies at the Ecole. The only requirement was that a student had to pass three of the exams to register for a *projet* — the most important type of the three exercises. At least five *projets* should be achieved to get into the first class. At least six exercises and all the required exams should be achieved before a first class student was eligible to prepare for a thesis. Students who completed their thesis were eligible to compete for the Grand Prix de Rome.

Apart from lectures optionally attended at the school, studio works were done in approximately a dozen *ateliers*, each self-organised with fifty to one hundred students and there was much competition between them. The older students,

[1] Jean Paul Carlhian, 'The Ecole Des Beaux-Arts: Modes and Manners', *Journal of Architectural Education*, 2 (1979), 7–17 (p. 13).
[2] Ibid.
[3] Egbert and Van Zanten, *The Beaux-Arts Tradition in French Architecture: Illustrated by the Grands Prix de Rome* (Princeton; Guildford: Princeton University Press, 1980), p. 73.

anciens, invited architects of some distinction in Paris to supervise them, known as *patrons*. Some of the large *ateliers* in the 1920s were those of Ladoux, de Frasse, Herot, Pontremoli, and Gromort. M. C. Samaichaloem was in the atelier of Alfred-Henri Recoura, a previous Prix de Rome holder and the chief architect of the National Library from 1912 to 1932.[1]

Newcomers in an *atelier* were called *nouveaux*. They were not fully accepted by the *anciens* until they proved themselves. Once they were accepted they became *anciens* and became closer to each other. In addition to criticism from *patrons*, *anciens* always criticised the works of *nouveaux*. In return, *nouveaux* served *anciens* when they needed help with their drawings.

T. Merrill Prentice recalled that the regular architectural *projets* in the 1920s, six of which were organised per year, were executed in the following procedure.[2] Once a subject and requirement were given and the submission date proposed, students made a 12-hour-*esquisse*, a rough outline of what they wanted to develop into their *projets*. After that they developed their *esquisse* in their *ateliers* for six weeks or so, before finally submitting their *projet rendu*. Each student needed to do one *projet* a year. The completed *projets* were judged by *patrons* from various *ateliers*. Students got credits from their marks.

The process shows that originality and ingenuity of the idea were emphasised by the rigid imposition and attachment to the 12-hour *esquisse*, in which students had to interpret the brief by themselves without any help and criticisms from *patrons*, fellow students, and *anciens* in *ateliers* and had to stick to the sketches in developing the final works.[3]

A review of different briefs, i.e. different building types, by Carlhian demonstrates the 'rational' idea of the Beaux-Arts.[4] Designs of particular building types must respond to and, therefore, imply use in their character. For example, a building related to the army should emphasise its parade ground as the symbolic feature. A religious building should adopt a cloister-like enclosure, imbuing it with

[1] École nationale supérieure des Beaux-Arts (France), *Concours d'architecture de l'année Scolaire 1926 - 1927/ Ecole Nationale Superieure Des Beaux-Arts, Paris*, PL 37.
[2] Prentice, 'Quatz-Arts - My Experiences as a Student at the Ecole-Des-Beaux-Arts in Paris 1924–1928', p. 388.
[3] Carlhian, 'The Ecole Des Beaux-Arts: Modes and Manners', p. 12.
[4] Ibid.

mystery, and place the chapel or church appropriately. Projects involved with security issues such as museums and libraries should have a single entry, while railway stations and theatres that handled large crowds should do the opposite. Different sub-categories of the same building types also implied the different characters needed. For example, a 'Grand Hotel' should be differentiated from a 'Holiday Hotel'. The former should emphasise prestige and splendid reception, while the latter should be designed to maximise views. Character was represented by the treatment of elevation too. Pilasters, detached columns, niches, all integrated in the system of the load-bearing wall, were applied to projects like theatres and spas, while unadorned walls were used for industrial plants, studios, or military barracks.

Student works in the early part of the twentieth century were dominated by what was called *style pompier*, consisting of columns, pilasters, arches, cornices, pediments, cartouches, finials, and cupolas. The main text books at the time were the four volumes of *Eléments et théorie de l'architecture* by Julien Guadet, the professor of theory, published from 1901 to 1904, covering theories and principles practically and aesthetically for designing all building types.[1] All of these, again, assured the adoption of teachable and fixed principles of taste, which were universally agreed by those who qualified.

However, this does not mean that student works were limited to a classical style, as some works show Gothic and Romanticism.[2] Designs leaning towards what are now called Art-Nouveau and Art Deco were also evident in the smaller-scale-*esquisse-esquisse*.[3] Furthermore, graduates of the Beaux-Arts since the 1900s, especially Americans who went back to practice in the USA, embraced new technology to design skyscrapers, responding to requirements emerging from particular socio-economic circumstances.[4] M. C. Itthithepsan experienced this kind of circumstance, and his future works in Siam bore little fondness for classicism.

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[1] Julien Guadet, Jean Louis Pascal, and École nationale supérieure des Beaux-Arts (France), *Éléments et théorie de l'architecture: Cours professé à l'école nationale et spéciale des Beaux-Arts*, 5th edn (Paris: Librarie de la Construction Moderne, 1911).

[2] See examples of such works in École nationale supérieure des Beaux-Arts (France), *Concours d'architecture de l'année scolaire 1920–1921 / Ecole nationale superieure des Beaux-Arts, Paris* (Paris: Auguste Vincent, 1921).

[3] See Ibid.; ———, *Concours d'architecture de l'année Scolaire 1926–1927/ Ecole Nationale Superieure des Beaux-Arts, Paris*.

[4] See Jewel Stern and John A. Stuart, *Ely Jacques Kahn, Architect: Beaux-Arts to Modernism in New York* (New York, London: W.W. Norton & Co., 2008) for example.

M. C. Samaichaloem and Aphaiwong, however, experienced a relatively different atmosphere, as the aformentioned principles were affected by new ideas and construction methods of the post-war period, profoundly influenced by the publication of Cité *industrielle* in 1917 by Tony Garnier, the winner of the Prix de Rome in 1899, and further stirred by the recognition of that book by Le Corbusier in 1921.[1] Le Corbusier himself published *Vers une architecture*, containing sharp criticism of the Ecole, in 1923. Some progressive students actually invited Le Corbusier to establish an external atelier, but he declined, instead suggesting August Perret, who agreed to do so in 1924.[2] Reinforced concrete was definitely one of the most up-and-coming new methods. However, as the majority of professors still considered reinforced concrete unsuitable for monumental architecture, Perret's students failed to win any prizes. He closed the atelier in 1928, as the number of students decreased year by year. Nevertheless, the presence of reinforced concrete structure, accompanied by features nearer to a conservative line of modernism, such as plastered surfaces and cantilevered slabs in symmetrical buildings, is evident in some awarded *projets* in 1923 and 1924, whose programmes, such as railway station or stadium, were likely to be acceptable for such style in the eyes of the judges (Figure 3.1.4 - Figure 3.1.5).[3] Such works gradually appeared more in following years but were still confined to projects such as aquarium and circus hall.[4] This tendency was applied to more building types when M. C. Samaichaloem was about to graduate and when Aphaiwong arrived.

[1] Egbert and Van Zanten, *The Beaux-Arts Tradition in French Architecture: Illustrated by the Grands Prix de Rome* (Princeton; Guildford: Princeton University Press, 1980), pp. 70, 74.
[2] Fernando Montes, 'Le Corbusier and the Ecole Des Beaux-Arts', *AD Profiles*, 8 (1978), 60–64, p. 60.
[3] École nationale supérieure des Beaux-Arts (France), *Concours d'architecture de l'année scolaire 1923–1924 / Ecole nationale superieure des Beaux-Arts, Paris* (Paris: Auguste Vincent, 1924), pp. PL 59, PL 62, PL 73.
[4] ———, *Concours d'architecture de l'année scolaire 1925–1926 / Ecole nationale superieure des Beaux-Arts, Paris* (Paris: Auguste Vincent, 1926), pp. PL 46, PL 62.

Figure 3.1.4: A design for a railway station by a student at the Ecole des Beaux-Arts showing an application of reinforced concrete construction and elements under the traditional principle (1924).[1]

Figure 3.1.5: A design for a stadium by a student at the Ecole des Beaux-Arts showing an application of reinforced concrete construction and elements under the traditional principle (1924).[2]

[1] ———, *Concours d'architecture de l'année Scolaire 1923 - 1924 / Ecole Nationale Superieure des Beaux-Arts, Paris,* PL 59.
[2] Ibid., PL 71.

The reception of Modernism was partly stimulated by the establishment of the French Travelling Scholarship in 1926 by American Beaux-Arts exponents that aimed at integrating the aspect of 'modernity' from the other side of the Atlantic, filtered through classical principles, into the great compositional tradition of the Ecole.[1] Not until the beginning of the 1960s did students' works obviously show an appreciation of Le Corbusier's works, previously tabooed by many *ateliers*.[2]

It is worth noting in detail the great tradition of *composition*, the term representing the core essential of the Ecole's manner of architectural design, conceived in three-dimensional entities presented by plan section and elevation.[3] The symmetrical plan, with the main element of the programme in the top centre was the norm of the Ecole as it was believed to be 'not only intellectually logical but explainable by the law of minimal effort'.[4] Other elements should be composed regarding their hierarchies and the access to the main element in mind. Sections and elevations were developed afterwards under the same principle that ensured the prominence of the main elements. Rykwert has pointed out that these principles, which could be learnt only from the 'classics', was aimed to 'remedy against all the vagaries of unlicensed imagination'.[5]

In organising the *composition*, specific environment, i.e. climate and geography, was rarely mentioned in the brief of *projets*. Rare examples were 'a Mediterranean site', 'a view of the sea', and 'commanding a panorama of mountains'. Orientation was absent. Students were allowed to put their own compasses on the drawings of some *projets* requiring particular orientation such as an art school that required north light. Mention of immediate surroundings was even rarer. No specified dimensions were given to sites of the *projets*. Shapes of sites were nearly always square. All this despite the fact that all French students must have known

[1] I. Gournay, 'Ecole-des-Beaux-Arts and Modernity, the Grand-Tour of America (1926–39) Relations Developed between the School and the United-States through the French Traveling Fellowship', *Casabella*, 493 (1983), 40–47 (p. 41).
[2] Marie-Jeanne Dumont, 'Vie et mort de l'ancienne école' *l'architecture d'aujourd'hui*, 310 (1997), 91; P. Panerai, 'Le Corbusier and Modern Architecture from Ecole-Des-Beaux-Arts Point of View', *L'architecture d'aujourd'hui*, 249 (1987), 50–52 (p. 51).
[3] David Van Zanten, 'Architectural Composition at the Ecole Des Beaux-Arts from Charles Percier to Charles Garnier' in *The Architecture of the Ecole Des Beaux-Arts*, ed. Arthur Drexler (London: Secker & Warburg, 1984), p. 112.
[4] Carlhian, 'The Ecole Des Beaux-Arts: Modes and Manners', p. 14.
[5] Joseph Rykwert, 'The Ecole Des Beaux-Arts and the Classical Tradition', in Robin Middleton, ed., *The Beaux-Arts and Nineteenth-Century French Architecture* (London: Thames and Hudson, 1982), p. 10.

that they were likely to design most buildings in urban sites, whose shapes were rarely square, and predominantly surrounded by existing structures.[1]

However, a general consideration of climate is evident. Design teaching at the Ecole agreed that pitched roofs were preferable to flat ones in France because frequent rain needed to be drained properly. Apart from the available roofing materials at the time, such as slates or tiles, that dictated the steepness, the dimensions of the spaces that needed to be covered affected the proportions of the roofs. Therefore, breaking up of large and complex plans into smaller units roofed individually helped students to ensure satisfactory proportions.

In addition, the fact that the Beaux-Arts's design principles relied on historical doctrines automatically made the course on history important, always attended by a large number of students.[2] The dependence on history did not, however, prevent debates among students and teachers in the history classes as to whether historical works had been designed properly, or about what had been the rationales behind one design versus another. Critical and rational thinking were, therefore, at work within an agreed ideology of the universal aesthetics of classicism.

Before moving to the British Isles, it is worth quoting Jean Paul Carlhian about the Ecole's conception of its role as an education institution:

> It [the Ecole] never attempted to nor ever had the pretention of teaching architecture: it was not a professional school by any stretch of imagination. […] The Ecole, in the mold of many a French institution of higher learning, concerned itself with the shaping and training of minds: it aspired to teach future architects how to think, architecturally; and by introducing them to a carefully devised multiplicity of exercises exposed them, time and again, to the exercise of judgment. The Ecole sought to *prepare* its students to *become* architects: it knew, only too well, that the only valid environment in which such a proficiency could be achieved was that of an architectural office, and that the only place for them to learn how to put a building together was the construction site.[3]

Despite having rationality in its own right, the Ecole's reputation diminished while that of the Modern Movement flourished. Its prejudice about its universal

[1] Carlhian, 'The Ecole Des Beaux-Arts: Modes and Manners', p. 14.
[2] Ibid.
[3] Ibid.

aesthetic failed to be reconciled with the new urbanism and the social implications addressed by the Modern Movement.[1] Its conservative nature prevented the first call for a possible reform before 1940 — all three Siamese students had left by that time. Now the ideas and principles of 'architecture' in English Schools as learnt by the other three Siamese students will be examined.

Liverpool School of Architecture and Siamese students, 1915–29

At the transition between the nineteenth and twentieth century, there was a great change in architectural training in England. The pupilage system that had long been the means of training was gradually replaced by institutional courses influenced by the École des Beaux-Arts curriculum in France and the USA.

In the history of architecture in the western world, the period involving the start of this training system in England and its architectural theory — mainly associated with Edwardian Architecture — has been researched far less than the following period of Modernism, thanks to the latter's subsequent domination of the world's mainstream architectural practice and education.[2] The Beaux-Arts architecture of this period was retrospectively seen as an obstruction to the continuous development of Modernist ideas. Taking this argument, the World's Columbian Exposition in 1893 marked the ending of the Chicago School and the sharp rise in popularity toward classical architecture for public buildings over the next few decades.[3]

At the transition from the nineteenth to the twentieth century memorialist ideas of architectural design, such as the Gothic Revival previously promoted by Ruskin and his allies, also gradually gave way to rational classical principles, especially for the design of public buildings, which were introduced along with the new training system. The emphasis on the uniformity of classicism was intended to

[1] Egbert and Van Zanten, *The Beaux-Arts Tradition in French Architecture: Illustrated by the Grands Prix de Rome* (Princeton; Guildford: Princeton University Press, 1980), p. 77.
[2] See Richard A. Fellows, *Edwardian Civic Buildings and Their Details* (London: Architectural Press, 1999); Alan Johnson, *Understanding the Edwardian and Inter-War House: A Historical, Architectural and Practical Guide* (Ramsbury: Crowood, 2006); Alastair Service, *Edwardian Architecture and Its Origins* (London: Architectural Press, 1975); ———, *Edwardian Architecture: A Handbook to Building Design in Britain, 1890–1914* (London: Thames and Hudson, 1977).
[3] Sigfried Giedion, *Space, Time and Architecture: The Growth of a New Tradition* (Cambridge: Harvard University Press, 2002), pp. 393–95.

allow students to concentrate more on planning and composition of mass rather than the detail and style previously prioritised by English architectural tradition.[1]

The idea of placing architectural education within universities in England started with Liverpool in 1901, when the first full-time course in architecture was provided. The purpose was to place the architectural career at the top of the construction team, completely differentiated from craftsmen and builders. Therefore the students needed to be equipped with knowledge of classical architecture, history, drawing, and mathematics.[2]

The spearhead of the new system was Charles Herbert Reilly, Head of Liverpool School of Architecture from 1904 to 1933, and the first chairman of the Royal Institute of British Architects Board of Architectural Education. He and his associate, Reginald Blomfield, a leading British architect who was subsequently made chairman in 1910, had a great influence on the training system until the third decade of the century. They shared a fondness for classicism, seeing it as a 'modern' principle.[3] Reilly's ideal, beyond classicism was the achievement of a styleless architecture, but he never achieved this before he encountered Modernism in his later career.

The architecture school at Liverpool played a leading role in the foundation of the new system. Not unlike the Ecole des Beaux-Arts in Paris, it enrolled students not only from all over the country but also from across the globe. However, as it was far below the Ecole des Beaux-Arts in prestige, the overseas students at Liverpool mostly came from British colonies and protectorates, such as Egypt, Iraq, and India, whereas students from other European countries or the USA tended to go to Paris. Among them, scholarship students from Siam, a non-colonial country, yet politically, culturally, and economically tied to Britain more than France, went to Liverpool not Paris. The fact that the course at Liverpool was limited to a certain period of time, unlike those of the Ecole des Beaux-Arts that had no limit, surely affected the Siamese government's decision, as it wanted to have Siamese graduates in the workforce as soon as possible.

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[1] Alan Powers, 'Edwardian Architectural Education: A Studies of Three Schools of Architecture', *AA files*, 5 (1984), 48–59 (53).
[2] Crinson and Lubbock, *Architecture--Art or Profession?: Three Hundred Years of Architectural Education in Britain*, p. 75.
[3] Powers, 'Edwardian Architectural Education: A Studies of Three Schools of Architecture', p. 55.

Sarot Sukkhayang and Nat Phothiprasat were trained at the University of Liverpool between 1915 and 1929. In the records of the University of Liverpool, Sarot Sukkhayang was recorded as Nai Saroj Subhung. Nai is a Thai salutation for a male of commoner background, Saroj is another way to transcribe his first name in the Roman alphabet. Subhung was his previous surname.[1] From now on, he will be called Sukkhayang. Nat Phothiprasat, whose name was spelt Naht Bodhiprasad in the school's records, will be called Phothiprasat.

Sukkhayang and Phothiprasat, both trained during the time that C. H. Reilly was the Head of the school, experienced a similar ethos in studio design oriented towards Beaux-Arts's classicism. But the structure of the curriculum changed, and also architectural ideas surrounding the school due to the emergence of Modernism after World War I. So Sukkhayang, who spent his time during the war, was still engaged more with classical principles in his studio works, whereas Phothiprasat, present from 1924 to 1929, witnessed a less rigid application of classical principles, despite its domination in theoretical subjects. It was not until 1932, three years after Phothiprasat's graduation, that Le Corbusier's *Vers une architecture*, first translated into English as *Toward a New Architecture* in 1927, was included in the school's reading list, for it was still predominantly classical oriented.[2]

Sarot Sukkhayang received a scholarship from the Ministry of Public Instruction to pursue a degree to be a teacher of architecture (note that the word architecture was written in English in his record by the English superintendent who looked after him).[3] He studied at Oundle School in 1913 and enrolled at the University of Liverpool in 1914, almost two years before M. C. Itthithepsan graduated from the Beaux-Arts and went back to work in Siam.

Despite adopting classicism from the Ecole des Beaux-Arts, the course at Liverpool was differently structured and more oriented towards professional training. Here, differently from the Ecole, students were trained to be ready to become practising architects — a profession — right after graduation. The course attended

[1] Phraya Sarasatsirirak, '*Prawat Phra Sarot Rattananimman* (The Profile of Phra Sarotrattananimman)' in *Anusorn Ngan Phra Ratchathan Ploengsop Phra Sarot Rattananimman (The Memorial Book for the Funeral of Phra Sarot Rattananimman)* (Bangkok: Chaisiri, 1950), p. 9.
[2] Lionel Budden, *The Book of the Liverpool School of Architecture* (Liverpool: University Press of Liverpool and Hodder and Stoughton, 1932), p. 25.
[3] A. Cecil Carter, *Report of the Superintendent of Siamese Government Students for the Period of April 1913 to Mar 1914 (BE 2456)*, (Edinburgh: The Darien Press, 1915), p. 28.

by Sukkhayang was divided into two parts.[1] Students studied professional subjects for the first two years at the school. They then spent time in architectural offices over the following two years and attended day or evening classes at the school. A further year might then be spent in the School of Architectural Design.

Prof. Reilly recalled that Sukkhayang asked him for a break after the first year when he turned twenty year-old to return to Siam for Buddhist ordination, which was strictly important for his age.[2] His father's death in October 1915 was perhaps another reason for his return and the ordination. On the completion of the first year in October 1916, the school reported Sukkhayang's performance as:

> Entirely satisfactory, and he has worked hard. […] He follows his lectures with diligence. [And this] is evident from his studio work. On the whole he shows greater aptitude in conventional than in aesthetic problems.[3]

His internship during the first vacation was conducted partly in Liverpool and then for two months in London under a 'well-known London architect' who praised Sukkhayang highly and reported that the student had just finished plan, elevation, and section of the model of St. Paul's Cathedral.[4]

After the completion of his second year in 1917, World War I prevented Sukkhayang obtaining an internship at an architectural office, as planned in the curriculum, because architectural projects were on hold.[5] However, he managed to gain one under his professor, first in Liverpool and then in Edinburgh, where the local authority provided him a chance to design a plan of a public building during the vacation. He then remained at the school for the third year, during which he received the Lever University Prize for Architectural design in June 1918, a First Class Certificate in Architecture, and the Holt Travelling Scholarship in July the same year.

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[1] A. Cecil Carter, *Report of the Superintendent of Siamese Government Students for the Period of April 1913 to Mar 1914 (BE 2456)*, p. 28.
[2] Charles Herbert Reilly, *Scaffolding in the Sky: A Semi-Architectural Autobiography* (London: G. Routledge & Sons, 1938), p. 75.
[3] 'Nai Saroj Subhung (Ed. Dept.)', London: Office of Educational Affairs, (Siamese Consulate London, 1921). This report has been kept in the Office of Educational Affairs, The Royal Thai Embassy London
[4] Ibid.
[5] Ibid.

The Lever University Prize had been endowed by the 1st Viscount of Leverhulme in 1909 for the lay-out and architectural development of prescribed areas in Liverpool and further afield.[1] A record showed that Sukkhayang received the prize for a design of a railway station.[2] There was no coverage of the competition in 1918 in the *Town Planning Review*, published by the Department of Civic Design at the University of Liverpool, as the period of the competition fell in the gap between the 7th volume in March 1918 and the 8th in April 1919. However, the nature of the competition can be seen in the coverage of the competition in previous years, as they were published in the journal in 1912, 1913, and 1916. Each year the competition was divided into two parts — planning and architecture. The first was done by the students of the Civic Design Department while the latter, including building design and detail drawing, was done by students of the architecture school. The designs reveal Beaux-Arts's monumentality of the buildings as related to the site plans.

The Holt Travelling Scholarship in Architecture was an annual award on the review of studio work in the third year exam.[3] Given this 50-pound scholarship, Sukkhayang was required to travel for the purpose of study and submit evidence either by measured drawing or illustrated report. Sukkhayang submitted a set of measured-drawings of Robert Adam's Old College, University of Edinburgh. He accomplished the travel only in Britain, possibly due to the war. A record showed a student who later received the same prize travelled as far as Berlin and Paris.[4]

[1] 'Chronicles of Passing Events', *Town Planning Review*, 1 (1912), 80; 'Chronicles of Passing Events' *Town Planning Review*, 1 (1913), 66; 'Chronicles of Passing Events' *Town Planning Review* , 1 (1916), 10–11.
[2] 'Nai Saroj Subhung (Ed. Dept.)'.
[3] Budden, *The Book of the Liverpool School of Architecture*, p. 49.
[4] Angela Carr, 'Eric Ross Arthur', http://www.thecanadianencyclopedia.com/articles/eric-ross-arthur [accessed 21 July 2013].

Figure 3.1.6: Lever Prizes in Civic Design and Architecture 1916.[1] The 1st prize by civic design student, Reginald Poole, shows only site planning (left). The 1st prize by architecture student, S. C. Foulkes, shows building plan followed the site planning laid out by the fellow student (right).

[1] 'Chronicles of Passing Events', *Town Planning Review* , 1 (1916), 10–11.

Figure 3.1.7: Measured drawings of the University of Edinburgh (dated 1919) by Sarot Sukkhayang (Saroj Subhung).[1] The drawings were submitted as evidence of his travel for the purpose of study as the holder of Holt Travelling Scholarship.

[1] *The Liverpool Architectural Sketch Book; Being the Annual of the School of Architecture*, ed. Charles Herbert Reilly (London: Architectural Review, 1920), pp. 81, 87, 89, 91.

Figure 3.1.8: A work of Sarot Sukkhayang (Saroj Subhung) at Liverpool School of Architecture, 1919.[1]

Figure 3.1.9: A studio work of a University Assembly Hall by W. Dougill (1919), a student contemporary of Sukkhayang, which also shows a classical approach.[1]

[1] *The Liverpool Architectural Sketch Book; Being the Annual of the School of Architecture*, p. 61.

In his last two years at Liverpool, Sukkhayang received training at an architectural office in the city, and spent one day and three evenings a week at the school. He also attended the lecture courses and executed studio work at the Department of Civic Design during the summer term of his fourth year. As a result, he also received a Diploma in Civic Design. The department, headed by Patrick Abercrombie from 1914, was the first of its kind in Britain. Abercrombie commented on Sukkhayang's work as follows:

> Having completed a very satisfactory course of study. The chief subject in design consisted of a scheme for a Congress City for Great Britain for which he prepared five large drawings. I was extremely satisfied with the general conception and the manner in which the scheme was worked out, and the excellent draughtsmanship.[2]

Sukkhayang finally finished his study with a First Class Diploma in Architecture and Town Planning in 1920, and registered as a member of the association of Town Planning (A.M.I.T.P.). Before returning to Siam in August, he spent one month in Norway, the only opportunity for him to travel on the continent, as for most of his time in the country, Britain had been at war. It was, therefore, likely that he experienced during the one-month travel Norwegian National Romanticist and Neo-classical works that dominated the country's architectural scene at the time.[3]

Nat Phothiprasat

Enrolling at Liverpool four years after Sukkhayang's graduation, Nat Phothiprasat experienced circumstances both similar and different from those experienced by Sukkhayang. But for one thing, the professionalism that differentiated the Liverpudlian School from the Parisian Ecole was strengthened during this period. Before arriving at England, Phothiprasat had started his career as teacher at Suan Kulab School in Bangkok. He received a scholarship from the Ministry of Public Instruction and went on with his education at Portsmouth School of Art from 1922 to 1924. After passing the matriculation exam, he enrolled at the

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[1] Ibid., pp. 27, 29.
[2] 'Nai Saroj Subhung (Ed. Dept.)'.
[3] Marian C. Donnelly, *Architecture in the Scandinavian Countries* (Cambridge; London: MIT Press, 1992), p. 300.

University of Liverpool in October 1924. He was finally awarded Bachelor Degree in Architecture with Honours in 1929. During his time at Liverpool, Phothiprasat had a Siamese classmate, Charoon Tulyananda, another scholarship student, who later became his assistant when he served as the Head of Architecture Division at the Department of Municipal Works.[1]

During Phothiprasat's time at Liverpool, C. H. Reilly wrote a report to the Siamese government's Office of Educational Affairs in London praising the Siamese student's excellent achievement, especially for his thesis in which he achieved the highest mark the school had ever given.[2] This achievement would have led to the award of the Rome Scholarship had he been a British subject.[3] His academic record showed the subjects completed in the first three years as follows:

1st Year (October 1924–June 1925)

- Architectural History
- Architectural Forms
- Architectural Building Construction
- Mechanics and Physics
- Sciagraphy
- Sketches and Notebooks
- Studio Works

In July 1925, by completing his first year examination, some of his works were selected to be exhibited at the annual exhibition of the school at Walker Art Gallery.[4] Then he went on to the 2nd and 3rd years, when following subjects were studied.

2nd Year (finishing June 1926)

- Studio Work in Elements of Architectural Design and Architectural Construction
- Architectural Construction

[1] '*Khrong Kan Phanaek Sathapattayakam* (Architecture Division Project)', (Bangkok: Chulalongkorn University, 1936), p. 19.
[2] A. Cecil Carter and Jones Stevenson, *Report of the Superintendent of Siamese Government Students for the Period of April 1928 to Mar 1929 (BE 2461)*, (Edinburgh: The Darien Press, 1930), p. 216.
[3] Ibid.
[4] *The Builder*, 129 (1925), pp. 113, 51.

- History of Architecture
- Sketch Design
- Symbolism in Classic Architecture
- Theory of Architectural Planning
- Perspective
- Life Drawing (optional) — attended

3rd Year (finishing June 1927)

- Studio Work in Architectural Design and Architectural Construction
- Mechanics of Architectural Construction and Strength of Materials
- Sanitation, Hygiene, and Illumination
- Theory of Architectural Design: Composition
- Surveying
- Measured Works
- Furniture and Decorations

During the summer vacation of the 2nd year, he also did measured drawings of Cambridge Library. The annual exhibition of the school in the 3rd year was opened by Gordon Selfridge, the department store tycoon. Selfridge's statement at the opening ceremony reflected a general idea of architecture at the time when Phothiprasat finished his third year of training:

> Architecture, to my mind, was the most beautiful of all arts, because it had such great utilitarian value as well as beauty. That a building must be permanent, and must be looked upon by so many people, implied an obligation upon the owner, and through him, as his adviser, the architect. […] A building could be made beautiful at only a comparatively small additional cost.[1]

The statement reassured the idea of architecture as durable art with function, and the role of ornaments in relation to architectural beauty. During summer

[1] 'University of Liverpool', *The Builder*, 138 (1927), 96

vacation that year, Phothiprasat also went to study architecture in Italy. It was an activity encouraged by the Liverpool school in this particular vacation. Entering the fourth year, Phothiprasat chose the course leading to Bachelor Degree with Honours, distinguished from ordinary Bachelor Degree by requiring students to study the extra subjects of Architectural Design or Architectural Construction.[1] Either subject had to be completed in addition to the compulsory ones, which were Studio Work, Sketch Design, Note Books, and Architectural Construction (ordinary).[2]

Phothiprasat chose Architectural Construction: Specific Problems and Reinforced Concrete, focusing on the more practical side. The former comprised problems in vaulting and dome constructions, Bent Lattice Girders, Bent Ribs stiffened at Joints with and without Tie, Braced Arch Roof Trusses, Arch Rib Truss, Theory of Modern Arch, Theory of Domes compared with Arches, and Curve of Thrust in Dome. The latter, which required students to satisfy the Board of Studies regarding their competence in mathematics before they went up to their fourth year, comprised a History of Re-inforced Concrete Construction, Selection of Material, Shuttering, Formulae, Short Columns, Long Columns, Centric and Eccentric Loads, Single and Double Re-inforced beam, Tee Beams, Foundations — Walls — Piles — Retaining Walls — Arches — Culverts.[3]

Also in the fourth year, the curriculum required students to take part in practical work. Thanks to Reilly's connection with American offices, Phothiprasat, among others, did internships in the United States for six months at various architectural offices. He joined the office of Charles Howard Crane in Detroit from April to October 1928. This prominent office specialised in theatre design, and the compulsory internship gave him a chance to participate in the design and construction of Fox Theatre in Detroit (Figure 3.1.10, Figure 3.1.11). The 5045-seat theatre was described as 'Siamese Byzantine Style', yet was seemingly a conglomeration of Moorish, Far Eastern, Egyptian, Babylonian, and Indian themes of various periods, completed in 1928.[4] Crane later moved to London in 1930 after the Great Depression that had made cinemas commissions dry up.[5]

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[1] 'Schools and Institutes', *The Builder*, 135 (1928), 547.
[2] Architecture University of Liverpool . School of, *The University of Liverpool. Prospectus of the Liverpool School of Architecture, Together with an Appendix Descriptive of the Department of Civic Design. Session 1934-35* (Liverpool: University Press, 1934), p. 16.
[3] Ibid., p. 22.
[4] 'The Fox Theatre Detroit, Michigan', *American Movie Classics Magazine*, 13 (1997), p. 6; Mary Strauss and David Nayler, *The Fabulous Fox Saint Louis* (Saint Loius: Fox Theatre/Fox Associates, 1985), p. 8.
[5] He retained his office in Detroit and continued his practice in London, where his most important project in England, the Earl's Court Exhibition Hall, was completed in 1937. See 'C. Howard Crane's Obituary', *Architectural Record*, 2 (1952), 392.

Figure 3.1.10: Fox Theatre Detroit (1928) by Charles Howard Crane[1]

Figure 3.1.11: A plan and a section of Fox Theatre Detroit showing a combination of a high-rise office block at the street front and a gigantic theatre under a steel trussed roof housing 5045 seats.[2]

[1] Theatre Historical Society of America
[2] Randolph Sexton and B. F. Betts, eds, *American Theatres of Today: Illustrated with Plans Sections and Photographs of Exterior and Interior Details of Modern Motion Picture and Legimate Theatres Throughout the United States* (Vestal: Vestal Press,1977) p. 54.

After returning to Liverpool in October 1928, Phothiprasat devoted the fifth year to the thesis — a cinema.[1] In June 1929, he was finally awarded a Bachelor Degree in Architecture with the 1st Class Honours in Architectural Construction. The school's annual exhibition was held at Walker Art Gallery in Liverpool and opened by Sir Banister Fletcher, President of the RIBA.[2] While most students' designs were conventional, a review of the exhibition mentioned 'a little exciting' matter that some modernist work was seen in the design of the 5th year students, who conceived the works in 'the most approved Continental manner'.[3] This implied an interest in Modernism, something from the 'continent' in an English school's studio. In the same volume of the magazine the article, *In defense of tradition*, criticised modernist work exploiting the advantages of reinforced concrete that 'appears to have gained some hold in this country'.[4] It castigated the work as 'modelled without question upon the French School' and questioned its appropriateness as a substitute for the art of masonry work. Accordingly, it has been shown that scepticism towards Modernism was evident both in the French and British architecture schools.

One year after Phothiprasat left the school, the atmosphere of freedom in students' designs became more obvious in the annual exhibition. Modernist work occupied more area than before. Amidst the majority of conventional work appeared furniture made of steel tubes, and chromium steel fittings for interior space, representing a 'mechanical age of design where a sense of efficiency is the only criterion' and 'the solution of any problem should proceed along practical lines unfettered from the first by style or periods'.[5]

[1] Pussadi Tiptus, *Sathapanik Siam: Nati Botbat puenthan (Siamese Architects: Duties, Roles, and Foundation)* (Bangkok: The Association of Siamese Architects, 1997), p. 120.
[2] Harold A. Dod, 'Liverpool School of Architectue', *The Builder*, 139 (1930), 221.
[3] Ibid.
[4] Progress, 'In Defense of Tradition', *The Builder*, 137 (1929), 137.
[5] Harold A. Dod, 'Liverpool School of Architectue'.

Figure 3.1.12: Illustrations of Hagia Sophia and Le Corbusier's Weissenhof double house (1927) in an article criticising Modernism, published in the same issue of *The Builder* that reported the annual exhibition of Liverpool School of Architecture that showed some students' work with a Modernist grain.[1]

Figure 7: Nat Phothiprasat (the second standing from right), Charoon Tulyananda (the first standing from right), and Prof. C. H. Reilly (sitting in the middle) with the staff and 5th year students in the class of 1928–29.[2]

[1] Progress, 'In Defense of Tradition'.
[2] Sharples et al., *Charles Reilly & the Liverpool School of Architecture, 1904–1933: Catalogue of an Exhibition at the Walker Art Gallery, Liverpool, 25 October 1996-2 February 1997*, p. 45.

Figure 3.1.13: 4th year and 5th year design work that was exhibited alongside Phothiprasat's work at the annual exhibition of Liverpool School of Architecture, 1929, showing plain treatments of facades stylistically influenced by Modernism.[1]

[1] Dod, 'Liverpool School of Archtecture: Annual Exhibiton', *The Builder*, 137 (1929), 110.

The situation in the school correlated with what happened outside it where a rather confused situation regarding 'style' developed concerning how British architects, who were claimed to possess a 'national instinct for tradition' should make sense of 'Modernism'.[1]

After graduation, Phothiprasat was automatically exempted from the RIBA's Finals. He then took exams and qualified for other two professional associations — Engineering (A.I. Struct. E.) and Sanitation (M.R. San. I.). After that, he took a position as trainee at the architectural office of Frank T. Verity in London from 13 October 1929 to 21 March 1930.[2] The office was a specialist in theatre and cinema design. Throughout the golden age of cinema in the 1920s, it designed a numerous number of cinemas in the UK.[3] The firm was awarded the RIBA's bronze medal for Shepherd's Bush Pavilion Cinema in 1930. Professor Reilly reported that Phothiprasat benefitted from construction site visits, while Verity praised him highly on his assistance in 'both theatre work and domestic planning and surveys'.[4]

After the internship, Phothiprasat travelled in Europe for two months before going back to Siam. He had already had a chance to travel via Germany, Belgium, and France for the purpose of architectural study on the return trip from Copenhagen, where he was one of the Siamese representatives in the 2nd World Scout Jamboree in summer 1924. Unlike Sukkhayang, whose education in wartime had prevented travel on the continent, Phothiprasat traveled extensively in Europe during his eight-year period in the United Kingdom. The conventional principles of Architecture learnt in the classes was wrestling with his experience of Modernism in publications, outside the school, and, to a lesser extent, first-hand experience on the continent.

[1] 'Modernism', *The Builder*, 139 (1930), 639.
[2] A. Cecil Carter and Jones Stevenson, *Report of the Superintendent of Siamese Government Students for the Period of April 1929 to Mar 1930 (BE 2457)*, (Edinburgh: The Darien Press, 1931), p. 192.
[3] 'Obituary: The Late Frank T. Verity, F.R.I.B.A', *The Builder*, 153 (1937), p. 312.
[4] A. Cecil Carter and Jones Stevenson, *Report of the Superintendent of Siamese Government Students for the Period of April 1929 to Mar 1930 (BE 2457)*, p. 192.

Figure 3.1.14: Fifth year thesis design of Municipal Offices and Entrance to Mersey Tunnel, Liverpool, by N. S. Lunn (1930).[1] The project clearly implied Modernist influence.

Figure 3.1.15: Fifth year thesis design by John Hughes (1930), a student contemporary of Phothiprasat, shows a cross section through a stand with detailed reinforced concrete specification.[2]

[1] Budden, *The Book of the Liverpool School of Architecture*, pp. Plate LIII, LVI.
[2] Ibid., p. Plate XXX.

It has been shown that, stylistically and aesthetically, the overall ethos at Liverpool seemed to be oriented towards the universality of the Beaux Arts. But the concerns of some British critics who questioned the appropriateness of transplanting Modernism from continental Europe to British soil raises the question of how the British school trained its students to deal with local contexts, especially non-western contexts with different architectural cultures. Regarding concern for such local cultures, Oliver pointed out that local knowledge of architecture at the time had to be abandoned by the rites of (western) architectural culture.[1]

However, Crinson has argued that Liverpool actually provided 'a double end' in architectural approach. He has pointed out that the school provided a universal approach that was depicted through classical principles from the USA and France, while local concern was evident in the distinction of English sophistication in details and construction material.[2] Furthermore, the concern for locality is also evident in the field trips to study countryside houses and the fact that a few overseas students proposed projects located in their home countries, such as Egypt and Iraq, for their theses.[3]

C. H. Reilly stated in his book, *The Theory and Practice of Architecture*, that architecture belonged to culture, age, geography, climate, and so gained its value. He claimed that to understand its value, one must understand its contexts and the questions that it answered.[4] Following Reilly's ideas, Budden claimed that many graduates, both English and overseas, fused the elements of East and West by combining outline, general forms, elements, and materials of the East with functions of the West in their projects in Iraq, Egypt, India, Zanzibar, Jerusalem, Palestine, Malta, and Northern Rhodesia.[5] At the Department of Civic Design, a growing number of research works on town planning in India was evident as early as 1916.[6] In addition, measured drawing, an important subject initiated by Reilly, which

[1] Paul Oliver, 'Perfected for Needs: Vernacular Architecture in Education', *Habitat* International, 5–6 (1983), 377–83 (p. 380).
[2] Crinson, *Modern Architecture and the End of Empire*, p. 41.
[3] Ibid.
[4] Charles Herbert Reilly, *The Theory and Practice of Architecture* (London: Victor Gollancz Ltd, 1932), 13–15.
[5] The graduates who used this approach were James Mollison Wilson and Harold Mason (Baghdad), Maurice Lyon (Egypt), A. L. Mortimer (India), P. C. Harris (Zanzibar), Clifford Holliday (Jerusalem), R. C. P. Hubbard (Palestine, Malta), R. W. H. Vallis (India), R. D. Jones (Northern Rhodesia). See Budden, *The Book of the Liverpool School of Architecture*.
[6] 'City of Baroda Report', *The Town Planning Review*, 1 (1916), 64.

allowed the students to dissect and reconstruct the western masterpieces, in which he believed that the subtlety of the masters' minds would gradually unfold to those of the students, became the starting point for an overseas student like Mohamed Makiya from Iraq to conduct extensive measured works of indigenous and traditional architecture in his home country.[1] But above all, local cultures could not challenge the perceived superiority of the Beaux-Arts rationality. They could only express themselves in 'secondary' aspects in the modern buildings overseas.

Both similar and different aspects of the training at the Ecole des Beaux-Arts and at Liverpool have been discussed. The fact that the last Siamese student to be described, Mom Chao Vodhyakara Varavarn, was trained at Cambridge under a different curriculum, needs to be examined because this adds more complexity to the architectural culture in Siam from the 1930s to 1950s.

Architectural studies at Cambridge and a Siamese Prince, 1924–28

As more of the biography of Mom Chao Vodhyakara Varavarn before he enrolled at Cambridge is available than with previous architects discussed, it is worth including here to clarify the different experiences of Siamese students at home and abroad. The contrast between the two cultures they experienced definitely affected how they thought about their home country and the so-called civilised West, as well as how they understood the new concept — architecture. And this would affect their ideas and works after graduation.

M. C. Vodhyakara's early years, like those of other Siamese students discussed, were spent amid the multifaceted reforms of Siam, where apparently modernised urban and royal life coexisted alongside many traditional practices and rituals. In particular, the life of M. C.Vodhyakara, who, like M. C. Itthithepsan and M. C. Samaichaloem, was a descendant of a royal family, was no exception as regards this combination of modernity and tradition.

Born in a traditionally polygamist royal family in 1900, M. C. Vodhyakara was the 20th child of Prince Varavarnnakara, who was the 56th child of King Mongkut, and Mom Boon, his father's forth wife. M. C. Vodhyakara grew up in his father's Praeng Nara Palace. Among his siblings and half-siblings were M. C. Wan

[1] Crinson, *Modern Architecture and the End of Empire*, p. 31.

Waithayakon, M. C. Wannawimon, and M. C. Wannaphimon, who were later King Vajiravudh's privy councilor, fiancée, and queen respectively.

In his early years, M. C. Vodhyakara was educated in his father's palace. He grew up in a context of progressive ideas, many connected with cultural activities. His father was a cultured and progressive figure, for in addition to his duty as a Deputy Minister of Finance from 1889, he was also famous for his writings and musicals. He translated important books such as the Rubaiyat of Omar Khayyam and Simon de la Loubère's *Du Royaume de Siam.* He also authored four hundred Thai musical plays, a genre of his own creation combining Thai, Malay, and western opera, including the famous Saow Kruea Fah inspired by Puccini's Madam Butterfly. In his palace, he built Siam's first musical theatre called Pridalai.[1]

In 1911, M. C. Vodhyakara entered the Royal Pages' School established by King Vajiravudh to provide modern education for his royal page trainees and other students. He first studied there in a temporary wooden building with a thatched roof, for the Thai-style permanent auditorium and four colleges designed by Phra Samit Lekha and the English architect Edward Healey were not finished until 1916.

M. C. Vodhyakara finished his studies in 1917 and was commissioned into the royal service of the King's secretariat. He became involved in the illustration of royal publications — Dusit Smith Journal and The Recorder. The King, impressed by his satirical cartoon depicting Emperor Wilhelm Kaiser confronting the World War I catastrophe, summoned him to an audience and rewarded him with a scholarship to pursue further studies in the United Kingdom .

In 1919, M. C. Vodhyakara travelled to England with Siamese diplomats as part of the first group of approximately twenty Siamese students to reach the country following World War I. He arrived in Britain when Sukkhayang was about to graduate from Liverpool, and two years before Phothiprasat arrived.

[1] Wimon Angsunanthawiwat, '*Tam Nan Pridalai* (The Legend of Pridalai)', http://www.gotomanager.com/news/details.aspx?id=80826 [accessed date 4 August 2013].

Figure 3.1.16: M. C. Vodhyakara in his youth.[1] He had a hair style called 'Chuk' (tonsure), the traditional practice for Thai children under twelve years old. 'Chuk' was believed to bring auspiciousness to the child's life, and its ritual removal marked the end of childhood.

Figure 3.1.17: M. C. Vodhyakara's own sketch in 1964.[2] He recalled the hybrid costumes of Siamese nobles in 1911 when he entered the Royal Pages School.

[1] *Works of Mom Chao Vodhyakara Varavarn 1900–1981* (Bangkok: Vodhyakara Varavarn Foundation, 1991), p. 6.
[2] *Sisan Saensai Prawatsat: Phabrang Laiphahat Bantuek Kwamsongcham Lae Kan Winitchai Suan Phra Ong Khong Mom Chao Vodhyakara Varavarn (Colours and Lines of History: Sketches and Personal Analysis of Prof. Mom Chao Vodhyakara Varavarn)* (Bangkok: Matichon, 2004), p. 63.

Figure 3.1.18: M. C. Vodhyakara's own sketches in 1964.[1] He also recalled the spatial practices in what he called the 'transformation period' (1858–1908). He remembered that the Siamese elite, despite their fondness of a modern lifestyle, still prefered the traditional way of sitting on the floor in their relaxing time. The traditional practice of crawling in the court was still maintained but changed in some details.

[1] *Sisan Saensai Prawatsat: Phabrang Laiphahat Bantuek Kwamsongcham Lae Kan Winitchai Suan Phra Ong Khong Mom Chao Vodhyakara Varavarn (Colours and Lines of History: Sketches and Personal Analysis of Prof. Mom Chao Vodhyakara Varavarn), pp.* 65, 80.

Like other Siamese students, on arriving in Britain, M. C. Vodhyakara was placed under the care of a series of tutors who helped him academically and culturally to prepare for his new world. They were responsible for tutoring in English and foundation subjects for the Cambridge University Entrance Examination. M. C. Vodhyakara also spent four hours a week at a Technical Institute taking lessons in drawing and elementary studies in architecture, the profession he wished to take up. Records of his first year in England indicate his difficulty in adapting himself to the unfamiliar language, circumstances, and etiquette. His tutor, Rev. W. Hinton Knowles who took care of M. C. Vodhyakara at St. Matthew's Vicarage in Norwich, reported in March 1920:

> I have paid special attention this term to Mathematics, Geometry, Algebra, and English. In the first three subjects he has made good progress, though his lack of the knowledge of English hinders him in the more advanced work.[1]

In the annual report dated March 1921, he also wrote

> [M. C. Vodhyakara] does not understand English manners. […] He is a quiet reserved fellow, very uncommunicative. [He] is very pleasant on occasions, and can be so when he chooses.[2]

However, in later years before he entered the University, his conduct and skills were appraised more highly by another tutor, even though he was evidently still struggling with the language, English etiquette seemed to have been adopted by him. Reporting on the period from April 1921 to December 1923, Major Sargent of Westgate-on-Sea, wrote

> He has fully conformed to the tradition of Visistha, and one could not possibly wish for a pleasanter pupil. […] of great personal charm […] He maintains the reputation of his country. […] [He] possesses a heart of gold.[3]

[1] 'M. C. Vodhayakara (His Majesty's Student)' London: Office of Educational Affairs', (Siamese Consulate London, 1928). This report has been kept in the Office of Educational Affairs, The Royal Thai Embassy London
[2] Ibid.
[3] Ibid.

Furthermore, his performance in foundation subjects, including Arithmetic, Algebra, Geometry, History, Geography, and Latin, had gradually improved and his skills in drawing and painting were rated as excellent. He entered Gonville and Caius College at the University of Cambridge to commence his architectural studies for the B.A. Degree in January 1924.

M. C. Vodhyakara spent three and a half years studying for his B.A. Degree at Cambridge from 1924 to 1927. Among other Siamese students in Britain, including Phothiprasat at Liverpool, those at Cambridge at that time included Mom Ratchawong Samaksaman Kridakorn at Magdelene College (1923–26) — later a royal secretary to Queen Rambaibanni; Umbhai Jantavimol at Gonville and Caius College — later a Minister of Education; and Sunthon Hongladarom at Trinity College, who later became a Minister of Finance. M. C. Prasomsvasti Sukhsvasti, M. C. Vodhyakara's future colleague at the Royal Railway Department and the Faculty of Architecture, only arrived in England later, entering Gonville and Caius and the Architecture School after M. C. Vodhyakara's graduation.

In the Cambridge architecture school, M. C. Vodhyakara obtained three-year-and-more-general studies in architecture in contrast with the curriculum at Liverpool, where Phothiprasat was trained under a 5-year-course that was more professionalised.

The Cambridge School of Architectural Studies was formally established in 1912, only a decade before M. C. Vodhyakara attended. Its formal establishment was followed by the succession of Edward Schroeder Prior, one of the second generation protagonists of the Arts and Crafts Movement, to the professorship previously held by Charles Waldstein, the school's founder. The three-year curriculum of the school comprised lectures and studio work culminating in final exams each year. It did not aim to give a full professional training, but rather a practical training in architecture in which the history of art was the principal subject, allowing the graduates broader choices of career. There is a comment that the school tended to produce executives, so the subjects about professional practice were not much emphasised.[1] However, an ex-student, Theodore Fyfe, who had been at the school under E. S. Prior and followed him as head, had a different opinion. He

[1] Tiptus, *Sathapanik Siam: Puen Than Bot Bat Pon Ngan Lae Naew Kid (Po So 2475–2537) [Siamese Architects: Foundation, Roles, Works, and Concepts (AD 1932–1990)*, pp. 37–38.

argued that the training equipped students who wanted to practise architecture by pointing out that it aimed at the recognition of art as a practice, not theory. By doing so, it aimed to produce builders, not architects, who would build with knowledge of working conditions and knew how to control workmen, not contractors; yet would be capable also of dealing with building economy and contracts with clients.[1] This argument is supported by the fact that E. S. Prior was the Head of the school from 1912 to 1924. And even though he was succeeded by Fyfe, he seemed never uninvolved.[2] The more important thing here is that only sketches of Prior, not any other teachers, by M. C. Vodhyakara have been found in his archive (Figure 3.1.19). This implies a certain level of impression the professor must have had on him.

The subjects taught at the school were divided into three groups — theoretical, practical, and a mixed one including the compulsory surveying and optional town planning.[3] The theoretical subjects were overwhelmed by art history classes which formed the main principle of the curriculum in the school. They covered a wide chronological range from prehistoric to Victorian. They included detailed information on subjects such as Hieroglyphics and methods of decoration, The School of Polyclitus, Scopa, Praxiteles, and Lysippus, English Gothic domestic architecture — brick and timber construction, etc. It was, therefore, not dominated by classicism as much as the Ecole des Beaux-Arts and Liverpool.

[1] Theodore Fyfe, *RIBA Journal*, 39 (1932), 814. Quoted in Peter Davey, *Arts and Crafts Architecture: The Search for Earthly Paradise* (London: Architectural Press, 1980).
[2] Andrew Saint, 'Recessional Lecture by Professor Andrew Saint on Departing from His Chair at the Cambridge School 18 March 2006' (unpublished).
[3] *Cambridge University School of Architecture Prospectus* (Cambridge: University Press, 1929), p. 3.

Figure 3.1.19: Professor Edward Schroeder Prior, sketched by M. C. Vodhyakara Varavarn in 1964[1]

[1] *Works of Mom Chao Vodhyakara Varavarn 1900–1981*, p. 32.

It should be noted here that a selection of Asian arts was also included, with a comparative method and a relationship to modern European architecture — i.e. colonial architecture — in that region. Among other things studied were Buddhist architecture in India and its influence on Ceylonese, Burmese, Cambodian, and Siamese arts, Islamic art in India and its influence on modern western architecture, the architecture of China and its relation to Japanese art, and also the architecture of European settlements.[1] Accordingly, even though the issue about the implication of western architecture to local contexts was not absent, M. C. Vodhyakara received little knowledge, if any, about the architecture of Siam when studying in Cambridge. Furthermore, he gained a linear and hierarchical idea of how architecture in various parts of the world had developed. More specifically in Asia, the architecture of Siam was considered a deviation from Buddhist architecture in India. This idea was evident in the main contemporary text book; Sir Banister Fletcher's 6th edition, the standard text used in architecture schools at the time.[2]

Apart from the history of art, the other subjects in the theoretical group were theory of art, building materials, mechanics, and essay writing. For the subject of theory of art in relation to architecture, the content dealt with classic and contemporary theories of art and architecture. The third year exam papers asked students to discuss Vitruvius, Sir Joshua Reynolds, and Benedetto Croce's principles on architecture, art, and aesthetics respectively.[3] In addition, they included discussion about the similarity of aesthetic pleasure in architecture, sculpture, and painting, as well as the employment of the sculpture on the exterior of buildings.[4] They also asked students to criticise the statement that a building plan must control the elevation, by giving references to specific buildings.[5] More interestingly, one of the questions in the papers asked the students to consider to what extent the natural surroundings should influence an architect in designing a building.

[1] A. Cecil Carter and Jones Stevenson, *Report of the Superintendent of Siamese Government Students for Period April 1926 to March 1927 (BE 2470)*, (Edinburgh: The Darien Press, 1928), pp. 243–44.
[2] Sir Banister Fletcher, *A History of Architecture on the Comparative Method*, 6th edn, (London: B. T. Batsford, 1921), p. 799.
[3] *Cambridge University Examination Papers: Easter Term 1929* (London: Cambridge University Press, 1971), p. 3.
[4] Ibid.
[5] Ibid.

Turning to the subject of Building Materials, not only methods of using different materials, such as stone, brick, timber, and concrete, both in English and modern ways were included, but also their production, and their geographical and geological distribution.[1] This fitted with Prior's idea of exploiting local materials in architectural design.

Last but not least for this group, the subject of mechanics involved basic understanding related to building design such as geometry and the calculation of structural forces.[2] Whereas the subject of essay writing asked the students to discuss issues related to the theories of art and architecture, such as the function of ornament in architecture; architecture as a manifestation of the most specific and powerful art of spatial composition, not merely a superior form of carpentry; and the distinction between fine and useful art.[3]

Second, the practical subjects consisted of drawing and design. Conducted in the former was freehand and constructional drawing practice, while the latter involved design studios with periodical crits and grading by juries. The marks constituted a part of each annual examination result. The studio works of each student were supervised individually by a tutor; at the time of M. C. Vodhyakara it was T. H. Lyon, a local architect described as visiting director of design.[4] Saint suggests that Lyon's teaching must have been of neo-Georgian or neo-Classical taste.[5] The presence of Modernism at Cambridge was more marginal and later than any other school described before. The alteration of don Mansfield Forbes' Finella by Raymond McGrath with a slight touch of what can be seen nowadays as Art Deco was not done until 1928, whereas other modern houses by George Checkley, a 'design demonstrator' of the school, were not completed until 1932.[6] Even though no evidence or publication of the studio works has been found so far, some issues included in this practical subject were factors of use and convenience, access,

[1] A. Cecil Carter and Jones Stevenson, *Report of the Superintendent of Siamese Government Students for Period April 1925 to March 1926 (BE 2469)*, (Edinburgh: The Darien Press, 1927), p. 327.
[2] *Cambridge University Examination Papers: Easter Term 1929*, p. 5.
[3] Ibid.
[4] *Cambridge University School of Architecture Prospectus*, p. 4.
[5] Saint, 'Recessional Lecture by Professor Andrew Saint on Departing from His Chair at the Cambridge School 18 March 2006' (unpublished), p. 19.
[6] See how minimum pre-war Modernism had an impact on the school in *Compendium: The Work of the University of Cambridge Department of Architecture*, ed. by University of Cambridge Department of Architecture (Cambridge: Cambridge University Press, 2006).

communication, layout, principles of planning, needs and conditions of material, constructive requirements, craft discipline, and places for ornament and decoration.[1] Moreover, an example from exam papers on this subject shows that students were asked to design projects, such as a country house and a chapel, located in non-specific sites.[2] Given with the requirements were usually approximate dimensions of the rooms and of the imagined sites and roads. Apart from that, the ability to design and draw parts of buildings was usually among subjects in the first-year exam. They ranged from a sundial to sections of window and an Ionic column.

Third, the subjects mixed with theoretical and practical aspects were surveying and town planning. The surveying included practices of measurement and plotting of buildings.[3]

During his four years in Cambridge, despite initial difficulties due to his lack of language skills, M. C. Vodhyakara Varavarn was equipped with sets of architectural principles and knowledge consisting mainly but not confined only to those of classicism. In general, it seems that he considered the entire time as a valuable experience which he later described in various poems as his 'glorious day'.[4]

After graduation in June 1927, M. C. Vodhyakara had a brief tour in Italy following Theodore Fyfe's advice, and then spent four months training at the H. M. Office of Works in London, where he was attached to the office's chief architect, Sir Richard Allison. As M. C. Vodhyakara expressed the wish to visit construction sites rather than experiencing studio work, Allison arranged free access to any construction site being supervised by him or by another architect, Archibald Scott .

M. C. Vodhyakara's expression gives us some idea of his attitude toward the learning of architectural practice — an attitude that seeks to learn from real experience on sites rather than from drawing boards. If Prior's approach to architectural design ever influenced him and if it persisted until then, he presumably gained the perspective that, to quote Saint's words, 'architecture and building are one,

[1] A. Cecil Carter and Jones Stevenson, *Report of the Superintendent of Siamese Government Students for Period April 1925 to March 1926 (BE 2469)*, p. 327.
[2] *Cambridge University Examination Papers: Easter Term 1929*, p. 6.
[3] *Cambridge University School of Architecture Prospectus*, p. 3.
[4] See *Works of Mom Chao Vodhyakara Varavarn 1900–1981*; *Sisan Saensai Prawatsat: Phabrang Laiphahat Bantuek Kwamsongcham Lae Kan Winitchai Suan Phra Ong Khong Mom Chao Vodhyakara Varavarn (Colours and Lines of History: Sketches and Personal Analysis of Prof. Mom Chao Vodhyakara Varavarn*.

that architecture is a practical art in which pretence and perhaps even theory have little place'.[1]

Even though Allison's approach to architectural design was strictly Ecole des Beaux-arts oriented and, therefore, might be considered as not fully correlated to what M. C. Vodhyakara had been equipped with at Cambridge, some aspects proved relevant to M. C. Vodhyakara's ideas in architecture, shown in his later career. These were the way architectural principles from the past were developed alongside contemporary techniques without a complete break with tradition, and the way construction was restricted economically due to contemporary necessity.

An example can be seen in the almost-finished Science Museum at South Kensington, among various projects Allison was in charge of at the time, which Varavarn is likely to have visited (Figure 3.1.20). Here, Allison had exercised a couple of practical design and construction approaches.[2] First, despite his attachment to classical principles, a characteristic deemed necessary for contemporary British institutional buildings, he explored new designs within the principle, such as a row of set-back classical columns in the facade and large windows in-between. Second, he strictly controlled construction economically, responding to the necessity of the post-war condition. One of the most evident techniques was the abundant use of reinforced concrete on the Coignet system in the construction of columns, column foundations, floors, staircases, roofs including Mansard slopes, and segmental ribs of the arched skylight. In a later interview, Allison also spoke of his preference for simplicity in design, avoiding unnecessary details and ornaments, which he claimed was more difficult than putting them in.[3]

[1] Saint, 'Recessional Lecture by Professor Andrew Saint on Departing from His Chair at the Cambridge School 18 March 2006' (unpublished), p. 13.
[2] B.S. Townroe, 'The New Science Museum', *The Architects' Journal*, (1928), 547.
[3] 'New Science Museum, Kensington. Designed by Sir Richard Allison, C.B.E., F.R.I.B.A.', *Building* (1928), p. 104.

Figure 3.1.20: Interior spaces of The Science Museum at South Kensington upon its completion, showing its light atmosphere, large windows and light well, and reinforced concrete construction with simple decoration.[1]

[1] 'New Science Museum, Kensington. Designed by Sir Richard Allison, C.B.E., F.R.I.B.A.', p. 104.

Even though the supervisor wanted M. C. Vodhyakara to stay longer, King Prajadhipok insisted that he returned to Siam at the end of March 1928, as originally fixed, in order to start his work as an architect at the Royal Railway Department. Despite a shorter period of study and less opportunity for internship, the fact that E. S. Prior's Arts & Crafts ideal had never been divorced from the school's ethos, even though he had left the position as Head, not only compensated for the emphasis on practical aspects that M. C. Vodhyakara lost by the absence of an internship, but even provided a relatively more sophisticated understanding of the way local materials could be used in construction.

The architectural education in the three European schools of architecture introduced Siamese students to ideas and principles not just of building but of architectural design. M. C. Itthithepsan was the first graduate to return to Siam in 1916. One of the most important things he had to do was to find a proper translation of the words architecture and architect — both new words unprecedented in the Thai language. By 1920, King Vajiravudh granted the translation for both words requested by M. C. Itthithepsan. *Sathapattayakam* and *Sathapok* (later becoming *Sathapanik*), words of Sanskrit root, were then adopted for architecture and architect respectively. The term *Kong Sathapattayakam* was then used for the Architecture Department at the Ministry of Public Instruction where Sarot Sukkhayang worked in 1920 upon his return to Siam. Now it is time to examine how the first generation of Siamese graduates returned home and tried to make sense of what they had studied within a totally different context.

Figure 3.1.21: The manuscript of King Vajiravudh granting Thai terms for the words architecture, architectural science, architect, and architectural drawing, to M. C. Itthithepsan Kridakorn (exact date unknown but approximately 1920)[1]

[1] *ASA*, 2 (1966).

3.2 Modernity, tradition, and compromise: Architectural practice in Siam under the last absolute monarchy, 1925–32

In the last chapter, the architectural education of the first generation of Siamese architects has been discussed. The Siamese graduates from Britain and France went back to Siam and worked alongside European architects and Siamese master builders. This chapter focuses on the period under the reign of King Prajadhipok prior to the establishment of the school of architecture in the university and the establishment of the association of Siamese architects along with its journal. Architectural discourse was, therefore, still largely unknown — not to mention the Thai terms *Sathapattayakam* (architecture) and *Sathapanik* (architect), already translated by King Vajiravudh by 1920 at the request of M. C. Itthithepsan Kridakorn, the first Beaux-Arts graduate, that were still far from widely used.

The nature of the government workforce in the last years of the absolute monarchy was characterised by a decreasing number of foreign professionals due to economic recession and an increasing return of Siamese graduates who completed their studies abroad. However, the Siamese graduates' status and skills were still in some doubt, so the remaining Europeans retained some of their prestige. It was the Siamese graduates' task to prove themselves.

Newly graduated Siamese architects

As mentioned before, the first graduate who had arrived in Siam since the last reign was M. C. Itthithepsan Kridakorn. He had worked as 'Assistant design master builder (*Phuchuai Nai Chang Khamnuan Okbaeb*)' at the Fine Arts Department in 1916 and had become Inspector (*Phu Truat Kan*) in 1919. He had accomplished Phra Thinang Marirattanaballang (1916) and Phra Tamnak Piamsuk (1927–28), two new mansions for King Vajiravudh's Sanam Chan Palace and King Prajadhipok's Klaikangwon Palace respectively. He had also designed a new mansion (1928) at Sa Pathum Palace, and renovation of other mansions in various palaces.

As part of the reorganisation of the administrative system at the beginning of King Prajadhipok's reign (1925–35) to solve economic difficulty resulting from the

previous reign's overspend, the Fine Arts Department was dissolved in 1925.[1] The responsibilities of that department were transferred to other offices. For example, museum affairs were made the responsibility of the Royal Library Committee (*Kammakan Ho Phra Samut*). A new office, with similar duties to those previously accomplished by the Fine Arts Department, was named the Fine Arts Institute (*Silpakornsathan*) and established within the also newly established Royal Institute (*Ratchabandittayasapha*), whose status was equal to a department. The Royal Institute also included Literature and Archaeology Divisions.[2] Prince Damrong was the President (*Saphanayok*), and Prince Naris was the Vice-president (*Uppanayok*) of the institute. In 1926, M. C. Itthithepsan became Director of the Fine Arts Institute.

In 1928, the Fine Arts Institute welcomed another Beaux-Arts graduate, M. C. Samaichaloem Kridakorn.[3] His professional certificate of D.P.L.G. perhaps supported him to assume the high position of Master builder (*Nai Chan*g). After one year, he left for the Department of the Outer Palace (*Krom Wang Nok*), Ministry of the Royal Household. In that department he assumed a yet higher position of Chief master builder (*Nai Chang Yai*) in the Western craftsmen/builders Section (*Phanaek Chang Farang*), Division of Craftsmen/builders (*Kong Chang*) in 1932. Here, he was responsible for the design of the state-of-the-art-Sala Chaloemkrung Theatre, a royal project of immense prestige, marking a great success for Siamese architects in proving their ability to design projects with merit. This project is examined in detail as a case study in the last chapter of this dissertation.

The absence of the position called Architect (*Sathapanik*) in the career of the first two graduates not only implies the obscure usage of the word but reiterates the traditional idea of building practice that still persisted. Even though the practitioner possessed the knowledge of 'western craftsmanship', he was still regarded as *Chang*.

As regards Siamese graduates from Britain, the first one, Sarot Sukkhayang (later assumed the title Phra Sarot Rattananimman), returned to Siam in 1920.[4] He

[1] 'Department of Fine Arts: History and Roles'.
[2] Ibid.
[3] See his full profile in *Ngan Sathapattayakam Khong Mom Chao Samaichaloem (Architecture of Mom Chao Samaichaloem)*.
[4] See his full profile in Sarasatsirirak, '*Prawat Phra Sarot Rattananimman* (The Profile of Phra Sarotrattananimman)'.

worked as *Achan Chang Khamnuan Baeb*, literally the teacher of design calculation technicians, at the 'Architecture Department (*Kong Sathapatayakam*)', Ministry of Public Instruction. It was here that the word 'architecture' in Thai was first used for the organisation, but still not for the position of officials working in it.

It was here too that Sukkhayang, as a newly graduated Siamese practitioner, was responsible for the first project of an immense scale. In 1921, supported by the Rockefeller Foundation, the Ministry of Public Instruction initiated a thorough redevelopment of its Siriraj Hospital, the first hospital and medical school in Siam which had been established in 1888. It decided not to use the 'skilful' foreign 'master builder (*Nai Chang*)' from the Local Sanitary Department, Ministry of Local Government as before (which meant the Italians), because they were always overloaded with work and the Ministry foresaw the snag of being too demanding about a design by officials not under its direct authority.[1] It therefore decided to use its own '*Chang*' in the ministry that, despite being 'less skilful', could be advised more conveniently.[2]

Having knowledge from Liverpool about both civic design and architecture, Sukkhayang therefore had a chance to lay down a new master plan and sixteen buildings, that were erected between 1923 and 1935. The Rockefeller Foundation, however, was reassured that Sukkhayang was able to accomplish the task by sending an 'architect' of its own to supervise the design.[3] A pressing timetable, complicated matters inevitable in the design of scientific buildings, and unskilled workers, however, entailed many difficulties and excessive cost.[4]

Sukkhayang became the Director of the Architecture Department in 1925.[5] Apart from his main job, he taught *Wicha Paenbaeb Sathapat* (Architectural Drawing), and *Wicha Kosang Akhan* (Building Construction) to the 4th year class of

[1] Phra Sarot Rattananimman, '*Kan Sang Akhan Thi Siriraj Phayaban (the Construction* of Buildings at Siriraj Hospital)' in *Anuson 84 Pi Siriraj (84th Anniversary of Siriraj)* (Bangkok: Faculty of Medicine, Siriraj Hospital, 1976), p. 497.
[2] Ibid.
[3] Ibid.
[4] Ibid., p. 499.
[5] M. R. Sadab Ladawan, '*Phra Sarot Rattananimman* (Sarot R. Sukkhayang)' in *Phra Sarot Rattananimman* (Sarot R. Sukkhayang)', in *Prawat Khru (Profiles of Teachers)* (Bangkok: Rongphim Kurusapha, 1961), 133–43 (p. 138).

the Division of Civil Engineering, Faculty of Engineering, Chulalongkorn University from 1931.[1]

The second graduate from Liverpool, Nat Phothiprasat, returned to Siam in 1930 and became Head of the newly established Department of Architecture at Po Chang School (The Craftsmen's Training School). Here too, the word architecture was used for an organisation. Another graduate from England, M. C. Vodhyakara Varavarn, returned to Siam at the end of March 1928 and started to work as '*Sathapanik* (architect)'[2] at the Royal Railway Department, one of the main employers of architects and engineers in Siam. It can, therefore, be said that M. C. Vodhyakara was the first Siamese who formally assumed the position of 'Architect'.

Siamese master builders

Besides the Siamese graduates trained abroad, Siamese practitioners holding no architectural degree were also involved in construction work in certain government offices. Among them was Lok Ditsayaniyom (later called Lom Burakamkowit and entitled Luang Burakamkowit), who would be significantly successful in his career over the next four decades. He had been an apprentice in the construction of Ban Puen Palace designed by Karl Döhring, from 1911 to 1915. After that, he worked at the Ministry of Interior, accumulating skills on modern design and construction until 1934.

Another important contribution of the practitioners without degree lay in those who possessed, apart from the knowledge and skills in modern construction, knowledge of traditional building design and construction. The most important figure was still Prince Naris, the ex-Minister of Public Works from 1899 to 1905, who had supervised all the Italian architects and had attempted to create modern Siamese art. He moved to the Department of Fine Arts and, before its dissolution in 1925, assumed the position of *Mae Ngan* (mother of works) directing its last major project, the royal funeral pyre of King Vajiravudh.[3] He then served as the Vice-president of the newly established Royal Institute.

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[1] Ibid.
[2] Bangkok, M. C. Vodhyakara Varavarn's Archive, *Prawat Yo* (Brief Profile) (1976).
[3] Phra Phromphichit, *Phutthasin Sathapattayakam Phakton (Buddhist Art and Architecture: Introduction)* (Bangkok: Rongphim Phrachan, 1952), p. *Ko Kai*.

One of the most prominent students of Prince Naris, Ou Laphanon (later entitled Phra Phromphichit) (1890–1965), who had worked at the Department of Public Works and Department of Fine Arts, and had learnt Siamese building design from the Prince, was at *Krom Rong Ngan, Krasuang Wang* (Ministry of the Royal Household) in 1925.[1] He then moved to the newly established Fine Arts Institute in the Royal Institute, where the Prince was the Vice-president, working as *Achan* (instructor), in 1926, and remained there until the department was dissolved in 1933.

Chuea Patthamachinda (later entitled Luang Wisan Sinlapakam) (1884–1982) was another prominent master builder who had taught Siamese crafts at Po Chang School (Craftsmen's Training School) from 1909 to 1921.[2] He moved to the Design Division (*Phanaek Kong Ok-baeb*), Department of Primary Education (*Krom Saman Sueksa*), Ministry of Public Instruction, designing a number of educational buildings with Sarot Sukkhayang, and remained there until 1933.

The cooperation between Patthamachinda and Sukkhayang is worth a detailed examination here, as it will demonstrate more clearly how the new and old professionals interacted with each other under a changing situation of practice in the last reign of the absolute monarchy.

After the Royal Pages School and the administrative building of Chulalongkorn University, where King Vajiravudh had implanted the idea of applying Siamese art in modern buildings in order to remind the next generation to retain their tradition alongside progress, many more public buildings in the reign of King Prajadhipok were designed in Siamese styles.

[1] Ibid.
[2] Chaloemphon Tosaradet, '*Kansuksa Phonngan Kan Okbaeb Sathapattayakam Khong Luang Wisan Sinlapakam* (The Study of Architectural Design of Luang Visal Silpakam)', (unpublished master's thesis, Silpakorn University, 2006), p. 8.

Figure 3.2.1 (Top left): Phra Phromphichit (Ou Laphanon)[1]

Figure 3.2.2 (Top right): Luang Wisan Sinlapakam (Chuea Patthamachinda)[2]

Figure 3.2.3: Luang Burakamkowit (Lok Ditsayaniyom)[3]

[1] Somchai Nimlek, '*Kanson Lae Ngan Sathapattayakam Khong Phra Phromphichit* (Teaching and Architecture of Phra Phromphichit)', *Na Chua*, 10 (1990), 11–20 (p. 12).
[2] *Anuson Ngan Phra Ratchathan Ploengsop Luang Wisan Sinlapakam (Memorial Book for the Funeral of Luang Wisan Silpakam)* ([n.p.]: [n. pub.], 1982), unnumbered p. 1.
[3] Chungsiriarak, *Sathapattayakam Baeb Tawantok Nai Siam Samai Ratchakanti 4 Tueng Po So 2480 (Western Architecture in Siam: Rama IV's Reign to 1937)*, p. 516.

In 1924, the same year that Sarot Sukkhayang started to design the new buildings at Siriraj Hospital (Figure 3.2.4–Figure 3.2.6), which appeared to be of no style and mostly ornament free, he also completed the Pali Language School at Wat Debsirin. It was in the Siamese-style Niphanopphadon Building, cooperation between him and Chuea Pattamachinda (Figure 3.2.8). Considered purely from a stylistic point of view, the fact that the school was run by and located in the premises of a Buddhist monastery could have justified application of a Siamese style. Moreover, in terms of Sukkhayang's educational background at Liverpool, it could have been seen as the architect's intention to retain a local cultural expression in a modern building in order to suit the context — something he had learnt from Liverpool.

Mark Crinson has pointed out that the expression of local culture in modern buildings was widely seen in the works of British-born architects graduated from Liverpool contemporary with Sukhayang, who worked extensively for the British public sectors in colonies and protectorates during the peak of the British Empire.[1] They were Harold Mason in Iraq, Maurice Lyon in Egypt, A. L. Mortimer and R. W. H. Vallis in India, P. C. Harris in Zanzibar, Clifford Holliday in Jerusalem, R. P. C. Hubbard in Palestine and Malta, and R. D. Jones in Northern Rhodesia.[2] The first question emerging here is: to what extent did these architects incorporate local character and construction methods by their own decision?

In the case of Harold Mason, there is an account stating that he was actively interested in the vernacular brick tradition.[3] But for the others, a political influence could have been the case. The policy of the British public sectors regarding their buildings in colonies and protectorates tended to follow that of the British Raj's government. It incorporated local elements in quite a few of its public buildings, as it had done in public buildings in India like the Viceroy's House designed by Edwin Lutyens in the 1910s, showing the metropole's sympathy to the colonies' culture and

[1] Crinson, *Modern Architecture and the End of Empire*, p. 31.
[2] See Budden, *The Book of the Liverpool School of Architecture*.
[3] Interview with Mohamed Makiya, 27 Oct 1998, as quoted in Crinson, *Modern Architecture and the End of Empire*, p. 30.

positioning itself as protector and revitalising agent for the colonies' glorious civilisation in the past.[1]

Did it matter whether they did it on their own or due to the offices' influence? It did, because they were British-born working in colonies, whereas Sukhayang was a Siamese working in his home country without colonial occupation. Moreover, as well as the plain buildings at Siriraj Hospital, Sukkhayang had also designed, a Gothic Revival building called Manutsayanak Witthayathan at Mahamongkut Ratchawitthayalai, a Buddhist monks' school (Figure 3.2.7). These are worth examining in relation to the Siamese-style-building he designed.

As for similarities, we have seen that the British designs for their colonies and Sukkhayang's design for Siam could both be categorised as hybrid buildings that exploited modern planning and technology alongside some local materials and elements. As for the differences, it has been stated that Sukhayang did not work alone on the project but cooperated with Chua Patthamachinda.[2] Moreover, it happened that Sukhayang never designed a building with Thai elements when he worked on his own in other projects. More crucially, even if he wanted to design the elements himself, he could not do it, but perhaps he also felt that he should not do it himself. There are two pieces of evidence for this. First, he realised that the Siamese art had strict principles according to its tradition, so an architect educated abroad with no knowledge in the art would need help from a Siamese master builder.[3] Second, there was no book about Siamese art sufficient to allow him to research it himself.

There was only Karl Döhring's book about Buddhist stupas and temples, and it was published only in Germany (see chapter 2.2). Apart from Döhring's books, traditional Siamese architecture was mentioned only occasionally in historical and archaeological journals, art books, and travel books. Most were in foreign languages, and many focused on the Orient in general rather than specifically on

[1] See Thomas R. Metcalf, *An Imperial Vision: Indian Architecture and Britain's Raj* (London: Faber and Faber, 1989).
[2] '*Poedtuek Yaowamanuthit Piyaratbophit Padiwaradda* (The Opening of *Yaowam*an Uthit Piyaratbophit Padiwaradda Building)', in *Talaengkan Suksa Debsirin (Debsirin's Announcement)*, 2 (1972), p. 37.
[3] See Sukkhayang's attitude toward the rigid principles in traditional Siamese art in Phra Sarot Rattananimman, '*Khonkrit* (Concrete)' *Chotmaihet Samakhom Sathapanik Sayam (The Journal of the Association of Siamese Architects)*, 6 (1935), 4 – 9.

Siam.[1] Important among journals was the *Journal of Siam Society*, first published in 1904. The contributors and subscribers were a limited number of Thai and foreign elite scholars. This limited state of knowledge made it difficult for Siamese architects to design Thai-style buildings in the 1920s.

Like most of Siriraj Hospital's new buildings the Niphanopphadon Building, which was located in the vicinity of Wat Debsirin, had a reinforced concrete structure and a symmetrical layout, despite the entrance hall and main staircase being located in the West wing. The entrance, which could be approached from the temple, and the corridor on both floors, faced North. The South side of the building faced a fence defining the boundary between the temple and a street.

While Sukkhayang continued to design more buildings without ornament for Siriraj Hospital, he and Patthamachinda, together again, designed the Science Building (1927–29) and Student Club (1932) at Chulalongkorn University, and the Vajiramongkut Building (1932) at Vajiravudh College (previously the Royal Pages' School, whose name had been changed in 1926) in a Siamese style, similar to that of the Niphanopphadon Building (Figure 3.2.9–Figure 3.2.11).[2]

All of these Siamese style buildings with modern function and adapted forms and elements, as well as the hybrid construction method, were the first set of contributions reflecting cooperation between a Siamese architect freshly graduated from England and a Siamese master builder. They worked together for buildings that accommodated not only progressive notions of education and science but also Siamese art.

[1] See René Grousset, *Les civilisations de l'orient* (Paris: Geuthner, 1929); Somdet Kromphraya Damrongrachanuphap, *Tamnan Phutthachedi Siam (The Legend of Siamese Buddhist Stupa)* (Bangkok: Rongphim Sophon Phipatthanakan, 1926); H. R. H. Prince Damrong Rajanubhab, 'The Golden Pavilion at Wat Sai', *The Journal of Siam Society*, 2 (1921), 1–10; Erik Seidenfaden, 'An Excursion to Lophburi', *The Journal of Siam Society*, 12 (1922), 66–77.
[2] See a detailed account of these buildings in chapter 4.4

Figure 3.2.4: Pathology Building at Siriraj Hospital (1923) by Sarot Sukkhayang[1]

Figure 3.2.5 (left): Mahidol Bamphen Building at Siriraj Hospital (1924) by Sarot Sukkhayang[2]

Figure 3.2.6 (right): Anatomy Building at Siriraj Hospital (1925) by Sarot Sukkhayang[3]

[1] National Archives of Thailand
[2] *120 Chin Aek Khong Siriraj (120 Memorabilia of Siriraj)* (Bangkok: Faculty of Medicine, Mahidol University, 2008), p. 69.
[3] Ibid.

Figure 3.2.7: Manutsayanak Witthayathan Building (1923) by Sarot Sukkhayang[1]

Figure 3.2.8: Niphanopphadon Building (1923) by Sarot Sukkhayang and Chua Patthamachinda[2]

[1] National Archives of Thailand
[2] Chungsiriarak, *Sathapattayakam Baeb Tawantok Nai Siam Samai Ratchakanti 4 Tueng Po So 2480 (Western Architecture in Siam: Rama IV's Reign to 1937)*, p. 404.

Figure 3.2.9: Science Building at Chulalongkorn University (1927–29)[1]

Figure 3.2.10: Student Club at Chulalongkorn University (1932)[2]

Figure 3.2.11: Vajiramongkut Building at Vajiravudh College (1932)[3]

[1] Chulalongkorn University Archives
[2] Ibid.
[3] *Samutphap Sathapattayakam Krung Rattanakosin (The Architectural Pictures of Rattanakosin)*, (Bangkok: Graphic Art, 1982), p. 54.

Patthamachinda, the master builder, was granted a royal medal for this achievement.[1] The contractor for the Vajiramongkut Building was Sanga Wannadit, the first Thai contractor qualified to execute a government building.[2] The pride in creating these hybrid style buildings was, therefore, distributed among the clients, their institutions, the architect and master builder, and the contractor.

The architect equipped with modern construction knowledge from England was ready to exercise his knowledge, yet lacked knowledge of Siamese art to fulfil the clients' wish. The master builder was, therefore, given a chance to cooperate with the architect in order to show that traditional skill could get along with the changing situation. This also applied to the case of the contractor. In sum, the modern buildings with national character in the last reign of absolute monarchy were conceived within the condition that tradition supported modernity and vise versa.

Remaining European architects

As regards European architects, two important figures who left Siam for Italy in 1926 were Mario Tamagno and Anibale Rigotti: the first had concluded his 25-year-contract and continued to practise under Mussolini's Fascist regime, while the second assumed a teaching post and practised with his son until as late as the 1960s.[3]

Edward Healey, who had started his career at the Ministry of Public Instruction in 1910, left his last governmental post at the Ministry of War in 1921 because the Minister saw that his salary was expensive and the number of ministry's large projects that needed 'a European architect' was decreasing.[4] But Healey remained in Siam, running a private office, Siam Architects, that he had established

[1] But he had to wait for twenty years to get his medal due to the 1932-revolution.
[2] Information from the exhibition '100th Anniversary of Vajiravudh College', at Vajiravudh College 21–26 December 2010.
[3] Tamagno was, however, the only architect in Turin, who was not a member of the Fascist Party, see Tamagno, '*Mario Tamagno: 25 Pi Haeng Kan Pen Sathapanik Nai Ratchasamnak Siam (2443–2468) (Mario Tamagno: 25 Years of an Architect in the S*iamese Court)', p. 44. For a detailed account on Rigotti, see Filippi, 'Un architetto tra otto e novecento. Annibale Rigotti, disegno e pratica di architettura 1882–1925 (An architect in the Nineteenth and Twentieth Centuries. Annibale Rigotti, Design and Practice of Architecture 1882–1925)', (unpublished doctoral thesis, Politecnico de Turin, 2004).
[4] National Archives of Thailand , R 6 B 5/130 Vol.6

when he worked for the government. In 1927, Siam Architects, which by now also did import business, had a new office.[1]

Healey designed the decoration of the walls of private rooms for children in the new surgical ward for women and children at Siriraj Hospital in 1931.[2] It is worth pointing out that he also designed a Siamese style building that was the first permanent building of the Siam Society completed in 1933 (Figure 3.2.12).[3] Exhibiting a Siamese style in a symmetrical and modern building comprising an auditorium, library, and office, it was designed in a similar manner to the educational buildings of Sukkhayang and Patthamachinda. The question of whether a Siamese master builder was involved with the design of Siamese elements has not yet been answered. The building that belonged to the society, which had been established in 1904 by the Siamese and foreign elite and scholars for the 'investigation and encouragement of arts, sciences, and literature that relate to Siam and neighbouring countries'[4], only reassured the popularity of such a style, perceived by the local elite and international scholars in Siam as a demonstration of Siam's integrated past and current civilisation. Healey was invited to become a member of the Siam Society's council, assuming the position of Honorary Architect, in 1935.[5] Even though his name still appeared in the society's annual report of 1939,[6] no evidence indicating further design activities for the Siam Society has yet been found.[7]

[1] Chairak Chansin, *Sathapattayakam Samaimai Khong Sathapanik Thai Run Bukboek* (Modern Architecture of Pioneer Thai Architects BE 2459–2508)', (unpublished master's thesis, Silpakorn University, 2006), p. 231.
[2] 'Bangkok's Sports Week', *The Singapore Free Press and Mercantile Advertiser*, 5 March 1931, p. 20. The ward was in a building among other new buildings at Siriraj Hospital designed by Sarot Sukkhayang. See Chungsiriarak, *Sathapattayakam Baeb Tawantok Nai Siam Samai Ratchakanti 4 Tueng Po So 2480 (Western Architecture in Siam: Rama IV's Reign to 1937)*, pp. 554–63.
[3] 'Annual Report 1935', *Journal of the Siam Society*, 1 (1937); 'Siam Society' *The Singapore Free Press and Mercantile Advertiser*, 17 January 1933, p. 8. The site had been donated by A. E. Nana, a prominent Indian businessman in Bangkok in October 1931. See 'Gift to Siam Society', *The Singapore Free Press and Mercantile Advertiser*, 30 October 1931, p. 7.
[4] 'Siam Society's New Library' *The Singapore Free Press and Mercantile Advertiser*, 4 January 1929, p. 13.
[5] 'Annual Report 1935'
[6] 'Annual Report 1939', *Journal of the Siam Society* , 1 (1940), 81.
[7] Prior to 1939, evidence regarding Siam Architects' import business is, however, available. In 1936, the company won the tender of supplying fifteen millions Siamese currency coins with the lowest price. See 'Siam Currency', *The Singapore Free Press and Mercantile Advertiser*, 1 January 1936, p. 6.

Figure 3.2.12: Siam Society by Edward Healey (1931–33) [1]

[1] 'Siam Society Milestones', http://www.siam-society.org/about/milestones.html [accessed date 10 August 2013].

Ercole Manfredi, whose early works in Siam were mainly collaborations with other Italians at the Department of Public Works from 1910 to 1924, also remained in the country. His career and work changed direction, as he left his previous position in 1924 to work at the Fine Arts Department.[1] Until 1929, he worked as Chief architect at the department's Division of Archaeology, supervising excavation sites with Prof. George Coedès, a renowned French archaeologist who was director of the National Library of Siam from 1918 to 1929 and later became director of L 'École française d' Extrême-Orient in French Indochina.[2] Manfredi also designed stands for exhibitions of sculptures found in an excavation site in Lopburi.[3]

Charles Beguelin, who arrived in Siam in April 1919, worked at the Division of Engineering at the newly established Department of Public Health as Chief master builder (*Nai Chang Yai*).[4] As the Department of Public Health was responsible for healthcare services, the nature of Beguelin's works leaned towards functional and hygienic aspects. After five years in Siam, Beguelin took a six-month holiday, going back to Europe in May 1924.[5] His return marked an important change in his design approach, for a Modernist grain appeared in his projects by the end of the 1920s when his duties were providing advice or designs for government offices, hospitals, healthcare stations (*Sukhasala*), prisons, in the provinces and sometimes in Bangkok, as well as engineering works in the provinces (except for roads), and urban planning in the provinces.[6]

These works included Bang Khwang Central Prison, whose construction started at the beginning of 1928, intended as one of 'the most modern prison in Asia with maximum security'.[7] He designed and inspected it, while the direction and management of construction were the responsibility of the Siamese prison inspector and provincial registrar. The main contractor was the Chinese See Kimhee

[1] National Archives of Thailand, R 6 B 5/79
[2] George Coedès, 'The Excavations at Pong Tuk and Their Importance for the Ancient History of Siam', *Journal of the Siam Society*, 21 (1928), 195–209; Bangkok, National Archives of Thailand, R 7 B 3/24 Vol.1 (Misecellaneous)
[3] 'Interesting Discoveries Made in Lopburi', *The Straits Times*, 15 July 1924, p. 10.
[4] National Archives of Thailand, S R 0201.19/5; K T 35.8/22 Box 5. Beguelin's wife and children came to visit or live with him in Siam in 1927 at the latest. See 'Passengers Arrived' 12; 'Passengers' 10.
[5] 'Social and Personal', *The Straits Times*, 24 May 1924, p. 8.
[6] Bangkok, National Archives of Thailand, S R 0201. 19/5.
[7] The Ministry of Interior, *Prawat Mahatthai Suan Phumiphak Nonthaburi (the History of the Ministry of Interior: Nonthaburi)* (Nonthaburi: Rongphim Sathansongkhrao Ying Ban Pakkret Nonthaburi, 1982), p. 122.

Company. At least eight hundred prisoners from Bangkok Prison were sent to help with the construction.[1] Luang Burakamkowit, acting as the translator for Beguelin, recalled that designs of prisons from Europe and USA were researched and compared with the Siam's needs in the first place.[2] Most of the construction was finished by 1931.

Beguelin's performance must have satisfied the government and so brought him to engage with one of the most important projects of Siam at the time — the Ministry of Justice's new Court. The project started in 1928, when the Ministry of Justice requested the Department of Public Health and the Ministry of the Interior, that Beguelin should design a new Court of Justice which had also to house *Neti Bandit Sapha* (the Bar) and a Law School, whose buildings had been projected since World War I but were halted due to insufficient funding.[3] The large complex was therefore deemed to be built as a Siamese-style-national monument called *Yuttitham Prasat* or *Prasat Yuttitham* (The Castle of Justice).[4]

Prince Naris and M. C. Itthithepsan were initially asked to 'design or supervise the design'.[5] But for a sufficient practicality to reach European courts' standard, the ministry requested the Department of Public Health, Ministry of Interior, that Charles Beguelin, *Nai Chang Yai* (Chief Engineer/Architect), should consult on the design.[6] It so happened that Prince Naris' Fine Arts Department was too busy with works in palaces to take this job; therefore Beguelin would design this project himself.[7] But the Supreme Council of State, including Prince Naris, insisted that the design should be 'a modern building in terms of its strength and durability, with a symbolic Thai *Prasat* element on its top'.[8] Prince Paribatra Sukhumbhan, the Minister of the Interior, wrote an official letter to Phraya Chindaphirom, the Minister

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[1] , *The Singapore Free Press and Mercantile Advertiser* 16 March 1929, p. 2.
[2] Bangkok, National Archives of Thailand, R 5 Y 15/14 (Ministry of Justice); R 7 M 10/4 (Ministry of Interior); Chaiyachan Wongpan, *72 Pi Ruencham Klang Bang Khwang (72nd Anniversary of Bang Khwang Central Prison)* (Nonthaburi: Ruencham, 2002).
[3] Phraya Wichiansiri and Bantoeng Phunsin, *Anuson Ngan Phraratchathan Ploengsop Maha Ammat Aek Chao Phraya Srithammathibet (Chit Na Songkhla)* (Bangkok: Rongphim Chuanphim, 1976), p. 94.
[4] ———, *Anuson Ngan Phraratchathan Ploengsop Maha Ammat Aek Chao Phraya Srithammathibet (Chit Na Songkhla) [Memorial for the Funeral of Maha Ammat Aek Chao Phraya Srithammathibet (Chit Na Songkhla)]* (Bangkok: Chuanphim, 1976), p. 95.
[5] Ibid.
[6] Ibid.
[7] Tiptus, *Chang Farang Nai Krung Siam (European Architects in Siam)*, p. 140.
[8] Wichiansiri and Phunsin, *Anuson Ngan Phraratchathan Ploengsop Maha Ammat Aek Chao Phraya Srithammathibet (Chit Na Songkhla)*, p. 103.

of Justice, dated 18 July 1929 regarding Beguelin's comment on this point and the design process. It reads:

> He [Beguelin] has expressed his wish to design the building elegantly as it should be, but he also mentioned that he cannot design it in a Thai style. And he does not want to design it in a Classical *Farang* [western] style either, as he does not like to do so. But if we let him design it in *Baeb Modern* [modern style], he is happy to do so. However, this is an important task therefore thorough research should be done before the drawing stage. He has suggested that he can do the research abroad and bring back many drawings of large buildings *Baeb Modern* for us to consider. Once he has understood our preference, he would know in which direction he should proceed. After that, he will sketch up three schemes for us to select. After the selection he will proceed to the detailed design. He has never executed such a large work as this, but he is confident and the employment of an assistant will help. For the strength [of the building] he does not worry at all, but as to its beauty, he is sure that some people will criticise the design. However, he believes it is impossible to deliver a design that would please everyone. […] I also discussed with him a possible architectural competition. He was afraid that the limited number of architects in Bangkok would make this choice unfruitful. If we were to call for the competition in Europe, it would be very expensive. […] And no one should be able to design without seeing the site. […] Actually, another choice was to hire a famous architect from Europe. But this means he has to come to Bangkok. Beguelin thought extremely famous architects might not see any benefit in doing so; therefore he was afraid no one would accept the invitation.[1]

Contemporary issues can be deduced from this letter. Firstly, not only elegance and durability but 'style' was obviously a priority, both for the architect and client, in designing a public building. The issue of style was always important for public projects in Europe. But when it came to Siam, it became even more

[1] Sucharit Thawonsuk, '*Ngan Krasuang Yutitham* (Work in the Ministry of Justice)', in Phraya Wichiansiri and Bantoeng Phunsin, eds, *Anuson Ngan Phraratchathan Ploengsop Maha Ammat Aek Chao Phraya Srithammathibet (Chit Na Songkhla) [Memorial for the Funeral of Maha Ammat Aek Chao Phraya Srithammathibet (Chit Na Songkhla)]* (Bangkok: Rongphim Chuanphim, 1976), pp. 95–101.

complicated as it involved various styles considered western, and against the Siamese style. It was evident that the Siamese style had earlier been chosen for a number of important projects under particular circumstances. However, their preference was not too rigid to be compromised by the architect's taste and expertise. They finally agreed that the building would be designed in 'Modern style'. It is worth noting that Modernist influence, if any, was considered as only another (western) style, for its attached ideology was not yet debated in Siam.

Another constraint was the fact that the architects in the government considered capable of designing a building at this scale were rarely available — leading figures of the Italian team had left, two Siamese graduates from European architecture school had started their careers less than a decade before and were busy at the court and the Department of Public Instruction.

To reiterate, the requirement that the new court house should be designed in a Siamese style was particularly difficult to achieve at this stage. This was because Phraya Chindarangsan (Plang Wiphatsilpin), a prominent master builder, who had designed the Royal Pages School's auditorium in a Thai style, possibly in continuation of Healey's overall plan, had retired. Chua Patthamachinda, another prominent master builder who had helped Healey with the design of other buildings at the school was, as mentioned earlier, supposed to be busy helping Sarot Sukkhayang with buildings at Chulalongkorn University. And finally, Prince Naris, the greatest master builder with his crews at the Fine Arts Department was also too busy to take on the job.[1] These conditions left the government little choice.

It is a reminder of the earlier situation when King Chulalongkorn had had to let the gigantic Phra Thinang Anantasamakhom be designed in so-called Renaissance style by Italian architects in 1908, instead of in a Siamese style as initially intended, just because of the lack of a prominent Siamese master builder. Twenty years on, Siamese architectural professionals were still inadequate in number and education to support the growing realm of building construction. Prominent foreign professionals, like Beguelin, were still needed.

[1] Tiptus, *Chang Farang Nai Krung Siam (European Architects in Siam)*, p. 140.

At the same time, international competitions were not unknown, for as we have seen, the possibility was raised by the Minister of the Interior. But the execution of overseas projects, especially those in unfamiliar territory, was not an easy task for architects at that time.[1] Overseas projects needed local architects or at least local site architects to supervise the constructions. If a local were to be appointed, he would need to have gone to work on the design with the architect and then returned to the site. The absence of a familiar supplier network on site would have made the situation yet more difficult for the designers to get the construction carried out as they had designed it. A contemporary case can be seen in Hugo Häring's winning scheme of an international competition for a huge hospital in Rio de Janeiro in 1922.[2] He did not go there before or after the design process, and his design was dramatically changed. Inviting foreign architects to design buildings in the Far East had also been done already. An example was the case of Japan's invitations to German and American architects to design its Diet Parliament, for which they made visits to observe the site and construction industry in 1887 and 1898. In any case, it seemed, as Beguelin suggested, not viable for an obscure country just recovering slowly from economic recession like Siam.

Although architect and client showed their concern over the 'style', the client omitted the notion of 'function', leaving it as an inherent duty of the architect's design process. On the other hand, Beguelin seemed to take function and site specificity more seriously by addressing his wish to look at case studies abroad and the necessity of site visits should a foreign architect be invited to design the building instead of him. However, his wish to design the building in 'modern' style as mentioned in Prince Paribatra's letter showed no clue of how the 'style' was supposed to fit Siam's contemporary situation. The notion of modernity was not evident. It was rather a matter of 'beauty' and the architect's own taste, as he himself admitted that not all the people might like it.

Beguelin's wish to design the court in a modern style was approved by *Aphiratthamontri* (The Supreme Council of State).[3] He went on leave in August 1929 to conduct his research in Europe and came back to Siam in June the following

[1] From a conversation with Peter Blundell Jones, 19 March 2013.
[2] Blundell Jones, *Hugo Häring: The Organic Versus the Geometric*, pp. 49–50.
[3] Thawonsuk, '*Ngan Krasuang Yutitham* (Work in the Ministry of Justice)'

year.[1] He went through the design and consideration processes and subsequently completed a detailed design for construction. Unfortunately, the project was halted by the revolution of 1932.

Towards a new era

It has been shown that by the end of the 1920s, Siamese architects gradually took over jobs previously done by European architects in several offices. Alongside them, master builders, who held no architectural degree, but had worked with foreign architects, and specialised in Thai architecture, were also at work. European expertise was however still needed in certain projects that the Siamese were deemed yet incapable of, or in the circumstance that the limited number of Siamese practitioners had too much work in hand. The Siamese architects had therefore to prove themselves and promote the significance of their profession in a new sense — architectural practice — and not *Chang* as traditionally perceived, in order to gain public esteem and government support to develop their profession. A professional architectural association, school, and publication were necessary. Their accumulating attempts in this were supported by the circumstances after the 1932-revolution that brought about a large scale project of 'nation building' by the democratic government. Before examining the architectural discourse, the circumstances that supported it should be scrutinised.

[1] 'Our Siam Letter', *Singapore Free Press and Mercantile Advertiser*, 9 August 1929, p. 9; 'Passengers', p. 10.

4 Transplanting Architecture

4.1 From Siam to Thailand: New regime, nation building, and architects

Before examining how the pioneering generation of Siamese architects gradually took over the jobs from foreigners and finally established modern architectural institutions in Siam, the political and cultural circumstances should be given. We discussed in the last chapter the practices of the pioneering Siamese architects, existing European architects, and Siamese master builders under the last absolute monarchy. Now we can proceed further to the transitional time prior to and after the 1932-revolution that put the monarchy under a constitution.[1]

Towards the end of absolute monarchy

After his ascension to the throne in 1925, King Prajadhipok (reigning 1925–35) proposed to carry on with the aim of the late-Kings — his grandfather, father, and half-brother, to lead Siam to the state of *Siwilai*, by learning from the West and its colonies, as well as from Japan, now arguably the most advanced nation of the East. The King and the elite, therefore, continued to 'adapt' what they considered good from those countries to suit Siam, but at the same time still allegedly ignored many things including democracy. There were actually two preliminary outlines for a constitution initiated by the King that were drafted by his consultants in 1929 and early 1932, but they concerned mainly the principles of how the monarchy could exercise its limited power via ministers.[2] They were still far from what could have been considered democracy.

At the level of normal people's lives, the particular circumstance engaging with so-called modernity that had occurred in the last seventy years after the

[1] The use of the word revolution for the incident on 24 June 1932 instead of the word coup d'état in this thesis is based on the fact that the incident did change the way the country was governed – from absolute monarchy to constitutional monarchy. The fact that it was staged by only a small group of government officials but not the masses can arguably be a factor making the use of this term not fully accurate. But this issue is beyond the scope of this thesis, whose main focus is about architectural culture.

[2] Federico Ferrara, 'The Legend of King Prajadhipok: Tall Tales and Stubborn Facts on the Seventh Reign in Siam', *Journal of Southeast Asian Studies*, 1 (2012), 4–31 (p. 9).

Bowring Treaty continued. The increasing urban middle class craved things modern, particularly focussing on their symbolic meaning. This trend, in some cases, entailed what was seen as superficially materialist and even absurd in a foreign journalist's view, such as a popular fashion among schoolgirls to wear watches that did not work.[1] Some modern buildings in Bangkok owned by the middle and upper social strata were built adjacent to the dilapidated bamboo shelters of the poor.[2] The Primary Education Act, issued in 1921, initially for particular areas, progressed ineffectively due to its insufficient budget. Even Bangkok was not covered by the act until 1930.[3]

Above all, the excessive expenditure by the government of the previous reign created a financial difficulty at the beginning of this reign. The situation started to improve only to worsen again with the worldwide depression, following the Wall Street Crash in 1929. This forced the royal government to impose new taxes, decrease government officials' salaries and even lay off some of them, both civilian and military. The disapproval of the absolute monarchy among some officials and middle classes who were severely affected by the economic hardship, especially those allegedly subjected to a double-standard in economic and administrative measures, was therefore increased. This was accompanied by growing criticism from the educated middle class and the press on the capability and eligibility of the absolute monarchy. Farmers, who were the majority of the population, were also affected by the economic difficulty, especially by high taxation amidst crop failures, and their hardship was echoed in the press, but no real movement against the regime by them was evident.

In sum, modernity was still obscured from the majority's livelihood — only in the urban realm was a change waiting to erupt. And it was in this urban realm that the old concept of the King as the 'lord of life' of great virtue who was always benevolent and capable of supporting the material and spiritual well-being of his subjects was shaken, as it was proved by the aforementioned circumstances that this idea no longer worked properly.

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[1] 'Modern Crazes in Siam' *The Singapore Free Press and Mercantile Advertiser*, 11 July 1929, p. 5.
[2] 'Our Siam Letter', *The Straits Times*, 26 October 1929, p. 6.
[3] Thanaprasitpatthana, '*Naew Phraratchadamri Khong Phrabatsomdet Phrapokklao Chaoyuhua Kiew Kab Sangkhom Thai Po So 2468–2475* (King Rama VII's Thoughts About Thai Society 1925–1932)', p. 14.

Figure 4.1.1: King Prajadhipok on the cover of Time magazine, April 1931 The heading reads 'King of Siam, defender of the faith. An old Etonian, he speaks King George's English, golfs, is a business king.'

Siam/Thailand under the new regime

At the dawn of 24 June 1932, a revolution staged by the People's Party, a group of middle-ranking civilian officials and military officers, many trained abroad, finally changed the country from an absolute monarchy to a constitutional monarchy. The new regime was called the new administrative system '*Rabob Ratthathammanun* (constitutional system)', not yet '*Prachathippatai* (democracy)', as the latter was understood to be 'republican' at the time. Therefore, the new regime insisted that its intention was to maintain the monarchy as head of the state, but to take away the administration to be conducted by the people's representatives.

King Prajadhipok decided not to resist the action of the People's Party in order to avoid a civil war. But even though the revolution in 1932 was bloodless, the newly established democracy in the following three decades was far from stable. An attempt by royalists to overthrow the People's Party's government resulted in a military confrontation in October 1933. Despite his denial of any support for the rebels, the government's distrust and subsequent conflicts with the King contributed to his abdication in 1935. King Ananda (reigning 1935–46), previously a nine-year-old Prince studying in Switzerland, in turn, ascended to the throne.[1] Having a child King allowed members of the People's Party to play the main roles in the country and overshadowed the monarchy for the next decade.

In the first five years after 1932, the democratic government created and enjoyed a liberal atmosphere in the country.[2] More funds were put into popular education. A system of municipalities was created to distribute administrative power. The unpopular capitation tax was replaced by an income and business tax. Women were elected in both council and assembly. This atmosphere was then eclipsed by a more momentous change affecting Siamese cultural life that started at the end of 1938 when the democratic government turned into a paramilitary nationalist regime under a new Prime Minister, Plaek Phibunsongkhram (Luang

[1] King Ananda spent most of his time in Switzerland during his reign and paid visits to Thailand from time to time. The last time he returned to the country was in December 1945. He was found shot dead on his bed in the Royal Palace in June 1946. After investigation, it was more convincing that the cause of his death was assassination rather than committing suicide, but the assassin was never found. However, the incident was used by political opponents to attack the Prime Minister, Pridi Phanomyong, a liberal leader of the People's Party, who was accused of being behind the assassination, and was finally toppled by a coup d'etat in November 1947.

[2] Crosby, *Siam: The Crossroads*, p. 83.

Phibunsongkhram, later Field Marshall Plaek Phibunsongkhram). Amidst political instability both domestically and internationally, and parallel to the rise of Mussolini's Italy and the Third Reich in Germany, Phibunsongkhram was seen as being inspired by Fascism. An order of the German Eagle 1st Class, mostly presented to foreign politicians and diplomats who showed sympathy to Nazi Germany, was presented to Phibunsongkhram by Hitler in 1940.[1]

This turn might be seen as unusual in the sense that nationalism is normally associated with conservative regimes who seek to suppress dissident elements within them, not with revolutionary democrats who promote a change in society. The point is that although the revolution had been completed, the plan of the People's Party to change society was left unfulfilled and still needed to carry on. To achieve this goal the majority in the so-called democratic regime initially saw nationalism as appropriate, but this was before the Prime Minister took personal advantage and joined nationalism's paramilitary branch.

It is worth noting that the government's brand of nationalism was different from the previous nationalism promoted under King Vajiravudh's reign (1910–25), for it had stemmed from a popular movement at least two decades before the 1932-revolution rather than from the monarchy, whose legitimacy had been supported by the previous nationalism.[2] However, despite their different origins and purposes, an important similarity lay in the cultural aspect of their processes. Peleggi has pointed out that the new regime's nationalism was culturally a continuation of King Vajiravudh's idea of nationalism, and that it strengthened the idea of the nation state by glorifying its race and its genealogical bravery in order to unify the citizens.[3] The shared mobilising force of both the old and new regimes that entailed the similarity in both nationalisms culturally was still the quest for *Siwilai* — a particular kind of modernity.

[1] '*Than Furoe Lae Nayok Ratthamontri Haeng Rai Yoeraman Hai Krueng Ratchaitsariyaphon Kae Than Nayok Ratthamontri* (The Fuehrer and Prime Minister of Reich Germany Granted an Insignia to the Prime Minister), *Khao Khosanakan* , 12 (1940), 128.
[2] Peleggi, *Thailand: The Worldly Kingdom*, p. 117.
[3] Ibid., p. 121.

The persisting quest towards Siwilai

The monarchy, who had conceived *Siwilai*, the indigenous term of civilised, as a goal of Siam after its undeniable intermingling with the West in the mid-nineteenth century, was now seen by the People's Party as an obstacle to achieving that goal, so they limited its power. It is worth exemplifying that the stage that might be perceived as *Siwilai* had been achieved to some extent regarding the status and dignity of the Siamese monarchy among international peers, but the same stage was not equally applied to the country and its people.

It is important to state here that the process of achieving *Siwilai* and modernisation was synonymous for American social scientists in the 1960s.[1] This has been followed by conventional scholars of Thai studies ever since. But if it must be perceived as 'a' modernisation, it should be understood as a particular kind conducted in Siam at the time, rather than as conforming to a generalised term applied anywhere in the world. It is therefore necessary to understand what *Siwilai* meant for the People's Party, especially the Prime Minister Plaek Phibunsongkhram, and to examine the actions aimed at achieving it along with their consequences. Needless to say, architectural culture in Siam/Thailand from the 1930s to 1950s as the focus of this thesis was not only a consequence but also a part of the action to achieve *Siwilai*.

Slightly different from the absolute monarchy's *Siwilai*, the term as conceived by the new regime still involved indefinite meanings, relating to wealth, power, territory, monogamy, gender equity, dress, cleanliness, etiquette, and mechanisation: all things which constituted the 'achieved stage of development and progress'.[2] Not unlike the old regime's *Siwilai*, it was also widely claimed by the new elite and the emerging middle class as a necessary achievement to get Siam recognised by the international community. This leads to one of the most important points: that *Siwilai* was always a relative term. It was inseparable from the West.

[1] The key book is Wyatt, *Thailand: A Short History*. Literature written in the first half of the twentieth century never mentioned 'modernisation' as a theoretical subject. It, however, dealt with other contemporary notions it was acquainting with, for example, 'civilisation' as being set to be a hegemonic goal, following European model, of every country seeking for progress. See, for example, Campbell, *Siam in the Twentieth Century: Being the Experiences and Impressions of a British Official*.
[2] See Thongchai Winichakul, 'The Quest For "Siwilai": A Geographical Discourse of Civilizational Thinking in the Late Nineteenth and Early Twentieth-Century Siam', *Journal of Asian Studies*, 3 (2000), 528–49.

Most of the time, the Siamese elite and thinkers preached that Siam should be as *Siwilai* as *Araya Prathet* (civilised countries) or *Maha Prathet* (great nations). An equivalent term to *Siwilai* was *Araya*, also translated as civilised, from the root of the Sanskrit word 'Aryan'. Both were used interchangeably in the new elite's propaganda, but the new term becoming more popular later. In order to achieve the state of *Araya* effectively, it was seen by Phibunsongkhram as necessary to impose nationalist campaigns and authoritarianism, especially at a time when the majority of the people was seen by the elite as having no idea about what would constitute the stage of *Araya* and even what was the point of it.

The other term that bore a similar meaning to *Siwilai* and *Araya* was *Khwam Charoen*. A question particularly regarding *Khwam Charoen* was, however, raised as the term was thought to be divided into *Khwam Charoen Thang Watthu* (material *Khwam Charoen*) and *Khwam Charoen Thang Chai* (mental *Khwam Charoen*). In the article, *Are we the people who are Charoen?*, published in Chulalongkorn University's journal in 1940, Rotchanaburanon pointed out that the material aspect of *Khwam Charoen* was large and strong buildings, fortresses, cars, railways, ships, submarines, aeroplanes, film, radio, telephone, a road system, etc., but all of these were not enough to make people surrounded by become people who were *Charoen*.[1] He pointed out the situation in Spain, that people were using this material *Khwam Charoen* for killing each other. He argued that people who were *Charoen* needed mental *Khwam Charoen* that could be grown by factors like culture, tradition, surroundings, social life, economy, etc. He continued to point out that eastern cultures like India and China had been *Charoen* before the West. Siam had also absorbed those *Khwam Charoen* before. But when it stopped developing, Siam also stopped and closed itself from the outside world. In the meantime the West developed itself and became much more *Charoen*. He, however, pointed out that cultures with *Khwam Charoen* also had *Khwam Suem* (degeneracy). The point was that the West had *Khwam Charoen* more than *Khwam Suem* now, but Siam seemed to have been absorbing the West's *Khwam Suem*, such as beer halls, dance halls, and gambling, more quickly than absorbing *Khwam Charoen*, in the form of culture, science, arts, literature, and charity associations.

[1] Pui Rotchanaburanon, '*Rao Pen Phu Charoen Rue Mai* (Are we civilised people?)', *Maha Witthayalai* , 1 (1940), 4–9.

With the goal to achieve the state of *Siwilai*, *Araya*, and *Khwam Charoen*, especially the good aspects, not degenerate ones, nationalist campaigns were seen as the tools to reinvent the nation. They targeted every aspect of the citizens' lives, ranging from how to speak, dress, eat, sleep, work, and live, including spatial practice — which was certainly related to architecture: for example, how to sleep on a bed, not on a floor as tradition demanded. State edicts were issued to encourage and later to enforce the campaigns from 1939 to 1942, and they became more strictly enforced during the war years.

The first edict declared the change of the country's name from Siam to Thailand, and the Siamese therefore became the Thai, in order to promote the idea of the nation's racial unity.[1] Chewing betel nuts, one of the most common habits of the majority, was discouraged in 1941 as the government not only declared it unhealthy but also condemned it an uncivilised habit leading to a bad image.[2] Despite the hot and humid climate, a dress code stressing the use of hats and shoes, and including western style suits for men, was prescribed in January 1941, followed by a royal decree prohibiting the use of loose garments, or of sitting and taking a bath on the street, both of which were considered undermining of the nation's dignity.[3]

While well-to-do middle classes could enjoy the latest fashions, the urban poor and rural population found the imposition of the dress code difficult, and therefore they always resisted it.[4] Other edicts encouraged people to pay respect to the national flag, to sing national and royal anthems, to be literate, to eat no more than four meals a day, to sleep six to eight hours, to have no more than an hour's lunch break, to spend evening time with family and friends, and free time on study, to go to the cinema, play sports, and to attend Buddhist temples. By issuing such edicts and decrees Phibunsongkhram claimed: 'whatever we have that is good we

[1] '*Ratchakitchanubaeksa* (The Royal Thai Government Gazette)', vol 56 (1939), p. 810.
[2] '*Thot Khong Kan Kin Mhak* (Disadvantages of Chewing Betel Nuts)', *Khao Khosanakan*, 8 (1941), 1794–95.
[3] '*Kamnhod Watthanatham Sueng Prachachon Chao Thai Tong Pratibat Tam* (Cultures that the Thais have to follow)', *Khao Khosanakan*, 10 (1941), 2326–28.
[4] '*Rabiab Kan Taeng Kai Satri* (Dress Codes for Women)', *Khao Khosanakan*, 9 (1941), 2294–99; '*Kuad Khan Kan Songsoem Watthanatham* (Enforcing the Encouragement of Culture)', *Khao Khosanakan*, 4 (1942), 548–49.

will keep; whatever we do not have but others possess that is good, we will adopt for our own needs'.[1]

Not unlike what has been discussed before about the absolute monarchy's selections in adoption and adaptation of western culture, the matter of what was 'good' and what was 'needed' was ambiguous and problematic, and depended on who was choosing it — who was in control and who controlled. In this case, the one in control was no more the absolute monarch but Phibunsongkhram, the '*Than Phunam* (leader)', equivalent to the Nazi *Führer* and Italian fascist's *Il Duce*, who believed he knew best how he should lead his country in this challenging time. But what was different between the practice of the absolute monarchy and Phibunsongkhram in adopting and adapting western culture was that Phibunsongkhram's practice was far more authoritarian and was intended to apply to all citizens, unlike the voluntary code limited only to the upper social strata under the absolute monarchy.

All the nationalist campaigns were promoted not only for the sake of physical and mental reform of the citizens to progress towards *Araya* but also so for that they could help the Thais to represent their 'face' among international peers. In this respect, Mulder has pointed out that Thai society has been an archetypal presentational society.[2] And Buddhist orientations to impermanence have perhaps helped the Thais to shift between contexts easily and skilfully.[3] But these were done under the consent of the ruling elite, no matter whether under the absolute monarchy the Peoples' Party, who had to make sure that the shifting between contexts only helped them to achieve their cultural and political agenda and did not undermine their status quo.

[1] Bangkok, National Archives of Thailand, (2) S R 0201.92.1/5 (State Edicts) Quoted in Kobkua Suwannathat-Pian, *Thailand's Durable Premier: Phibun through Three Decades, 1932–1957* (Kuala Lumpur; Oxford: Oxford University Press, 1995), p. 116.
[2] Mulder, *Inside Southeast Asia: Religion, Everyday Life, Cultural Change*, p. 159.
[3] Penny Van Esterik, *Materializing Thailand*, Materializing Culture (Oxford: Berg, 2000), p. 96.

Figure 4.1.2: Plaek Phibunsongkhram[1]

Figure 4.1.3: State propaganda under Phibunsongkhram's regime encouraging citizens to reform their habits. It reads 'For the great Thai nation, we should improve eating, sleeping, dressing as follows.'[2]

[1] 'Nation-Building and the Pursuit of Nationalism under Field Marshal Plaek Phibunsongkhram', http://2bangkok.com/06-nationalism.html [accessed 19 July 2013].
[2] Ibid.

Figure 4.1.4: A poster indicating how citizens should and should not dress[1]

[1] 'Nation-Building and the Pursuit of Nationalism under Field Marshal Plaek Phibunsongkhram', http://2bangkok.com/06-nationalism.html [accessed 19 July 2013].

Figure 4.1.5: Ladies' clothes for 'normal outing' (left) and for 'strolling in the morning' (right) awarded in the competition on the National Day 1942[1]

[1] *Khao Khosanakan*, 7 (1942), unnumbered p. 8.

As regards industry, the state edict No.5 encouraged people to use products that had been domestically produced.[1] Having realised that most commerce and enterprise had been in the hands of, or under the influence of foreigners, the nationalist government stimulated manufacturing and industries mainly by state-owned enterprises by 1940; something that not had been done since Siam's entry into the world's capitalist economy in the mid-nineteenth century.[2]

Once the Thai government promoted the industries, the goal was however never to develop the products' quality beyond that of imported ones. The promotion was rather based on necessity, due to the difficulties in importing goods caused by the war in Europe and to nationalist sentiment in reaction against the foreigners' trade monopoly in the country.[3] While agricultural and some industrial products

[1] '*Ratchakitchanubaeksa* (The Royal Thai Government Gazette)', vol 56 (1939), pp. 2359–60.
[2] Up to that time, Siam's economy had depended almost completely on rice exports with a small proportion of tin and teak, yet almost all the export business was done by Chinese and Europeans. The development of manufacturing could not had been undertaken before questioning Siam's pseudo-colonial status, for any attempt to alter the tax rates imposed by the West, or to expend the gains from the agricultural exports to invest in manufacturing, would had been seen as a challenge to the imperial powers' interest in supplying imported consumer goods. As regards the growth of rice production, while the land under cultivation had increased from 2.3 million acres in 1850 to 8.5 million acres in 1939, the productivity per acre had remained constant or even declined due to manual technology and regular crop failures. See Stephen A. Resnick, 'The Decline of Rural Industry under Export Expansion: A Comparison among Burma, Philippines, and Thailand, 1870–1938', *The Journal of Economic History*, 1 (1970), 51–73. A large-scale irrigation scheme proposed by Homan van der Heide, an enthusiastic Dutch engineer employed by King Chulalongkorn's royal government, which would had supported agriculture extensively for export at the turn of the twentieth century, had been turned down due to various factors. These included the influence of British financial advisors, the alternative priority of railway construction, the only minor advantage to be gained in irrigation by the elite, and the government's insufficient funds. See James Carlton Ingram, *Economic Change in Thail Nd, 1850-1970* (Stanford: Stanford University Press, 1971), 197; David B. Johnston, 'Rural Society and the Rice Economy in Thailand, 1880–1930', (unpublished doctoral thesis, Yale University, 1975); David Feeny, *The Political Economy of Productivity: Thai Agricultural Development, 1880–1975* (Vancouver: University of British Columbia Press, 1982), pp.81–82. Moreover, the profits from the rapidly flourishing export of rice had gone mainly to the Chinese who had owned almost all the 49 rice mills in Bangkok at the turn of the twentieth century. See Wright and Breakspear, *Twentieth Century Impressions of Siam: Its History, People, Commerce, Industries and Resources*, p. 146. The trade in rice from farms to the rice mills had also been almost entirely done by Chinese middlemen. See Chatthip Nartsupha, Christopher John Baker, and Pasuk Phongpaichit, *The Thai Village Economy in the Past* (Chiang Mai: Silkworm Books, 1999), p. 53. Domestic industries such as home spinning had been vanishing, displaced by imported goods. These situations stood in contrast to what was happening in Japan during the same period, where not only agricultural productivity but also the productivity per acre was increased due to improvement of technology. Heavy industries had been developed in Japan by the turn of the twentieth century, if not as rapidly as the improvement of smaller industries where so-called traditional entrepreneurship adopted new technology to improve the products. See Ayal, 'Value-Systems and Economic-Development in Japan and Thailand'
[3] '*Chuai Luea Phokha Phuea Ha Sinkha Ma Chamnai* (Supporting Merchants to Find Goods for Sale)', *Khao Khosanakan*, 1 (1940), 107. Furthermore, the action was far from smooth. An example was the government's attempt to establish a joint-investment in the sugar industry with the private sector prior to 1940: it proved unviable due to insufficient funds from the Thais, the government's unwillingness to sell shares to foreigners, conflict of interest among politicians, and the

were sufficiently available due to promotion, shortages of medicine, machinery, paper pulp, military equipment and weapons were unavoidable in the war time.[1]

Initially neutral, Thailand finally allied itself with Japan in World War II in December 1941, after some one-night clashes along Thailand's southern shores. Despite the claim by Phibunsongkram that his decision was based on necessity due to Japan's aggression, this decision did not occur without an opportunistic aim. By that time, Thailand had successfully amended its unequal treaties with western countries in 1938. With Japan's support, it had even gained territories in eastern Cambodia in January 1941 and later gained the Shan State in Burma in January 1942, and finally four provinces in northern Malaya in August 1943, all of which had been annexed by France and Britain during 1907 and 1909. This was made possible by the turbulence of the war in Europe, where the Nazis had already invaded France, and by the pressure from its ally Japan whose advances challenged western Imperial powers in Southeast Asia. The weakening of the West's influence in the region allowed Thai scholars to aggressively condemn the West in favour of Japan's propaganda about The Greater East Asia Co-Prosperity Sphere.[2] Despite some reluctance about the alliance, Phibunsongkhram's ultimate aim was to create 'The Great Thai Nation', covering areas in Southeast Asia that he perceived as the area exclusively inhabited by the ethnic Thai from ancient times.

After the end of the war in 1945 following the surrender of Japan, the plan of 'The Great Thai Nation' lapsed into a forgotten dream, but Thailand survived as a looser country, since the United States recognised the action of Free Thai, the underground organisation that had cooperated with the Allies contravening the country's war declaration. Phibunsongkhram survived a war crime trial, successfully defending himself on the grounds that he had led the country into alliance with Japan from sheer necessity. He even served as Prime Minister for a second term from 1948 to 1957 after a coup in 1947, with the support of a new generation of military leaders who were more conservative than those in the People's

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world's economic depression. See Nonthaphon Yumangmi, '*Namtan Mai Wan Khong Khanarat: Phap Sathon Kitchakan Kan Ruamthun Thang Thurakit Rawang Ratthaban Khanarat Lae Aekkachon* (The People's Party' Unsweet Sugar: A Reflection of the Cooperation between the People's Party and Private Sectors)', *Sinlapa Watthanatham (Art & Culture)*, 7 (2012), 102–11.

[1] Suwannathat-Pian, *Thailand's Durable Premier: Phibun through Three Decades, 1932–1957*, p. 150.

[2] See Sathiankoset, '*Angkrit Sang Khwam Chua Bon Chiwit Khon Asia* (England Does Harmfulness to Asians' Lives)', *Khao Khosanakan*, 2 (1942), 212–27.

Party and had overthrown the short-lived-liberal government of Pridi Phanomyong, one of Phibunsongkhram's colleague-turned-rivals in the People's Party.

Phibunsongkhram's second term did not continue his sole authoritative regime due to his need for support from the new generation of conservative military leaders. But it did see another attempt to develop the economy. Ports and railways were improved, dams, bridges and highways constructed, existing universities were enhanced, and the first regional one was established. But despite many development plans, massive corruption ensured that the overall economy was not much improved, the majority remained poor, and the gap between rich and poor was widening. [1] At the same time, the weakening democracy was gradually overshadowed by the return of sacredness, religion, and conservative ideology. [2] The new government revived nationalist campaigns both culturally and economically; but this time it promoted the conservative version of the country's three pillars, i.e. nation, religion, and monarchy, as introduced in the reign of King Vajiravudh (1910–25), which aimed at resisting Communism rather than radically establishing the Great Thai Nation.[3] 'High culture' was promoted by the newly established Ministry of Culture. Historic sites were restored; so-called traditional plays and music were promoted. This uneasy balance between the imported ideology of democracy and the deep-rooted conservative paradigm that Phibunsongkhram sought to use as an exit for the post-war difficulties, both for the sake of the country and for his own grip on power, not only impeded the possible development of democracy but also supported the conservative elite to assume power shortly afterwards.

Despite the promotion of national culture and Buddhism alongside the nationalist line, the monarchy was still downplayed until 1957, when most members of the People's Party, including Phibunsongkhram, were finally dismissed from Thai politics when the conservative military leaders and royalists finally achieved a decisive return to power.[4]

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[1] Suwannathat-Pian, *Thailand's Durable Premier: Phibun through Three Decades, 1932–1957*.
[2] Phinyaphan Photchanalawan, '*Prathetchat Phra Phutthasatsana Lae Ratthaban Kan Niyam Khwam Pen Thai Nai Kan Chalong 25 Phutthasattawat* (Nation, Buddhism, and Government: The Definition of Thainess in the Cerebration of the 25th Millennia of Buddhism)', *Sinlapa Watthanatham (Art & Culture)*, 33 (2012), 70–91.
[3] Suwannathat-Pian, *Thailand's Durable Premier: Phibun through Three Decades, 1932–1957*, p. 195.
[4] Charnvit Kasetsiri, *Prawat Kan Mueng Thai Siam Po So 2475–2500 (A Political History of Siam/Thailand 1932 - 1957)*, 5th edn, (Bangkok: The Foundation for the Promotion of Social Sciences and Humanities Textbooks Project, 2008), p. 22. After Phibunsongkhram was ousted by the coup of 1957, the country entered a new era of economic and industrial development from 1957 to

Architect as a nation builder

Under the circumstances of the turbulent decades after 1932, the built environments of the country, among other things, was seen by the new regime as a tool to build a new Thai nation. It was aimed to help the nation to achieve the stage of *Siwilai*, *Araya*, *Khwam Charoen*, etc, all of which would constitute a particular kind of modernity chosen by the new regime.

The government pursued this idea by appointing a Town Planning Committee in 1938.[1] Town planning works at the time were mostly urban designs, such as plans for the area surrounding temples, city halls, and government offices, and plans for areas previously destroyed by fire that focused on orderliness and beauty.[2] By 1940, the Department of Municipal Works had already laid out the overall plans for fifty seven municipalities nationwide.[3] But these were far from comprehensive, as the detailed plans and regulations for the real implementation left much still to be done, and they needed 'patience and compromise'.[4] The principles of the urban plans were 'hygiene, economy, humanity, beauty, usefulness, and orderliness'.[5] However, at least two detailed implementations were executed in Lopburi Province and Yala Province. The first was especially intended by the paramilitary Prime Minister Luang Phibunsongkhram to be a new town for the expansion of the army.[6]

1973 under a new royalist military dictatorship supported by the USA, who sought to prevent Communism in the region. Thailand participated in the Korean War and the Vietnam War in alliance with the USA. During the latter war, US Air Force bases and 50,000 American soldiers were located in the country. Apart from the 935 million-US dollars aid for the Thai army between 1951 and 1971, a further 650 million were donated by the US to support the economy between 1950 and 1977, 75% of which was used for constructing road networks in order to suppress the communist insurgency. Amidst this change, a new period of modern architectural culture in Thailand started. And this thesis will form a foundation for further research on this period and beyond.

[1] Ladawan, '*Phra Sarot Rattananimman* (Sarot R. Sukkhayang)', p. 141.

[2] Chaloem Kaewkangwan, '*Patchai Thi Thamhai Phang Mueng Thai Taektang Chak Phang Mueng Nai Prathet Phatthana Laew (Amerika)* [The Factors Making Thailand's Urban Planning Different from That of Developped Countries (USA)]', *Warasan Krom Yothathikan Lae Phang Mueng*, 10 (2010), 32–37 (p. 33).

[3] Phraya Prakitkonlasat, '*Lakkan Phangmueng* (Principles of Town Planning)', Yothathikan, 2 (1940), 11.

[4] Ibid.

[5] Ibid.

[6] See Thanaporn Tiamsrirutchaneekorn, '*Phon Khong Kan Phatthana Mueng Phaitai Itthiphon Kan Phang Mueng Tawantok Korani Sueksa Mueng Lopburi* (Effectiveness of Urban Development under Western Urban Planning Influence: A Case Study of Muang Lop Buri)', (unpublished master's thesis, Chulalongkorn University, 2002).

In this situation, M. C. Itthithepsan Kridakorn started his first chapter in his book *About architecture*, published in 1934, by claiming that once the villages that had been composed of huts and barns, built by the villagers themselves, needed to be developed as more civilised towns, cities, or metropolises, their 'permanent construction' involving a 'civic aesthetic' should be the responsibility of architects and engineers.[1] Even though he did not specify the location of such villages, towns, cities, and metropolis, the fact that Siam had originally lacked cities in the sense of western cities, and the fact that permanent construction had been reserved only for Buddhist monasteries and palaces, other public buildings having only been introduced in recent decades, M. C. Itthithepsan was claiming the significance of architecture, architects, and engineers to civilise Siam.

This demonstrates that pioneering Siamese architects had a chance to prove their capability and promote their new profession. We will now examine how the architects worked under this situation, and how they finally strengthened their profession.

Foreign professionals in need

To start with, the fate of foreign professionals long associated with architectural practice since the period under the absolute monarchies will be discussed. Following his retirement after the 1932-revolution, Ercole Manfredi remained in Siam working as a private architect, cooperating with private companies. He cooperated with Christiani & Nielsen Ltd. from 1934 to 1936 and the Impresitor Company from 1937 to 1938.[2] The former was a Danish company, the latter was Italian. After that, he entered an academic career, teaching construction, acoustic design, studio, and history at the Faculty of Architecture, Chulalongkorn University, from 1939 to 1946. He also taught at the Signaling Division of the Royal Navy from 1944 to 1950.[3]

Manfredi retired from public life in 1950 and lived in Bangkok until his death on 9 June 1973.[4] His long stay in Siam/Thailand was marked by an adventurous

[1] M. C. Itthithepsan Kriddakara, *Rueng Kiaokab Sathapattayakam (About Architecture)* (Bangkok: Association of Siamese Architects, 1996), pp. 3–15.
[2] Bressan, 'Ercole Manfredi: One of the Great Architects of Bangkok (1883–1973)', p. 4.
[3] Ibid., p. 5.
[4] Ibid.

turn of mind, which seems to have retained throughout his life. It brought him to activities unusual for contemporary foreign architects, from the intimate intermingling with the local, to the exploration of archaeological sites. This quality, together with his competent service, provided him with opportunities and prestige in his career from the court of absolute monarchy to the university under the new regime. Tact and good manners were the characteristics needed by foreign expats in order to secure success in their careers in Siam from the mid-nineteenth century through to post-war periods.[1] Manfredi possessed such a character and could work well under both regimes.

The presence of Danish and Italian construction companies, at which Manfredi worked during 1934 to 1938, signifies the situation that, not unlike in the final years of absolute monarchy, many advanced projects in Siam/Thailand under the new regime still needed foreign expertise to accomplish. Manfredi's participations in those companies and his teaching jobs in the university might reiterate this situation even if we do not consider that he almost became a Siamese.

Another example of the persisting necessity of foreign professionals can be observed in the arrival of a Belgian, Lucien Coppé (1892–1975), in 1938. It correlated with that of many other Belgian architects who went to work in other Asian countries, especially China, and in the Belgian Congo, at the time of an economic crisis in Europe.[2] His main duty in Siam/Thailand lay in the architectural education just being established at the higher education level. The lack of availability of indigenous architectural professors made the government rely on another foreign professional. A detailed account of his contribution will be given in the chapter about architectural education in Siam/Thailand.[3]

The last foreign professional to be examined in detail is Charles Beguelin. The prestigious project of the Ministry and Court of Justice should have allowed him to exercise his Modernist ideas, if the absolute monarchy was to continue, but the project was shelved by the new regime. However, his willingness to work under the

[1] Kenneth T. Young, 'The specialrole of American Advisers in Thailand 1902–1949', *Asia*, 14 (1969), 30.
[2] Thomas Coomans and Leung-kwok Prudence Lau, 'Les tribulations d'un architectebelge en Chine: Gustavevolckaert, au service du Créditfoncierd'extrême-Orient, 1914–1954', *Revue belged'archéologie et d'histoire de l'art*, 81 (2012), 129–53 (p. 130).
[3] He also designed a few buildings; all of them apparently fell into a more conservative line of Modernism.

new regime met with sympathy as his expertise matched the new regime's ambitious plan to build a new nation. The plan initiated as early as 1933 was to lay out urban planning not only for cities but for the countryside, in order to make everything rationally ordered and hygienic, convenient for commerce and industry, and pleasurable for people.[1]

The government saw that most regional cities and the countryside did not have many permanent buildings; therefore it was suitable to lay out plans which would make the future cities convenient and imposing.[2] The problem was a lack of professionals in this field. Taking advantage of this situation, Beguelin, who had some knowledge on the subject by attending an urban planning course and winning three competitions back in Europe, managed to extend his contract from 1 April 1934 to 31 March 1935 after a previous one-year extension.[3]

It should be noted that, due to an administrative adjustment in March 1935, the urban planning jobs previously conducted by the Department of Public Health, were transferred to the Department of Municipal Works (*Krom Yotha Thetsaban*). Therefore Beguelin now served as *Nai Chang Yai* (Chief master builder) at the Department's Division of Architecture.

The government's aim at using Thai officials more, as they were paid a lower salary, however, resulted in its decision finally to terminate Beguelin's contract after its expiry date on 31 March 1935.[4] As Beguelin intended to have a seven-month holiday from 16 May 1934, the government allowed him to return home for good from that date and granted him one month extra salary (for the whole of May) with pension. The government's generosity proved its satisfaction with duties carried out through fifteen years. He had been already conferred the third class commander of the Order of the Crown of Siam by King Prajadhipok in 1931.[5]

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[1] National Archives of Thailand, S R 0201. 19/5.
[2] Ibid.
[3] Ibid.
[4] Ibid.
[5] 'Social & Personal', *The Straits Times*, 24 November 1931, p. 10. Beguelin returned to Switzerland and started a new job in 1936 at Hoch-und Tiefbau AG, Interlaken, a civil engineering company that had its root in parquet manufacturing and Swiss Chalet construction, where he served as director from 1941 to 1951. Starting in 1935, the company developed a prefabricated timber barrack design for the Swiss army that was produced in large numbers during World War II and exported to European countries and as far as Madagascar after the war. During his time there, the company also designed the Travel Pavilion at the Swiss National Exhibition, Zurich (1939), as well as interior spaces of ships,

Beguelin's long service in Siam was an outcome of a political conflict between Siam and France at the end of the nineteenth century that resulted in unequal agreements allowing Beguelin, together with other French professionals from teachers to sanitary engineers, to work in the subodinate Siam. Imperialism did well in distributing opportunities for both manufacturers and professionals whose products and skills were excessive for the metropoles. But Beguelin, as a civil servant and not a member of a colonising force, was well received by the local elite as a westerner who possessed knowledge that the country needed. As a result, he managed to get not only prestigious works from the state but also private commisions from the elite. He even managed to negotiate with clients to design in the style he liked. However, his privileges did not last forever. Despite being treated well by the new regime in the first place, he fell victim to spending cuts and the gradual takeover by local professionals, resulting in his departure.

Up-and-coming Thai professionals?

Not unlike the situations that foreign companies were still needed to build advanced projects, and that foreign professors were still needed to teach in university, the question was raised of which Siamese would be able to take over the job of town planning that Beguelin had started. Sarot Sukhayang, who had done the Civic Design Course as his additional subject at Liverpool, had already taken the position of the Director of Architecture Division at the Fine Arts Department in which he had a large workload. Luang Burakamkowit, who had been equipped with some sort of knowledge about town planning through reading and by his acquaintance with Beguelin in the Department of Municipal Works, should have been considered capable to some extent, but the problem was perhaps that he was not graduated from abroad and held no professional degree.

The issue about whether one had graduated abroad mattered to the Siamese government, no matter whether under the old or the new regime. Siamese who had graduated abroad always held a more-prestigious status. A line from a popular novel, *Khang Lang Phap (Behind the painting)*, a story about the love between a

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hangars, bridges, and railway stations. After fifteen years in Siam, Beguelin continued to practice in the Alps. See Scharz and Wyss, *Hoch- und Tiefbau AG Interlaken, 1850–1975* (Interlaken: Hoch- und Tiefbau AG), pp. 47, 49, 50.

Siamese student in Japan and a Siamese noblewoman published in 1937, demonstrates this situation:

> I believe you will successfully accomplish it [an intention to encourage Siamese to use free time with useful activities such as sightseeing] because you are *Nak Rian Nok* [students who are studying abroad or graduates from abroad]. The majority admire the *Nak Rian Nok*'s thoughts.[1]

The issue about whether one held a degree, especially that conferred from abroad, also mattered in contemporary Siamese society. In another popular novel, *Lakhon Haeng Chiwit* (The circus of life) based on the author, M. C. Akatdamkoeng Raphipat's, life, the likely situation of a person who returned from abroad without a degree is described:

> For Siam, ones who return from abroad without a degree would be inferior. […] Even though they might be able to get some sort of job, the salary would be very poor, almost inadequate to live one's life. No one would trust our [Siamese who returned to the country without a degree's] capability.[2]

This situation may explain why the government finally decided to employ another foreign professional in town planning. It set up the Division of Urban Planning in the Department of Municipal Works and called for applications from foreign experts in August 1935.[3] After its establishment, Luang Burakamkowit was given a chance to become the only town planning expert in the division, possibly before it acquired a foreign expert. By the end of 1935, he had published a series of articles in the *Journal of the Association of Siamese Architects*, introducing town planning to Siamese readers, demonstrating his capability even though he had not graduated abroad. Texts about town planning in English, i.e. *Site Planning in Practice*, *The Art of Town Planning*, *Town Planning and Town Development*, and *The Planning of the Modern City*, were referred to.

[1] Sri-Burapha, *Khang Lang Phap (Behind the Painting)* (Bangkok: Dokya, 1986), p. 102.
[2] Ibid., p. 181.
[3] Bangkok, National Archives of Thailand, S R 0201.19/38 (Call for Applications from Foreign Planners)

As the government intended to employ only a planner who could accept a 'reasonable' salary, it was not until 1937 that the division got Francis Ruy, a former planner from Paris Municipality, to take the position.[1] In the same year, supported by the government, Burakamkowit had completed his eight-month-journey to Singapore, Japan, Europe, and the United States to observe how town planning, sanitary works, and building construction were carried out. After his return, he was transferred to the newly established Bangkok Municipality as town planning expert, participating in the issuing of Town Planning and construction regulations. After the war, he became the right hand of Plaek Phibunsongkhram, the nationalist Prime Minister serving his second term, and helped the premier to deliver construction projects.

It has been demonstrated that, despite a clear intention to prioritise the employment of Siamese rather than foreign expats, the Siamese elite still preferred 'original' and 'professional' people with real experience and knowledge. This resulted in a contradiction between maintaining the highest priority in employing foreign expats and a concern for cost. And this, therefore, resulted in their compromise to employ not the best expats, but those who accepted the 'resonable' salary that the government of a small country experiencing an economic recession could offer. The second priority was then placed upon employing Siamese who had graduated from abroad and were assumed to have experienced 'original' training and knowledge — not to mention the increase in status in relation to those without a degree from overseas. In these circumstances, Burakhamkowit's case was extremely rare for an official without a degree as most technicians, who shared the same background but were less competent and ambitious, could not assume positions higher than draughtsman.

There were, however, some exceptions for those who held no degree but possessed knowledge and skills both in modern and traditional construction, such as Luang Wisansilpakam and Phra Phromphichit. The former served as headmaster of the government's Uthaen Thawai Construction School from 1934 to 1935. The latter worked at the Department of Fine Arts cooperating extensively with architects

[1] Ibid.

who had graduated from abroad to deliver modern building designs with national character. But, again, this was a rare case.

Apart from the fading and remaining foreigners and master builders without a degree, there was also a new group of practitioners graduating from the first school of architecture in Siam, where most of the pioneering generation of Siamese architects taught. Therefore, the teachers became the bosses by default in the first place. It was not until the teachers and bosses retired in the second half of the 1950s that the graduates, some of whom continued their education in Modernist schools abroad, together with other newcomers who had graduated with their first degree from Modernist schools in USA, were in the position to propose some changes.

It is timely now to examine the career of the pioneering Siamese architects who became dominant in the architectural field in the post-1932-revolution period. Their high positions in practice inevitably made them engage with the political changes no less than any other group discussed above.

M. C. Itthithepsan Kriddakorn, the Beaux-Arts graduate who had returned to Siam in 1916, was now the most senior Siamese architect, but his career in the post-1932-revolution period was as bad as his ailing health. The Fine Arts Institute, where M. C. Itthithepsan had served as Director, was dissolved by the new regime. Following the announcement of the Royal Decree of Public Regulations for Offices and Departments within the Minister of Public Instruction on 23 May 1933, the new regime re-established the Fine Arts Department within the Ministry of Public Instruction, which already had the Division of Architecture in it.[1]

M. C. Itthithepsan was prevented from serving as Director in the newly established department. An anonymous letter written in English to the new government briefly after the 1932-revolution suggested that it should not offer him the job, accusing him of:

[1] Bangkok, Natioanl Archives of Thailand, S R 0201.14/2 (Vocational School Programme)

> … not being able to conceive what his plans and ideas would look like, the Prince has always to construct, to pull down and to rebuild his works half a dozen times […] a notorious money-waster.[1]

Opposite to the career of M. C. Itthithepsan was that of Sarot Sukkhayang, the Liverpool graduate and the second most senior in the circle of Siamese architects educated abroad, now known by the ennobled title of Phra Sarot Rattananimman. He served as the Director of Architecture Division at the Fine Arts Department, Ministry of Public Instruction in 1933, just as M. C. Itthithepsan missed the chance to do so. Sukkhayang went on to be one of the most prominent architects of Siam/Thailand in the first decade of the new regime.

Sukkhayang's career was well supported by the new regime's ambitious plan to employ art and built environments to build a new nation. As the Director of the Architecture Division, he helped Prof.Corado Feroci, an Italian sculptor and another foreigner remaining in the country after the 1932-revolution, to establish Siam's first fine art school, instructing Fine arts, Industrial arts, and Performing arts in 1935.[2] Feroci's initiation had been planned for long time, but had not been supported by the royal government or by M. C. Itthithepsan who had served as the Director of Fine Arts Institute. At the school, Sukhayang became the first director and taught Architecture and Art history.[3]

Sukkhayang was a member of the Town Planning Committee in 1938.[4] He was also a member of the National Housing Committee (*Khana Kammakan Akhan Khong Chat*) in 1939. The committee was established following the suggestion of the League of Nations in order to exchange knowledge and cooperation on housing construction, domestic hygiene, urban zoning, and building standards.[5] He became a special-ranked architect at the Fine Arts Department in 1941 and a visiting professor at the Faculty of Architecture, Chulalongkorn University, teaching Town

[1] Bangkok, National Archives of Thailand, S R 0201.8/2 (M. C. Itthithepsan)
[2] Khian Yimsiri, '*Sattarachan Silpa Bhirasri* (Professor Silpa Bhirasri), ed. by Silpakorn University (Bangkok: Art & Culture Department, Silpakorn University, 2012), p. 7.
[3] Ibid., 4. See also Kritsana Honguthaen, '*Sattarachan Silpa Bhirasri and Mahawitthayalai Silpakorn* (Professor Silpa Bhirasri and Silpakorn University)', http://www.psgartgallery.su.ac.th/gallery/bhirasri2_1.htm [accessed 17 July 2013].
[4] Ladawan, '*Phra Sarot Rattananimman* (Sarot R. Sukkhayang)', p. 141.
[5] Bangkok, National Archives of Thailand, (2) S R 0201.21/42 (The National Committee of Buildings)

Planning from 1943 to 1948.[1] He retired in 1948 but still taught at the university until 1950.

The fall of M. C. Itthithepsan Kriddakara's career and the rise of Sukkhayang's might have given the impression that members of royal families found difficulty in their career under the new regime. But this was not the case when we consider the career of M. C. Samaichaloem Kriddakara, M. C. Itthithepsan's half-brother. M. C. Samaichaloem moved from the Ministry of the Royal Household to be an architect in the Section of Craftsmen (*Mhuad Chang*), Division of Architecture, Fine Arts Department from 1935. He became the Director of Design Sector (*Huana Phanaek Okbaeb*) in the same division in 1940. After Sukhayang assumed the senior position as special-ranked architect at the Fine Arts Department in 1941, M. C. Samaichaloem succeeded to his previous position, the Director of the Architecture Division in 1942. He became the Dean of the Faculty of Sculpture, Silpakorn University (previously the School of Fine Arts, which Sukkhayang had helped to establish) in 1944. Following the path of Sukkhayang, M. C. Samaichaloem assumed the position of special-ranked architect at the department in 1950. In the same year, he became the Interim-director-general of the Fine Arts Department, now in the Ministry of Culture. In 1951 he became the special-ranked architect at the Division of Handicrafts, Fine Arts Department, Ministry of Culture, and in 1958 he became the Dean of the Faculty of Decorative Arts, Silpakorn University. M. C. Samaichaloem's career lasted long enough to experience the return of the monarchy as the country's main institution, supported by the conservative military regime that assumed power in 1957. In 1962, M. C. Samaichaloem served as a consultant at the Bureau of the Royal Household, designing Phu Ping Palace, the King's retreat in Sakhon Nakhorn Province.

Other descendants of the royal family whose careers went well under the new regime were M. C. Vodhyakara Varavarn and M. C. Prasomsawat Suksawat. They both worked as architects at the State Railways of Thailand and taught at the architecture school. M. C. Vodhyakara went on to be Head of the Architecture Department in 1949 and the Dean in 1954.

[1] Ladawan, '*Phra Sarot Rattananimman* (Sarot R. Sukkhayang)', p. 136.

Another important figure in the architectural field after the 1932-revolution was Nat Phothiprasat. After his contribution in the establishment of the first school of architecture at Chulalongkorn University, Phothiprasat was transferred to be the Director of the Division of Architecture, Department of Public and Municipal Works in 1934. He replaced Beguelin whose contract had terminated, for the government wanted to use a Siamese rather than to continue the foreigner's contract. Phothiprasat was seen as suitable for the job as he held an Honours degree in architectural construction, and received, apart from his RIBA certificate, professional certificates in structure and sanitation from Britain. He taught at the architecture school on a part-time basis from 1934 to 1951. He finally returned as a full-time staff member at the Faculty of Architecture, Chulalongkorn University, in 1954, but suddenly died in the same year after his participation in the change of the curriculum to follow the Bauhaus model.

The last important Siamese figure was Mew (Chittrasen) Aphaiwong, whose name appeared in charge of some of the most important projects by the new regime. However, his life was obscure. He did not seem to participate in the professional circle and never taught at the school of architecture. The little information available about him was that he worked at the Crown Property Bureau, established by the new regime in order to manage confiscated royal property. This was probably the reason why he was in charge of the regime's important projects, many of them owned by the Bureau. He was also the half-brother of Kuang Aphaiwong, an important member of the People's Party, which may have led to Aphaiwaong's participation in other important projects of the regime. Unfortunately, when the construction of Chaloem Chat Theatre at Mitsakawan Garden, in which he involved as site-architect, partly collapsed in June 1942, Aphaiwong was convicted of corruption and then evicted from his job at the Crown Property Bureau.[1] He left for France after the war and returned to Thailand again in 1947. There was no evidence of his involvement in any significant project afterwards, perhaps because he had been discredited by the corruption scandal.[2]

[1] Bangkok, National Archives of Thailand, (2) S R 0201.69/16 (The National Theatre Project)
[2] See Aphaiwong's biography in Chatri Prakitnonthakan, '*70 Pi Dom Thammasat Lae Kanmueng (70th anniversary Of the* Dome of University of Moral and Political Sciences)' in *Thammasat University Archive Bulletin*, 10 (2007), 28.

It has been shown that the nation building policy of the new regime provided positive opportunities for the architectural profession in Siam. Even though foreign experts were still needed in some particular fields, Siamese architects who graduated from abroad gradually took key positions in most of the government offices. The architects' main task now was to reinforce their profession's dignity as perceived by the government and the public. A related task was to differentiate their profession from mere *Chang* in a traditional sense, and also from engineers. The architect was to be considered a professional with a degree at higher education level or was proved to have equivalent knowledge.

Previleging the profession: The Association of Siamese Architects

One way to assist the differentiation of architects from others was to establish their professional association, to which only qualified members could be admitted. M. C. Itthithepsan, as the most senior Siamese architect to graduate from abroad, and the one requested King Vajiravudh to translate the term architect to the Thai word *Sathapanik* could not help being one of the most active persons in establishing the association. Even though his career was cut short after the 1932-revolution, M. C. Itthithepsan did help junior fellows to establish the Association of Siamese Architects in 1934. He, however, rarely participated in the association's activities in public as he defined himself as *persona non grata*.[1] Despite the unknown origin of the anonymous letter accusing M. C. Itthithepsan of wasting state money, this incident, and the subsequent employment of Sukkhayang as the Director of Architecture Division, Fine Arts Department, probably soured the relationship between these two senior architects. In a letter to Luang Burakamkowit, in which M. C. Itthithepsan promised to attend a meeting to discuss about the establishment of the Association of Siamese Architects on the 24 December 1933, he mentioned that Sukkhayang would be absent — a scenario described by him as 'weird'.[2] After the establishment of the association in 1934, M. C. Itthithepsan died in the same year, at the untimely age of 45.

The newly established association had Sarot Sukkhayang as the first president. Nat Phothiprasat served as treasurer and its journal's first editor. The

[1] See a letter written by him in Thatsani, '*Khwamlang* (The Past)', *ASA* (1959), 1–29 (p. 27).
[2] Ibid.

founding members were almost all Siamese architects who had graduated abroad, except for the enthusiastic Burakamkowit, the non-degree-master builder, who actively helped the architects who had graduated abroad to set up the association. It gradually acquired more members from the professional field and junior members from the architecture school. Apart from those two types of member, it proposed another type of member, associate members, who would have to take an exam before admission, so that the association could secure its '*Witthaya Thana* [knowledge status]'.[1] It aimed to secure the rights to sign building permission drawings only for its members when the government was ready to issue the Act of Construction Control.[2]

The association halted its operations in 1941 due to World War II, and also the publication of its journal. It started again in 1945. M. C. Vodhyakara Varavarn was the president in 1946. Nat Phothiprasat took the position in the following year. Even though the Act of Construction Control had been issued since 1936, a Bill of Architectural Profession was only issued in 1955.[3] The Act of Architectural Profession was not finally issued until 1965.[4]

Pioneering continued: Post-war situation

At the large scale, the development of town planning and building regulations went on slowly in the pre-war years. After the war, the economy was still not good and a lot more urban problems had yet to be solved. The supply of Thai professionals in the field seemed never adequate, not to mention that the understanding of their profession by the public was still not widespread. An Nimmanhaemin returned to Thailand in 1948 after finishing his Architectural and planning Degree at Liverpool and Harvard. During one year of his position as Head of Urban Planning and Sanitary Works at the Department of Municipality Works, he had to design stalls, public toilets, ponds, markets, other buildings, and laid out the

[1] '*Lekhathikan Thalaeng* (Announcement of General Secretary)' *Lekhathikan Thalaeng* (Announcement of General Secretary)', *Chotmaihaet Samakhom Sathapanik Siam (The Journal of the Association of Siamese Architects)*, 2 (1934), 2.
[2] Ibid.
[3] '*Khao Muan ASA* (News of ASA Members)', *ASA*, 1 (1957), 131.
[4] Pan Aek Luang Burakamkowit, '*Khwam Rusuek Thi Yhak Cha Rabai* (The Feeling I Want to Tell)', *ASA*, 2 (1966), 19.

plans of more than twenty municipalities.[1] He was even commanded by his boss to lay out a plan for Bangkok within three days, with only an old map survey of twenty years ago as his data in hand. Fortunately, the plan was not implemented, as the boss did not agree with his design and requested another planner to work in the office. Nimmanhemin then left the department for the Faculty of Architecture, Chulalongkorn University in 1950.

The first Town and Country Planning Act (*Phra Ratchabanyat Phang Mueng*) was issued in 1952 despite initial moves as early as 1921.[2] It indicated the ways projects for new towns or parts of towns should be built from scratch or regenerated after disasters such as fire.[3] This was aimed as a substitute for ad hoc Acts for particular areas, previously issued to assist town planning works. At the same time, more students sent to study Urban Planning abroad came back to serve in several governmental offices, their number still disproportionate to the amount of work waiting for them. Sophak Komalakun Na Nakhon, an urban planner who graduated from Cornell and worked at Thonburi Municipality, stated in 1957 that urban planning was a long-term matter which needed thorough study before an implementation, and was more difficult in eastern countries than in the West because of 'the high rate of population increase, the backwardness of the people, the inadequate budget, and the lack of understanding of urban planning'.[4] No better than the situation of the professional, the Town and Country Planning Act itself lacked clear definition in some parts, and also funding to support the projects guided by it.[5] In 1957, the government brought in Litchfield Whiting Bowne & Associates, an American firm, to survey and plan Greater Bangkok. The 'Greater Bangkok 2533 (1990) Plan' was then issued, covering a 30-year comprehensive plan for Bangkok's land use, transportation, communication and infrastructure. This plan also highlighted the incapability of the existing Town and Country Planning Act that

[1] An Nimmanhaemin, '*Khwam Plianplaeng Khrang Yingyai Nai Khana Sathapat Thi Khaphachao Dai Ru Haen Ma* (The Great Change in the Faculty of Architecture That I Have Known)', *ASA*, 2 (1958), 22–27.
[2] Burakamkowit, '*Khwam Rusuek Thi Yhak Cha Rabai* (The Feeling I Want to Tell)'.
[3] Ibid.
[4] Sophak Komalakun Na Nakhon, '*Phang Mueng Khue Arai* (What is Town Planning)', *ASA*, 1 (1957), 9–22 (pp. 10, 14).
[5] '*Kan Phang Mueng Khong Prathet Thai Panha Lae Kan Kae Khai* (Town Planning in Thailand: Problems and Solutions)', Department of Urban and Regional Planning, Faculty of Architecture, Chulalongkorn University, http://www.cuurp.org/B_resource/B_data/articles/2553_01-URP_NT140410%20x.pdf [accessed 15 July 2013]

lacked long-term consideration, control of private sectors, and a mechanism to promote cooperation among public sectors; all of this would obstruct the implementation of the Greater Bangkok Plan. As a result, the government appointed a committee to revise the law in order to include both the comprehensive plan and particular projects in 1959. The revised Town Planning Act was finally issued in 1975.

Conclusion

The foundational period of Siam/Thailand's architectural profession was far from smooth due to the large amount of work, the limited budget provided by the state for projects, and the war. But during this difficult time, its members tried to introduce 'architecture' to the public and to declare the architectural profession's significance and dignity in the public realm. They tried to reassure the public that Siamese professionals were as capable as foreigners, whom the country could not afford to hire any more. At the same time, they tried to differentiate architects from engineers and contractors. They tried to position architects as a particular kind of *Chang*, whose duty was not just drawing luxurious design for pleasure, like *Chang Hatthakam* (craftsmen), but creating a civilised environment with aesthetics and an economical process.[1] The best vehicle to examine how they did these things in the contemporary context, and how the ideas and principles about architecture gained from Europe were localised to suit the local context, is through an examination of the professional association's publications started right after its establishment in 1934, alongside other architectural writings in other press by members and non-members.

[1] Kriddakara, *Rueng Kiaokab Sathapattayakam (About Architecture)*, p. 27.

4.2 Writing about architecture: Architectural publication in Thailand, 1930s–1950s

> Architecture benefits politics. It constitutes a firm nation. It draws citizens and commerce together. It makes citizens love their hometown. This love immensely benefits the public. […] Town planning should therefore be performed with aesthetics and that means it should be done by architects.[1]

The statement above by M. C. Itthithepsan Kridakorn, originally published in 1934, captures perfectly what the author wanted architecture to mean in the time of nation building and suggests who should be responsible to create architecture. Even though King Vajiravudh had granted the Thai term *Sathapattayakam* for the word 'architecture' and *Sathapok* (later becoming *Sathapanik*) for 'architect' by 1920, he had not defined their definitions in Thai. Certainly, it was not the duty of the King but for the pioneering Siamese architects to do so. M. C. Itthithepsan Kridakorn also pointed out that the definition of architecture in the English dictionary, which was 'the art and science of building' was still not enough as its main idea was still 'building'.[2] He proposed that a more accurate definition should be 'the wise art and science of building executed with artistic quality', in which the main point lay on the design process involving planning and artistic quality.[3] After M. C. Itthithepsan's proclamation, more writings were produced to constitute the definition of architecture and the role of architects in Siam.

Localising 'Architecture'

Right after its establishment in 1934, the Association of Siamese Architects published *Chotmaihet Samakhom Sathapanik Sayam (The Journal of the Association of Siamese Architects)* to educate its members as well as the public about architecture and architects. The contents in this early period were mostly basic ideas about architecture and practice, as the topic was new to the Siamese. Contributors tried mainly to point out the importance and necessity of having

[1] M. C. Itthithepsan Kridakorn, *Rueng Kiaokab Sathapattayakam (About Architecture)*, p. 11.
[2] Ibid., p. 17.
[3] Ibid., p. 18.

architectural practice to assist the development of the civilising nation.[1] Architectural competitions, education, fees, and urban planning were also discussed.

From time to time, issues were raised about the appropriateness of applying modern practices and technology to the local context, as well as the possibility and necessity of reviving and developing what were considered as traditional arts and architecture in the contemporary context.[2]

At the same time, there were two other journals, *Khao Chang* (*Chang*'s news = Builder's, craftsmen's, and technicians' news), and *Silpakorn* (Fine Arts), in which some writings regarding architecture were published occasionally. The former was a journal about construction, engineering, and crafts, as people who practised such works were still widely known by the traditional term '*Chang*'. The second was published by the Department of Fine Arts and therefore covered all artistic areas. However, these three publications were produced at a time of a great economic difficulty, and other fields such as publishing and architectural education were not yet at an advanced stage of development. The journals rarely had pictures, as they were very expensive to print. The distribution of the *Journal of the Association of Siamese Architects* outside the circle of the limited number of members of the association was unlikely, as it was only available through subscription.

As the most senior of all Siamese architects who graduated from abroad, M. C. Itthithepsan Kridakorn remained at the forefront of the establishment of the association, despite in the decline of his professional career after the 1932-revolution. He published a series of articles about architecture in the *Journal of the Association of Siamese Architects* right from the start. They were later combined in the volume *Rueng Kiaokab Sathapattayakam (About Architecture)* and published in 1935 for distribution at his funeral.

[1] See an example in Chuea Kumarat, '*Pruetthitham Lae Khunkha Khong Sathapattayakit* (Virtue and Value of Architectural Practice)', *Chotmaihet Samakhom Sathapanik Sayam (Journal of the Association of Siamese Architects)*, 4 (1935), 10–13.
[2] See an example in Sarot Rattananimman, '*Khonkrit* (Concrete)'.

Figure 4.2.1: Pages from the second issue of *The Journal of the Association of Siamese Architects* (1934). [1] **Drawings and photos were rare in early publications about architecture up until the World War II.**

[1] *Chotmaihet Samakhom Sathapanik Sayam (The Journal of the Association of Siamese Architects)*, 2 (1934), 9.

About Architecture can be considered the first text book about architecture written in Thai. M. C. Itthithepsan proposed to introduce a range of basic ideas about architecture and architects, such as the value of architecture and architects' roles and ethics, following the modern model he had learnt from Europe. But he tried to adapt these ideas to suit the contemporary situation of the country's backward construction industry and the uneasy establishment of architectural education.

The first chapter entitled '*Sathapattayakam* (architecture)', shows M. C. Itthithepsan dealing with both difficulty and complexity in the transplantation of this new concept from Europe to Siam. Firstly, he encouraged architects towards a new understanding and appreciation of 'architecture' in a contemporary society that, as discussed in the previous chapters, had profound appreciation of buildings, both residential and public, as the symbolic representation of status and modernity. This is not to say that the Siamese were unsophisticated in artistic aspects, but as discussed in previous chapters, western style buildings had been used to exhibit the owners' status and a modern image rather than to serve an intrinsic appreciation of the new art. Appreciation of the new art had been limited to a narrow circle of artistic elite and scholars such as Prince Naris, who was familiar with the work of Italian architects. Even though the new 'art' that was presented by the buildings' shells and type of planning was adopted, the Siamese perception of the buildings and their spaces remained largely unchanged — some transformation notwithstanding.

Secondly, a complexity lay in the word 'art' itself, which was not to be separated from 'architecture' according to M. C. Itthithepsan. He argued that the two types of '*Sin* (art)' that changed 'savage' nature to 'civilised, pleased, delighted, beautiful, and orderly' landscape were 'agriculture', whose value had been well recognised by the Siamese as it was their life; and 'architecture' that was not yet much known or thought to be necessary.[1] The complexity lay on the fact that the word 'art' in Thai was originally used to describe a wide range of subjects, not only those related to crafts. For example, there were the art of war, the art of medicine, etc. Agriculture, as already mentioned, was also viewed as an art by M. C. Itthithepsan.

[1] Kridakorn, *Rueng Kiaokab Sathapattayakam (About Architecture)*, p. 4.

M. C. Itthithepsan suggested that art, in terms of crafts, was regarded by the public as something that made things more luxurious, more expensive, and was associated with the way things could be beautifully decorated.[1] But he claimed on the contrary that good art was not necessarily luxurious or over-expensive. Economy was also a quality of art. He even posited in his last comment that art might not have to involve beauty at all. In effect M. C. Itthithepsan responded to the difficulties of the country at the time, especially economically, by trying to place architecture, itself an art, in the public realm as a necessity for the whole nation's progress rather than as a luxury for the privileged.

M. C. Itthithepsan concluded that art was rather the competence of thorough research and invention in terms of thought, tools, and processes 'appropriate' for the objective and intention. He claimed that these actions were the expression that aimed to convince an audience to think like the creator. In addition, M. C. Itthithepsan defined a difference between fine art (*Wichit Sin*) and art (*Sin*). The former did not need usefulness as he quoted Victor Hugo that '[Fine] art is useful and might be more useful than its usefulness'.[2] The latter was more about the process of creation, not the product. It was the process that, however, would eventually lead the audience to goals of goodness, aesthetics, happiness, joyfulness, truthfulness, and affection.[3] Architecture, for him, fell within this latter group.

In the second chapter, 'How do we understand architecture?', M. C. Itthithepsan posited that ignorance about the real definition of architecture had so far resulted in Siamese cities having 'buildings' that brought a shame to the nation. This he described by the Thai term *Khai Na* (selling face), observing that the representational quality of western style buildings for high status and modernity was more important than its artistic quality. By challenging a core culture of Thai society, described by Mulder as a 'presentational society' in which surface expression is always more important for individual and community than intrinsic appreciation[4], M. C. Itthithepsan himself could not help claiming that a better understanding and appreciation of architecture would actually save the nation's face.

[1] Ibid., 8.
[2] Ibid., 9.
[3] Ibid.
[4] See Mulder, *Inside Southeast Asia: Religion, Everyday Life, Cultural Change*.

The buildings that 'brought a shame to the nation', as M. C. Itthithepsan claimed, had been executed by Siam's high ranking officers who thought they could do buildings and civic design with 'common sense', in co-operatation with Chinese contractors.[1] He complained that, unfortunately, many of those buildings were durable as they had been built with adequate knowledge by engineers and contractors, together with those officials. So they stood permanently and brought the nation to shame.

Quite ambiguously contradicting his statement in the previous chapter that art might not necessarily involve beauty, he tried to argue that durability was not enough for architecture, as it also needed '*Sinlapa Laksana* [artistic quality]'. In describing the 'artistic quality', he tried to localise George Bernard Shaw's 'Life force' and French '*Elan Vital*' and '*Etincelie devine*', which could supposedly turn a normal building to architecture, by translating them as *Khwam Khlang* and *Khwam Saksit*, terms conveying different degrees of 'sacredness'. By doing so, M. C. Itthithepsan tried to convert the European artistic quality that architecture should possess into Thai terms. This quality was, however, transformed not only by the limits of translation but by its suitability to communicate with the Siamese public, whose idea of 'sacredness' still held a high position in everyday life, despite the political change from absolute monarchy to democracy. Given the subjective nature of the somewhat ambiguous discussion, M. C. Itthithepsan's first attempt to make sense of the concept of architecture was in need of some solid examples.

And the examples for M. C. Itthithepsan's definition of architecture were more explicitly described by Nat Phothiprasat, first editor of the *Journal of the Association of Siamese Architects,* and contributor to the journal from time to time. In the second issue published in 1934, Phothiprasat also introduced architecture to his readers in the article, '*Kham Mai Khong Sathapattayakam* [Architecture explained]'. Apart from basic definitions similar to those M. C. Itthithepsan had given, Phothiprasat used Phra Prang Wat Arun, a landmark pagoda next to the Chao Phraya River, as an example, describing its beauty in many respects, such as its well-selected location that promoted its spiritual monumentality, its silhouette that was beautifully outstanding at dusk, its reflection in the water at night with a waxing

[1] Kridakorn, *Rueng Kiaokab Sathapattayakam (About Architecture)*, p. 19.

moon, its perfect proportion that pleased the eye, its gradually tapered shape that made it seem to grow from the ground, and its traditional yet clever construction method that made it last for one hundred and sixty years without the help of modern reinforced concrete construction.[1]

Phothiprasat noted that his use of Phra Prang Wat Arun as a main example to explain architecture instead of any canonic example from the West aimed to allow readers to understand architecture, a new concept, more easily, as they were familiar with it. This use of a local example was not only a localisation of the new concept but also a reassurance that Siam itself had architecture of its own. The point was that Siamese edifices had not been conceptualised in this way already: a pagoda, previously associated mainly with religious and spiritual matters, was now conceptualised as 'architecture'.

Reinterpreting the categorisation of 'Architecture'

Phothiprasat continued his introduction of architecture by discussing the origin of 'types', 'characters' and 'styles' as basic categorisations. Discussing what gave birth to various 'types' of architecture, Phothiprasat adopted Banister Fletcher's categorisations: namely migrations, conquests, and changes in commerce, society, and religion. He also promoted the Beaux-Arts principle that each type of architecture had to imply its function through its 'character'. And within each type of architecture there were many '*Baeb* [styles]'.

A style, as posited by Phothiprasat, was developed from '*Samai Niyom* [trend of the period]' in a particular region of the world and spread to other regions by its '*Khwam Niyom* [popularity]'.[2] The main styles in Siam were the Thai style, Chinese style, and *Farang* (western) style, which was mostly Italian. Each style had its sub-styles, so the Thai style had Sri Vijaya, Lopburi, etc.; the Italian style had Gothic and Renaissance.

Phothiprasat associated styles with the periods when they were 'popular'. He proposed that readers could know more styles by studying the history of architecture as written by a European scholar, presumably Sir Banister Fletcher, who categorised

[1]Nat Phothiprasat, '*Khwammai Khong Sathapattayakam* (Architecture Explained)', *Journal of the Association of Siamese Architects*, 2 (1934), 13–20 (p. 13).
[2] Ibid., p.16.

periods from pre-historic to Classical Revivals. After Classical Revivals, Phothiprasat identified categories of *Sathapattayakam Samai Pattayuban* (Present architecture) in Europe and America and *Sathapattayakam Samai Mai* (Modern architecture) in Germany and Austria, etc.[1]

He posited that buildings in America at that time adopted 'styles' from the past but improved them to suit present conditions. The result was a new 'type' of architecture, the skyscraper, which responded to America's large scale commercialisation. This type of architecture was, therefore, '*Samai Niyom Nai Khanani* (the trend of the period) in America.

At the same time, Phothiprasat explained that modern buildings in Europe emerged in Germany and Austria after the Great War. He described them as cubic, straightforward, 'assuming' that this was due to the countries' economic difficulty after the war. Prince Naris called this style a 'bread box form'.[2] Phothiprasat posited that they had to use light, cheap, durable materials, produced domestically. He claimed that cheap things could not be much decorated, so the result was straightforward. He gave an example of this style in Siam, Bang Rak Health Centre, which was well linked to another important quality of this style — hygeine.

By defining style and giving its examples, Phothiprasat prioritised the explanation of how styles were adopted rather than the ideas behind them. Obviously the in-depth question of the original idea of styles was not his concern in his brief introduction of architecture, but this reveals that apart from M. C. Itthithepsan's conceptual ideas about how artistic quality of architecture should be created, examples of how such ideas had created artistic quality in architecture of the past were still not widely discussed.

One of the rare examples could be seen in Sarot Sukkhayang's article, '*Prawat Sinlapakam* (Art History)', published in 1935 in the journal of the Fine Arts Department, *Silpakorn*.[3] The text was the content of his inaugural lecture for the

[1] Nat Phothiprasat, '*Khwammai Khong Sathapattayakam* (Architecture Explained)', p. 17.
[2] Prince Naris' letter to M. C. Philailekha Diskul quoted in M. C. Philailaekha Diskul, *Mom Chao Philailekha Diskul Phim Nueng Nai Wan Prasut Khrop 6 Rob 8 Sinhakhom 2512 (6 Circles Anniversary of Mom Chao Philailaekha Diskul 8 August 1969)*, (Bangkok: Watcharin Kanphim, 1969), p. 78.
[3] Phra Sarot Rattananimman, '*Prawat Sinlapakam* (Art Histoy)', *Silpakorn (Fine Arts)*, 1 (1935), 11–45.

fine art and industrial art students. Even though it was mainly about art, architecture was mentioned from time to time. Sukkhayang pointed out from the beginning that existing literature in art history (in English) was only based on archaeological and stylistic categorisation. He argued that there was no account of a basic rationale behind the origin of art. Then he began discussing the origin of art in terms of religious versus non-religious.[1] Architecture, he supposed, was originally conceived by necessity and only later related to religion.[2] He then discussed in detail the art of antiquity that had been produced to serve religious belief, but he did not cover architecture in particular and did not go beyond that period.

Constituting a Thai canon

Not until Phothiprasat's first book, *Sathapattayakam Nai Prathet Thai (Architecture in Thailand)*, of 1944 did he discuss the origin and styles of architecture in Thailand, adopting Banister Fletcher's 'comparative method'. It was at this point that the stylistic outcomes of Thai architecture of different periods were discussed in relation to their underlying ideas — Buddhism — as understood by Phothiprasat. By relating stylistic ideas to religion, sacred buildings in Thailand were systematically conceptualised in a new way, in the way that they were Thai architecture — a national art embedded with aesthetic ideas relating to Buddhism, rather than mere provision of places of worship. This attempt had actually been made before, in Prince Damrong's book, *Tamnan Phuttha Chedi Sayam (The legend of Siamese Buddhist stupas)*, published in 1926, from which Phothiprasat extracted much information.[3] A quote from Phothiprasat's preface clearly demonstrates the idea of architecture as national art and national pride:

> Architecture] of the Thai nation has been *Charoen Rungrot* (developed and prosperous) for ages and periods. It is highly valuable comparable to those of other nations. And its architectural character has been clearly visible until the present day. It is something we can be highly proud of. But [the historic sites'] history has not been well known so their value and significance have not been acknowledged. […] These historic sites have been

[1] Phra Sarot Rattananimman, '*Prawat Sinlapakam* (Art Histoy)', *Silpakorn (Fine Arts)*, 1 (1935), 11–45 (p. 13).
[2] Ibid.
[3] Somdet Kromphraya Damrongrachanuphap, *Tamnan Phuttha Chedi Sayam (The Legend of Siamese Buddhist Stupa)* (Bangkok: Rongphim Sophon Phipatthanakan, 1926).

> always covered with jungle, deteriorating because of age. […] changing to mysterious and sacred places. Their history has, therefore, become faded and lost, being transformed to tales far from the truth.[1]

The meaning of sacred places was transformed into art. While the idea of religious sacredness was seen as a possible threat to art, it was, as M. C. Itthithepsan pointed out, also promoted as an important means to turn a building into architecture. The ambiguity in the definitions of architecture remained.

Although Phothiprasat constituted this connection between Buddhism and styles, his priority was still to ground a rationale behind the spreading of styles. This practice allowed him to position architecture, the new concept, as a representation of periods. In this sense, style could not be discussed separately from the history of architecture. And it was this reading that allowed Phothiprasat to discuss what 'style' was 'appropriate' for Siam at the time of progress.

To build 'appropriately'

In his 'Architecture explained', Phothiprasat grounded the issue of 'appropriateness' of style in Siam by first discussing modern architecture in Europe. He explained that the Great War had made European people change to become more ambitious about novelty and development, resulting in a more advanced art and science that involved the machine, mass production, durability, and economy, all reflected in the development of modern buildings in Germany and Austria.[2] This was followed by other countries in Europe. Some examples in Siam were also visible, as already mentioned.

He ended the article by stating that 'because of economic difficulties construction in Siam now should be oriented towards economy by using domestic materials, so it could be considered as 'appropriate' for the time. The fact that he did not mention specifically that 'modern style' was the most 'appropriate' for Siam, despite adopting aspects of it, implied that the most important quality of architecture for Phothiprasat was not a matter of style per se but rather 'appropriateness'. Modern buildings that were to be built economically with domestic materials, with

[1] Nat Phothiprasat, *Sathapattayakam Nai Prathet Thai (Architecture in Thailand)* (Bangkok: Ministry of Municipal Works, 1944), p. *Kho Khai.*
[2] Phothiprasat, '*Khwammai Khong Sathapattayakam* (Architecture Explained)', p. 18.

machines and mass production (if any) in Siam were, therefore, not necessarily to be categorised as modern architecture. They were better considered as architecture appropriate to Siam at the time. In this way, the reinterpretation of the rationale behind modern architecture mainly through Phothiprasat's 'assumption' managed to localise this style to suit the Siamese context without a rigid dependence on the style per se.

Another example of the way Siamese architects localised Modernist ideas by prioritising 'appropriateness' without caring much about the rationales originally underlying them was evident in another article by Sarot Sukkhayang in *Silpakorn*, published in 1938. It concerned his visit to the Paris Exposition in 1937 to supervise the construction of Siamese Pavilion.[1] He mentioned Alvar Aalto's Finnish pavilion that had been appraised by western architects and journalists.[2] He admired its exhibition, but claimed the way it exploited timber construction was no surprise for people from a country full of wood like Siam, because it was the most appropriate material for Finland. After observing many other pavilions, he added that 'this era is about using glass but when it came to the question how glass should be used in Siam, he 'wondered about Bangkok's sun'.[3] And it is worth noting that no photo was published with this article.

The issue of appropriateness in changing periods had actually been championed as early as 1931 in M. C. Vodhyakara Varavarn's own version of the brief history of architecture, in which he had described Egyptian civilisation as being too rigid and static, reflecting this in its architecture, which led to its decline.[4] He speculated that most buildings in the past had been oriented towards 'pure art value' including ornaments and decoration, but modern buildings were oriented towards proportion, harmony, colour scheme, hygeine, economy, and stability. Periods of architecture, he claimed, were similar to women's fashions that kept changing and returned to old things whenever they could go no further.[5] He speculated that the modern buildings with cubic forms was not unlike a return to Egyptian Architecture,

[1] Ladawan, '*Phra Sarot Rattananimman* (Sarot R. Sukkhayang)', p. 141.
[2] Phra Sarot Rattananimman, '*Kan Sadaeng Phiphitthaphan Sakon Thi Krung Paris Po So 2480* (The International Exposition in Paris 1937)' *Silpakorn*, 2 (1938), 21–31.
[3] Ibid.
[4] M. C. Vodhyakara Varavarn, '*Prawat Sathapattayakam* (History of Architecture)', *Khao Chang*, 2, (1931), 193 – 94 (p. 93).
[5] Ibid.

which correlated with the idea of Wilhelm Worringer's book, *Egyptian Art*, first translated into English in 1928. The art historian, best known for his book *Abstraction and empathy* was a pioneering theorist of abstract art. In *Egyptian Art* he saw parallels between Egyptian temples and the cubic plain buildings of the present time.[1]

Despite some knowledge about Modernist ideas in architecture from the West, the pioneering Siamese architects chose to associate the rationales behind styles as a given — the response to changing situations, not unlike what had happened before in every preceding period. They discussed them as if they were dictated by a law of nature. The idea about a rotation of styles posited by M. C. Vodhyakara even implied the non-linear nature of Buddhist concept of time. The ideological concept of Modernism based on linear progress was not much reflected in Siam.

As regards the Thai style, Phothiprasat raised a concern that the erection of Thai-style buildings might decrease because the cost was high. He pointed out that if the style was popular it might be accomplished more cheaply. This concern led back to the main rationale he and his colleagues posited from the first place: that a style was developed from '*Samai Niyom* [trend of the period]'.

It has been demonstrated that Phothiprasat had sympathy for rationalised, economical, and straightforward buildings built with domestic materials and without ornament. It has, however, also been shown that he did not have explicit sympathy for the Modern Movement itself, as his use of the word 'assume' implies that he did not take Modernist ideology seriously. In addition, Phothiprasat by no mean disdained Thai-style architecture, but he only saw that the economic situation at the time did not allow the country to produce such work, therefore the plain buildings should generally be considered as more appropriate. And if Thai-style buildings were to become popular and cheaper again, such works should be built. This was not like the Anti-waste movement in China in 1955, where nationalistic buildings with big roofs and traditional ornaments were condemned as wasteful under the new austerity policy.[2]

[1] See Wilhelm Worringer, *Egypian Art* (London: G. P. Putnam's sons, 1928).
[2] Rowe and Kuan, *Architectural Encounters with Essence and Form in Modern China*, p. 10.

How much Phothiprasat understood and appreciated Modernist aesthetic ideology was less important than how he promoted it as an appropriate means for contemporary architecture in Siam. For him, it would have been irrelevant to discuss in detail machine aesthetics in the Siamese context where an industrial revolution had never happened, let alone that architecture itself that was a new subject. The Modernist grain was therefore of rational and practical assistance to him in order to apply conventional principles in architecture that the Liverpool graduate had received from his Beaux Arts-oriented training to suit Siam's contemporary situation.

Appropriate architecture and a link with Britain

Examples of Phothiprasat's works, mostly executed at the end of the 1930s, reiterated what he promoted in his writings. The first example is Papplachai Police Station completed in 1941. The project was initiated in 1938 when the old wooden-Samyaek Police station deteriorated. The project aimed to transform 'its construction form to a 3-story-masonry building that is permanent and imposing'.[1] A preliminary design was dated 4 April 1938 (Figure 4.2.2).[2] It would also be used as a main office of the Metropolitan Police. Later the cabinet decided that it was to be built on a new and larger site, and Luang Thamrongnawasawat, the Minister of Interior, suggested the design should be changed.[3] Therefore, a new design dated 1 March 1939 was located at the new site on Papplachai Road (Figure 4.2.4). Eiw Nguanliangthai, a Chinese contractor, submitted the cheapest bid.[4] Chinese contractors were still common, while the selection of the cheapest bid was the rule. Both original and new designs were conceived in terms of symmetrically rationalised plans without ornaments. Reinforced concrete structure was deliberately used, but with almost no other industrialised material except asbestos cements sheets for roofing.

[1] Bangkok, National Archives of Thailand , (2) S R 0201.69/81 (Samyaek Metropolitan Police Station Project)
[2] Ibid.
[3] Ibid., p. 6.
[4] Ibid., p. 15.

Figure 4.2.2: Ground floor plan and front elevation of Samyaek Police Station by Nat Phothiprasat (1938)[1]

[1] National Archives of Thailand

Figure 4.2.3: Ground floor plan and front elevation of Papphlachai Police Station (1939)[1]

[1] National Archives of Thailand

Another project by Phothiprasat, the Royal Thai Air Force Club (Figure 4.2.5), completed in the same year, was executed on a similar principle. The design and construction process as well as the rationale behind these projects correlated with what Phothiprasat had promoted as appropriate for Siam. The imposing, durable, economic construction using domestic materials was adopted. It was both 'modern' and 'appropriate'.

Phothiprasat's hybrid transplantation of Beaux-Arts-cum-Modern principles from the western world to Siam should not be considered so surprising if his internship with Frank T. Verity from October 1929 to March 1930 is taken to account. During the internship, he was supposed to learn Verity's consistent idea of 'urban style', by which façade designs should belong to the town, expressing solidity, assurance, restraint and orderliness.[1] The idea posited that buildings should express, in the street view, the purpose for which it was intended.[2] Flat roofs or parapets were used and gables were avoided or hidden.[3] Phothiprasat must have found that the Modern style was by no means against his classical principles but it was more 'appropriate' for the contemporary situation of Siam.

The projects and what Phothiprasat promoted as appropriate for contemporary Siam also paralleled the views of his professor, Charles Reilly, from the late 1920s through the 1930s. Their similarity lay in the way they gradually adopted modernist principles not as an abrupt convert, but evolving from traditional principles to suit the contemporary situation.[4] This was made possible by the Liverpool School's rationalised and technology-based ethos, laid down by Reilly on grounds of Classicism, which played an important part in the dissemination of Modernism in Britain in the 1930s.[5]

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[1] A. Trystan Edwards, 'The Work of Frank T. Verity' *The Architects' Journal*, 7 (1925), 36.
[2] 'Obituary: The Late Frank T. Verity, F.R.I.B.A.'. In the obituary, H.S. Goodhart-Rendel wrote that Verity's Hyde Park Place was the first block of flats in London designed without gables, turrets, visible chimneys, or glazing in small squares. He elaborated that 'Flats that had six equal storeys allowed to look equal, and in which the only cornice was a large one at the top of the wall'.
[3] Edwards, 'The Work of Frank T. Verity'. Edwards even mentions that he wonders if Verity ever designed a single gable for his urban buildings.
[4] Peter Richmond, *Marketing Modernisms: The Architecture of Charles Reilly* (Liverpool: Liverpool Uniersity Press, 2001), pp. 131–32.
[5] See Christopher Crouch, '*Design Initiatves in Liverpool 1881–1914* (Liverpool: University of Liverpool, 1992).

Figure 4.2.4: Papphlachai Police Station (1941)[1]

Figure 4.2.5: The Royal Thai Air Force Club (1941)[2]

Figure 4.2.6: Prime Minister Plaek Phibunsongkhram was giving a speech in front of the Royal Thai Air Force Club[3]

[1] *Khao Khosanakan*, 6 (1941).
[2] Ibid.
[3] '*Suan Sanam Kongthap Fha* (Air Force Parade)', *Chiwit Thai*, 10 (1941), 22–23.

Figure 4.2.7: Works by Prof.Charles Reilly and colleagues: Veterinary Hospital, Liverpool University (1929); Leverhulme Building, New School of Architecture, Liverpool University (1933); and the courtyard of Leverhulme Building.[1]

[1] Richmond, *Marketing Modernisms: The Architecture of Charles Reilly*, pp. 109–10.

The fusing of different 'rational' ideas from different architectural ideologies demonstrates, as Colquhoun posited, that the definition of 'rational' in architecture has not been constant, but has changed throughout history in relation to economic and social factors as well as philosophical ideas in particular periods.[1]

What the teacher did in Britain and the student later did in Siam could be seen, as Franco Borsi commented on British Modernism in the 1930s, as an 'aspect of the blend of traditional continuity and modern style. […] Neo-Georgian, international style and eclectic historicism intermix'.[2]

While Reilly constantly gave welcoming statements for Modernism in his writings, being first somewhat ambivalent, but later more definite, in Thailand conventional-cum-modern qualities, i.e. strength, durability, hygiene, fire-proofness, orderliness, all of which Phothiprasat had learnt from his conventional education and exploration outside classrooms, were all reflected in his writings and projects and supported by his localised advantages of modernist principles. The main difference between the case of Britain and Thailand is that the British were going through a transformational period in architectural culture from tradition to modern, while the Thais were only starting to establish this new concept. The localised principles of modern architecture, therefore, became a new tradition.

After examining how Siamese architects who had graduated from abroad and had first-hand experience of Modernist works in an appropriate 'modern style' to fit the conventional principle theoretically and practically, it is worth examining how the style and principle were received by the practitioners without professional degrees from abroad and how they were applied at the urban scale. This can be a good foundation for the examination of later case studies.

Appropriateness at urban scale and fiber cement roofing

To see how a variety of styles, especially the so-called modern style was perceived by practitioners without a professional degree from abroad, the best place to start is Luang Burakamkowit's report of his observation of town planning,

[1] Alan Colquhoun, *Modernity and the Classical Tradition: Architectural Essays 1980–1987* (Cambridge: MIT Press, 1991), p. 58.
[2] Franco Borsi, *The Monumental Era:European Architecture and Design 1921–1939* (London: Lund Humphries, 1987), pp. 99–100.

sanitary works, and construction in advanced countries, published in 1938.[1] From 10 April to 14 December 1937, Burakamkowit visited Singapore, Japan, the USA, and Europe to observe urban planning regulations of San Francisco, Washington DC, England's new towns, France, Belgium, Holland, Germany, Italy; and building construction in Singapore, Japan, the USA, and England. One of his surveys concerned 'modern style' building associated with cubic forms, flat roofs, and non-ornamentation. Concerning many aspects he commented on whether they could be adopted and adapted for Siam:

> *Baeb Sakon* [International style] was popular in Singapore. The [international style] buildings do not have roofs but have eaves to protect from sunshine and rain, surrounding both floors. The decks are genuinely waterproofed and very costly. The materials to prevent leakage are waterproofed fabric and asphalt covered with small pebbles. The eaves surrounding all sides of buildings are very suitable for the climate. They do not aim at being *Farang* [western] too much and forget the climate. The dwellers are, therefore, happy. […] In Japan, stores and government offices are mostly built in *Baeb Sakon*, sometimes with roofs. For residential projects, they mostly prefer their eastern style. Even though they sometimes use western style, they do not completely abandon their art.[2]

In the West, Burakamkowit observed that:

> In the USA and England, most houses have a roof with short eaves and they do not have a verandah. I do not agree with people who have brought house designs without a roof, an eaves and a verandah to Siam because they are more costly if they do not want them to leak. And they are hotter [than those with a roof] anyway because the space inside the roof can prevent heat. […] If buildings do not have eaves, the windows have to be closed when it rains. […] A verandah is important [for buildings in Siam] as the users can use it in summer to get the breeze. It is also necessary for hospitals as recovering patients sometimes also want to catch some breeze. […] There are many

[1] Luang Burakamkowit, '*Raingan Kan Dungan Nai Tangprathet Khong Kharatchakan Sueng Dai Rab Ngoen Chuailuei Khachaichai Chak Kopho Kan Dungan Phang Muang Kan Chang Satharanasuk Lae Kan Kosang Akhan* (Report of the Travel for Studies in Foreign Countries: Studies of Town Planning, Sanitary, and Construction)' (Bangkok: Department of Municipal Works, 1938).
[2] Ibid., pp. 84–85.

houses and offices in Bangkok where the owner wanted to show their exterior form as *Baeb Sakon* but did not want to pay too much money for a proper water-proofed concrete slab. They are, therefore, roofed with zinc sheets hidden behind parapets to make them look like buildings without roof. This increases heat in the rooms and creates leakage at the joints between the roof and the parapets. The owners have started to complain recently. This is the consequence of following the West without climatic consideration.[1]

Burakamkowit's main concern was how foreign styles should be selected and used appropriately for the Siamese context. This related to a bigger concern that the Siamese should not wholeheartedly follow the West. As regards the adoption of cubic forms by using parapets, flat roofs, and zinc sheet roofs, his comments show that by the end of the 1930s the modern style was known quite widely as a western style but its adaptation to climatic conditions needed more promotion.

A main factor which helped to improve this situation, and later became a catalyst to increase the popularity of what might have been seen as 'modern buildings' in Thailand, was the production of asbestos mixed fiber sheets for roofing, which performed better than zinc sheet in terms of insulation, started domestically in 1939. The price was half that of previous imports from Italy, Belgium, England, and Japan.[2] The material then rapidly became popular for the roofing of both public and private buildings.[3] The use of the sheets allowed low angles of pitched roofs or lean-to roofs. It became more suitable to apply parapets that needed not to be high, making the forms of the buildings appear cubic. At the same time, reinforced concrete structure that had become more affordable was a comprehensive solution for issues of strength, durability, hygiene, and fire, allowing the structure and all features to be thinner and lighter. All these technical changes allowed construction that 'involved machine, mass production, durability, and economy', all described by Phothiprasat as the origin of 'modern buildings' in Europe, and deemed suitable for contemporary Thailand.

[1] Ibid.
[2] '*Krabueng Kradad* (Asbestos Cement Tiles)', *Chiwit Thai*, 28 (1941), 32.
[3] Ibid.

Following this more-positive trend, Bangkok Municipality issued its own regulations on construction control in 1940. It regulated public and commercial buildings in strength, durability, hygiene, sanitary provision, fire protection, and orderliness in relation to urban planning. Especially for shop houses, the regulation determined their height and width, back alley, eaves height, and decoration. Despite the initial concerns of Burakamkowit, Bangkok Municipality's town planning expert three years earlier, the regulation now indicated the use of '*Song Tat* (cut form)' and parapets for the shop houses' roofs.[1]

The regulation must have aimed to make shop houses, a popular building type being increasingly built in the capital, contribute to unity and orderliness with acceptable quality and safety, because what had been built previously possessed no unity in design.[2] The principle of unity in town planning was acknowledged before that of the Modern Movement. In his inaugural lecture, Stanley Adshead, Charles Reilly's colleague and the first chair of the School of Civic Design at Liverpool, called for a unity in style of architecture of the city as against the individualism that had dominated British cities in the nineteenth century.[3] Moreover, the use of parapets had been extensively popular in London's Georgian terrace houses since the issue of the Building Act of 1707, which banned projecting wooden eaves as a fire risk.[4]

So the way that Bangkok's regulations indicated use of cubic forms and parapets conformed to a principle well established before the Modern Movement. But the fact that it was implemented in Siam when localised Modernist principles were being promoted alongside the more-accessible technology of reinforced concrete and fiber cement sheets, contributed to the popularity of the cubic forms. The cubic form-shop houses were, therefore, a hybrid consequence of Modernist principles and Beaux-Arts's orderliness, supported by the pioneering Thai architects' definitions of architecture to suit the contemporary Thai context.

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[1] '*Thetsabanyat Khong Thetsaban Nakhon Krungthep Rueng Khuabkhum Kankosang Akhan Phutthasakkarat 2483* (Bangkok Municipality's Regulation on Building Construction Control 1940)' ed. Bangkok Municipality (Bangkok: Nitiwet (Mo. Po. Po.), 1940).

[2] 'Clean Bill of Health for Siam', *The Straits Times*, 9 August 1929, p. 5.

[3] Liverpool, Liverpool University Archive, Sydney Jones Library, Civic Design: Inaugural Lecture Delivered at the University of Liverpool on 8 October 1909 by Stanley D. Adshead, ed. by University of Liverpool (1909). Quoted in Richmond, *Marketing Modernisms: The Architecture of Charles Reilly*, p. 95.

[4] Malcolm Hollis, 'Georgian Roofs', *Structural Survey*, 3 (1987), 218–25.

Figure 4.2.8: Typical London Georgian terraced houses after Act of building 1707[1]

Figure 4.2.9: Typical shop houses in Thailand built during the 1940s to the beginning of 1960s applying parapets, conforming to the 1940 regulation of Bangkok Municipality[2]

[1] Photo by Chomchon Fusinpaiboon
[2] Photos by Google Maps street view

What had been demonstrated by Phothiprasat and his colleagues' writings, Phothiprasat's works, and the regulations, regarding the relations of Modernist ideas and the establishment of concept of architecture in Thailand, was summarised by Phothiprasat's article, '*Which direction will our architectural work progress towards?*', published by the Royal Institute in 1943.[1] He pointed out that there were three possible directions: '1. Sticking with ancient principles and improving them. 2. Following international style but adapting it to suit our ideas. 3. Inventing a brand new one'.

After that, he pointed out that these three directions were by no means independent from each other. They could overlap. This demonstrates the attitude at the time. Architecture was about appropriateness, and flexibility was always welcome.

Architects as appropriate men for appropriate jobs

Above all, there should be someone who knows best about what was appropriate and how the flexibility should be adopted. Needless to say, those people should have been architects but the pioneering generation of Thai architects was still on the way to secure this position.

'Architects', as M. C. Itthithepsan defined, were *Chang Sinlapa* (Artistic builders). As they were a new and unfamiliar profession, he noticed that architects were understood by the public to be the same as contractors, mainly Chinese immigrants who could design and build projects and included this benefit in their construction costs.[2] M. C. Itthithepsan's further elaboration of how the Chinese took over the market reiterates what has been discussed in previous chapters:

> Until the reign of King Nang Klao [1809–24] when Chinese migrated to the country more, the reception of Chinese craftsmanship and the demand for Chinese stuff were like the trend for acquiring western stuff now. This resulted in Chinese craftsmen completely overtaking construction jobs from the Thais. When the craving for western stuff followed, western designers

[1] Nat Phothiprasat, '*Ngan Sathapattayakam Khong Rao Cha Kaona Pai Thang Nai* (Which Direction Will Our Architectural Work Progress Towards?)', in *Samud Thi Raruek Wan Ratchabandittayasathan (The Royal Institute Day Memorial)* (Bangkok: The Royal Institute, 1943), p. 394.
[2] Kridakorn, *Rueng Kiaokab Sathapattayakam (About Architecture)*, p. 12.

> hired Chinese craftsmen to execute their works because most of Thai craftsmen had disappeared. The few who still survived were not as skilful as the Chinese in adopting a new working process.[1]

Moreover, architects were also thought to be the same as engineers, whose duty dealt only with usefulness and economy, which were what the public normally thought as 'enough'.[2] Only a little better than that was the way architects were perceived as someone who could '*Phad Na Kan Yotha Hai Modchot* [make up the surface of buildings]'.[3] M. C. Itthithepsan encouraged architects not to accept such positions and tried to demonstrate their competence and behaviour according to the association's code of conduct. In doing so, he believed the public would understand and trust architects soon.[4]

Glorifying tradition (in relation to the West)

Thailand was neutral during World War II until it was forced to ally with Japan in 1941. The difficulty of ordering international journals after war had erupted in Europe, and the lack of texts about Thai architecture, together with the increasing nationalist sentiment to prepare for a possibly unavoidable war, made architectural discourse in Thailand engage more with traditional architecture. As a result, writings became oriented toward research about traditional architecture, not only to increase knowledge for design purposes but to celebrate the glorious past, strengthening nationalism. But the glorious past would not have been justified without an acknowledgement by the West, as one of its main roles was as a tool to get Thailand recognised on the international stage.

In 1940, Luang Wichit Wathakan (Luang Vichitr Vadakarn) published a small book, *The Architecture of the Monasteries of Thailand* in English, with only eleven pages and very few pictures, in response to the requests of foreigners who wanted to know more about Thai architecture and culture.[5] This book is merely a summary of existing knowledge on the character and function of traditional Thai

[1] Kridakorn, *Rueng Kiaokab Sathapattayakam (About Architecture)*, pp. 36–37.
[2] Ibid., p. 22.
[3] Ibid., p. 26.
[4] Ibid., p. 15.
[5] Luang Vichitr Vadakarn, *The Architectureof the Monasteries of Thailand* (Bangkok: Department of Fine Arts, 1940), p. 1.

architecture, as well as its social and cultural significance to the Thais, which had only been sparsely illustrated in the existing literature about travel and archaeology.

An important stance of the author concerned the originality of Thai architecture. He quoted foreign writers such as René Grousset and Mark T. Green, whose works were claimed by him to mark the significance and originality of Thai architecture, despite influence from the other cultures it had assimilated.[1] The last sentence runs:

> In spite of the adaptations, mixing, and influences stated above, Thailand still keeps the national style alive in numerous buildings. The architecture of monasteries keeps Thailand on a par with the most civilised countries in the field of art and culture.[2]

This reiterated, on one hand, the necessity of having a national art and architecture, which were believed to be 'original', as a symbol of the country's civilised status, and on the other, it also reiterated how much the Thais' own national art and architecture, as well as their values, depended on recognition by the West. In both ways, it lent support to the way the national art had been, and should be, incorporated in important architecture.

Nat Phothiprasat's already mentioned book, *Sathapattayakam Nai Prathet Thai (Architecture in Thailand)*, was further evidence of this stance. Published in 1944 as the first textbook on the history of architecture in Thailand for architectural study in the university and the Department of Public Works' school, the 200 pages-with-196 pictures-book provides a survey of architectural history categorised by archaeological periods. The content for each period is mostly a description of the background and the architectural components. It gives an account of the origins of monastic buildings in Thailand, as well as their typical spatial organisation. It also includes Thai architectural character by describing it following Banister Fletcher's method, as a consequence of six interrelated factors — geography, construction material, climate, religion, society, and history.[3]

[1] Ibid., pp. 9–11.
[2] Ibid.
[3] Phothiprasat, *Sathapattayakam Nai Prathet Thai (Architecture in Thailand)*, pp. 24–26.

Despite a good account of the general history of Thai architecture, the book lacks references to original sources, and includes suggestions from the author that some information needs further research in order to ascertain reliable evidence.

As previously mentioned, readers could experience, quite apart from the historical content, a patriotic attitude in the writing style of the author, evident in many appraisals of Thai cultural superiority over neighbouring ethnicities. They could also get a view of the Thai ancestors' bravery which had supposedly contributed to the originality of Thai architecture; and was therefore something for following generations to be proud of.[1] The author suggests that the architecture of the nation depicts its discipline, ritual, and tradition, of which students needed to be aware.

As with Luang Wichit Wathakan's book, despite the nationalist tone, there are quite a few places where the attitude toward the West as a parameter of Thai self-esteem is also evident. An example is the author's suggestion that grandiose architecture is a representation of a nation's development and prosperity, which was important not only because it makes Thai people proud, but because it impresses foreigners.[2] The 'foreigners' in this case were western peers, who had been the model of the Thai paradigm for civilisation.

Another example is the regular practice of placing Thai architecture in comparison with western architecture, which had previously been used by foreign writers in several books, such as the comparison between Greek and Roman buildings in which roofs are described as standing out less than those of Thai buildings. Such comparisons are made several times by Phothiprasat, despite the fact that this book targeted Thai audiences, especially architecture students. It implies a situation of knowledge about traditional architecture in the academy, which was less well known than western architecture to contemporary architecture students. This was because they were taught a Beaux Arts-oriented curriculum prioritising western architecture.

Last but not least, it is important to note that this book was the first academic book to include a traditional Thai house, yet only very briefly describing its character,

[1] Phothiprasat, *Sathapattayakam Nai Prathet Thai (Architecture in Thailand)*, p. 3.
[2] Ibid., p. 2.

material, and some construction details. Before it, Thai houses had only been mentioned in the memoirs of foreign explorers and missionaries, but were neglected by early architectural scholars, all of whom had paid attention only to temples and palaces.

Phothiprasat's book was aimed mainly at architecture students who were taught by Phra Phromphichit in the subject of Thai art and architecture. Despite an absence of detailed drawings of ornaments and patterns, the book gave an overall view and principles of architecture from different periods.

Among official and canonic texts that were written in a nationalist tone appeared a short article by Khruthep, an architectural connoisseur, who discussed Thai architecture aesthetically with little comparative reference to western architecture. The discussion of this renowned minister interestingly centred on an Arts & Crafts approach, for he admired the truthfulness of construction method, craftsmanship, and the architecture's relation to climate. But in general, he was also optimistic about the possibility of exploiting of the good characteristics from both cultures in contemporary architecture.[1] 'National character' was deemed appropriate for all scholars.

Post-war appropriateness and the arrival of Modernism

After the war, general circumstance regarding the architectural culture was that architecture and long-dreamed-of urban planning were important for the nation because they would contribute not only to the well-being of the public but to their dignity as the population of a civilised nation. Somphop Phirom pointed out in *Kiat Khong Rao (Our dignity)*, published in *ASA*, the post-war form of the *Journal of the Association of Siamese Architects*, in 1951 that caves, hollows of trees, and huts for sheltering ancient people from climate and beasts were not enough anymore, therefore religion, society, and the nation's dignity brought forward models of buildings suitable for geography and culture.[2] He also took the issue of Thai architecture seriously. In the same article, he pointed out that the issues of religion, society, and dignity of a nation contributed to its architecture. He was concerned that Thai craftsmanship had been abandoned since the arrival of western influence in

[1] Khruthep, '*Sathapattayakam* (Architecture)', *Yothathikan*,3 (1940), 3–6.
[2] Somphop Phirom, '*Kiat Khong Rao* (Our Dignity)', *ASA*, 1 (1951), 26–28.

architecture at the mid-nineteenth century with a subsequent overwhelming popularity, leaving only a few high-quality works of Thai architecture, such as Prince Naris' Wat Benchamabophit Temple, to be constructed amid what he called 'Roman and Renaissance Style architecture'.[1] Like Phromphichit, he thought that the lack of national character in architecture would undermine the dignity of the nation among other nations.

Khruthep, the architecture connoisseur, published another article in *ASA* in 1951:

> Aesthetic buildings and cities bring joyfulness to society. The citizens will enjoy their lives, with good economy and hygiene. They [architecture and engineering] are the arts that change jungles into beautiful cities. If cities are crude like jungles, citizens will become crude. Only the arts will help them to develop.[2]

This showed the craving for modernity to be created by artistic, rational and hygienic built environments that was still going on. Amidst these circumstances, a more-serious acquaintance with Modernism was gradually visible. Even though M. C. Itthithepsan had mentioned Le Corbusier in passing in 1934, in his book, *About architecture*, as a famous architect in the modern style, Phothiprasat only mentioned Le Corbusier and Frank Lloyd Wright, also in passing, when discussing possible new Thai house designs to suit the present age, in an article published in 1949.[3] The idea of 'appropriateness' was still most significant. Both masters were examples of those who responded to the age 'appropriately', if not mobilising a new age. By quoting Tuaihan Yommanak, one of Phothiprasat's students, the teacher had seen that *Sathapattayakam Samaimai* (modern architecture), unlike architecture before in every period, still lacked a certain 'style', since it had to respond to functions and economic constraints, creating 'functional architecture', whose 'forms follow function'.[4]

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[1] Ibid.
[2] Khruthep, '*Sathapattayakam* (Architecture)', *ASA*, 1 (1951), 7.
[3] No-Po, '*Ban Ruen Thai* (The Thai House)', in *Nangsue Thiraruek Nai Ngan Phra Ratchathan Ploengsop Phra Prachitthanyahan (The Memorial Book for the Funeral of Phra Prachitthanyahan)* (Bangkok: Prae Kanchang, 1949), pp. 22–36.
[4] Tuaihan Yommanak, '*Baeb Thai Kab Baeb Samaimai* (Thai Style and Modern Style)', *ASA*, 10 (1960), 30–36 (p. 34).

The familiar phrase was possibly borrowed from Louis Sullivan's ideology driven by the necessity to find a new way to determine forms of buildings located in the changing contexts of technology, taste, and economy at the end of the nineteenth century. However, what Phothiprasat prioritised as reason and necessity fitted a contemporary Thai context, rather than aesthetic issues.

Richard Neutra visited the Association of Siamese Architects in 1952, having a brief discussion with M. C. Vodhyakara Varavarn and some members.[1] Walter Gropius and Buckminster Fuller also paid short visits to Thailand in 1953 and 1958 respectively, but without any great effect. They did have a chance of discussion with architects in authority, both in the professional and educational institutes, but there was no recorded account of their lectures or serious publication about their ideas.

Toward the end of the 1950s, more accounts on what had been going on in the United States appeared in *ASA*. The accounts were superficial at first but gradually became more critical. This happened alongside the gradual appearance of a Modernist grain in designs outside the classroom. In 1957, the article, '*Sathapanik Yai Haeng Sattawat Thi Yisip* [The great architects of the twentieth century]', translated from *Time* magazine of July 2nd the previous year, summarised a snapshot of living great architects.[2] Among others, Frank Lloyd Wright's 'organic architecture' and 'free-flow space', Le Corbusier's 'open floor plan' and 'house is a machine for living in', Gropius' Bauhaus and its machine aesthetic, Mies van der Rohe's glass and steel were mentioned superficially. They were appraised for their new 'style' and successful career. The fact that Thai architects got acquainting with the Modernist masters via a mass media like *Time*, not through architectural journals, reiterates the idea that architects responded to changing society (and appraisal by the mass media) with their appropriate designs. The publication in Thai did not include any photos or drawings of the buildings.

[1] '*Richard J. Neutra Ma Yiam Samakhom (A Visit b*y Richard J. Neutra at the Association)', *ASA*, 2 (1953), 4.
[2] '*Sathapanik Yai Haeng Sattawat Thi Yisip (Great Architects of the twentieth century)*', *ASA*, 1 (1959), 39–40.

Figure 4.2.10: A satirical cartoon with the heading translated as 'Which style do you want?' reflected a dilemma of style in post-war period[1]

[1] '*Ao Baeb Nhai* (Which Style Do You Want?)', *ASA*, 1 (1948), unnumbered p. 5.

That Thai architects were yet to appreciate western Modernist ideology was due to a lack of awareness of changes in Western societies that had taken place over decades (or even centuries), but had never fully taken place in Thai society. What did happen in Thai society in the last century was, however, the dominance of western superiority as perceived by the Thai elite, in both old and new regimes, who wanted to catch up each in its own way. This issue was reflected in a comment on the emergence of seemingly Modernist design in Thailand at the end of the 1950s that saw it more about 'Fashion' than 'Function'.[1]

Another transcultural example that not only reflected an irony but inserted a further complication in the mission to establish the concept of architecture in Thailand was Songkhun Athakorn's account on Walter Gropius's visit to Chulalongkorn University back in 1953, when he enjoyed a river tour with the Modernist master in Bangkok.

> When Gropius has been told that the nipa leaves thatch roofed huts belong to the poorer owners and they would change it for zinc sheet when they get richer, he joked that he would like Thai people to be poor, so that nipa leaves thatch roofed houses would still exist. He thinks them more charming, oriental, and natural.[2]

While the Thai elite and architects wanted the majority to achieve a western standard in dwelling, the western Modernist expressed a new aesthetic appreciation for vernacular buildings, an idea even beyond the so-called Modernist idea which the Thais had yet to appreciate. Gropius saw the value in what was being sacrificed for the sake of modernity in Thailand.

A detailed analysis of Mies van der Rohe's ideas and architecture by Ruengsak Kantabut, then a student at Illinois Institute of Technology, was also published in *ASA* in 1957.[3] This article was one of the first serious introductions to western Modernist masters' ideas in Thailand. After discussing Miesian freedom of plan and form, and truthfulness of structure, he emphasised the proportions of solid

[1] '*Sathapattayakam Tae Chamiphonnan* (Temporary Architecture That Gives a Consequence in a Long Term)', *ASA*, 2 (1959), 11–13.
[2] Interview with Songkhun Atthakon. Quoted in Tiptus, *Sathapanik Siam: Puen Than Bot Bat Pon Ngan Lae Naew Kid (Po So 2475–2537) [Siamese Architects: Foundation, Roles, Works, and Concepts (AD 1932–1990)*, p. 60.
[3] Ruengsak Kantabut, '*Chotmai Chak Tang Prathet* (A Letter from Abroad)', *ASA*, 1 (1957), 96–103.

and void, free standing walls and space, and the relationship between internal walls and columns. By emphasising these issues, he proposed that Miesian composition of such elements was also a composition of decorative elements. Therefore, he concluded, there was no question that Miesian works had value as art.

Apart from the artistic aspect, Kantabut later mentioned his attempts to interview the owners of houses designed by Mies and found that they complained about heating expense and the control of environment as a consequence of glass walls. He stated that the American public also reacted critically to the use of glass walls. However, he supported Mies by questioning the old customs of living and the opinions of lay people who might lack a creative mind. He also concluded that both glass walls and flat roof worked if they were used properly, and were economically and technologically responsive to the circumstance of the projects. By balancing the architect's creativity against the public response in his writing, Kantabut, more than previous Thai writers, raised the issue of whether architecture, especially modern, should be designed by the creative mind of the architect or should follow public opinion.

The issue of Thai style too, was still a concern. In 1952 M. C. Vodhyakara Varavarn stated the importance of the issue by pointing out that a crucial and unsolved issue, which did not happen in Europe but was being faced in Thailand and Hong Kong, was about an appropriate 'character' for modern architecture in those countries.[1] The issue became more complex as it now mingled with Modernism. In 1958, An Nimmanhemin discussed Modernist architecture and stated his intention to adapt suitable aspects for architectural design in contemporary Thai society.[2] While he denied both the so-called International style, which, in his view, neglected differences in ways of life, national character, climate, and taste; and hyper nationalism, which he saw as a burden to the exploitation of progressive techniques, he still craved a new architecture with 'national character' — the moderate nationalism he might or might have not admitted. This issue evidently still lingered on in most Thai scholar's minds.

[1] Bangkok, M. C. Vodhyakara Varavarn's Archives, M. C. Vodhyakara Varavarn's Letter to Mr.Brown (1952).
[2] Nimmanhaemin, '*Khwam Plianplaeng Khrang Yingyai Nai Khana Sathapat Thi Khaphachao Dai Ru Haen Ma* (The Great Change in the Faculty of Architecture That I Have Known)'.

Figure 4.2.11: Drawings portray social and urban landscape of American cities at the end of the 1950s including some Modernist ideas.[1]

Figure 4.2.12: Richard Neutra discussing with the committee of the Association of Siamese Architects, including M. C. Vodhyakara Varavarn[2]

[1] Tu, '*Banthuek Kan Dungan Dan Sathapattayakam Nai Saharat Amerika Sanoe to Samachik Samakhom Sathapanik Siam Raingan Doi Tu* (A Memoir of an Architectural Study Trip to the USA Presented to Members of the Association of Siamese Architects by Tu)', *ASA*, 2 (1958).
[2] '*Richard J. Neutra Ma Yiam Samakhom* (A Visit by Richard J. Neutra at the Association)'.

Figure 4.2.13: An open-plan house published in *ASA* in 1953[1]

Figure 4.2.14: Flat and house designs for less-well-to-do dwellers, published in *ASA* in 1951, exploited multi-purposed spaces[1]

[1] '*Tuek Ram Ban Ruen* (Buildings and Houses)', *ASA*, 2 (1953), unnumbered p. 9.

Figure 4.2.15: Office buildings seemingly with a Modernist grain alongside with Bangkok City Hall that continued a more conservative stance[2] from *ASA* (1957)

[1] '*Tuek Ram Ban Ruen* (Buildings and Houses)', *ASA*, 2 (1951), unnumbered p. 7.
[2] Ibid., unnumbered p. 8.

The dilemma in the establishment of the concept of architecture in Thailand, as well as the position of the architects, has been examined. The introduction of the definitions and history of architecture at the same time reassured the importance of 'style' in the design process. This allowed pioneering Thai architects to position architecture as a representation of periods in which a particular style emerged. By doing so, they questioned which style was appropriate for Thailand at the time. The presence of 'modern style' was, in turn, reinterpreted to suit the conventional principles and was localised to suit the context found in Thailand. The localised style and rationale were applied at large scale to urban planning and building regulations, and at small scale to building design.

In this circumstance, practical aspects such as durability, climate, and hygiene were promoted and understood more than before by practitioners and public. But as for subjective aspects, the issue of aesthetics was scarcely discussed and most of the time neglected for the sake of economy. And when the budget allowed, national identity was always called for because it was deemed to reassure the nation's civilised status in the way that it developed from its own tradition, not only following the West. Ironically, the knowledge about national identity in architecture needed to be appreciated in relation to dominating knowledge about western architecture. Apart from the discourses in the publications that clearly demonstrate the complexity of the foundational period of architectural culture in Thailand, an examination of how architects were trained under this situation is useful and will provide a clearer picture.

4.3 Teaching Architecture: Architectural education in Thailand, 1930s–1950s

We have examined the introduction of the definitions of architecture by pioneering Thai architects, and the way they were positioned in and applied to Thai society, between the nation-building period and the end of the Second World War. This has included the introduction of urban planning and regulations, the role of architects, and how they were received by the public. Now the establishment and the early period of architectural education will be examined in order to give a clearer picture of how the pioneering architects trained abroad tried to transplant architectural education from the western world to Thailand. By teaching local students, the teachers must have hoped that they would graduate to become architects and strengthen the recognition of architecture and architects in Thai society. In this examination, the ways that the training responded to anticipated local conditions and encountered obstructions beyond its control will be also emphasised. Not unlike the writings about architecture examined in the last chapter, the establishment of architectural education involved translation, localisation, and reinterpretation.

There was no architectural or crafts education in a formal school in Siam prior to 1910. Nor was there a word for 'architecture' in Thai, as described in previous chapters, as it was only translated to '*Sathapattayakam*' by 1920. The training in a school as well as the concept of the subject was, therefore, a brand new concept. However, this does not mean that there had been no training in building crafts in the past. We have seen from the introductory chapter about building culture in Siam before the mid-nineteenth century that, apart from small houses and other humble structures such as granaries, all of which were normally built by the owners themselves, the construction of large houses and more sophisticated structures such as temples and palaces, were executed or supervised by *Chang*, whose training had been accomplished through apprenticeship and oral knowledge transfer.

From the mid-nineteenth century up to the 1920s, when European-style buildings became enormously popular among royal families, noblemen, and wealthy merchants, only few Princes and Siamese carpenters and builders learnt modern

practice introduced by European architects who were employed by the royal government. They learnt modern methods of design and construction using architectural drawings, bidding, competition, and estimation, as well as new technologies. Joining them, Chinese immigrants who worked as carpenters and builders enthusiastically learnt the new style and practice too, and gradually took over the jobs from the majority of Thai carpenters and builders. Simultaneously as traditional practice and its buildings became less popular, most of the Thai *Chang* lost their grip on the market to the Chinese.

In this situation, the government started to realise the necessity of having a systematic training in modern construction practice for the Thais. Sarot Sukkhayang, the first scholarship student who studied architecture at Liverpool from 1913 to 1918, was intended to come back to be a teacher in architecture. Nat Phothiprasat followed suit in 1924. The training of both in Europe has been examined (chapter 3.1). This was necessary for an examination of the transplantation of architectural ideas and training from the European schools to Siam. But before examining the first school of architecture in Siam, its predecessor Po Chang School (Craftsmen's Training School) will be discussed as background.

The modern school for Siamese craftsmen

The establishment of Po Chang School was initiated in the last years of King Chulalongkorn's reign (1900s) when the King realised that the tremendous popularity of western-style crafts and buildings among royal families and wealthy classes, who had previously been almost the only patrons of traditional Siamese arts and crafts, had resulted in the traditional skills of Siamese craftsmanship deteriorating throughout the last thirty years of his reign, almost to the point of extinction.[1]

At a wider scale, household industries of the agrarian society in rural areas such as spinning, weaving, iron and metalwork, pottery, and earthenware, had declined continuously up to the turn of the century being replaced by the consumption of imported goods, so the labour of the industries had been relocated

[1] '*Prawat Witthayalai Po Chang* (The History of Po Chang College)', http://www.pohchang.rmutr.ac.th/index.php?option=com_content&view=article&id=46&Itemid=53 [accessed date 9 Aug 2013].

into rice production for export.[1] As a result of such losses, the Department of Woodcarving at the Ministry of Public Instruction was established in 1905, training painters and woodcarvers to make printing plates for the production of the Ministry's textbooks. The department was promoted to become the Craftsmen's Club at Samakkhayachan Association at the Ministry of Public Instruction, enrolling students in painting and woodcarving in 1907. Over the next three years curricula on sculpture, lathe work, mother of pearl and nielloware were added.

In 1910, the club was affiliated directly to the Ministry of Public Instruction as a school, following the Ministry's policy to produce teachers for schools. An English headmaster, Edward Healey, trained as art teacher at the Royal College of Art, London, was appointed. The school's name was changed first to Hatthakam Ratburana School (Ratburana Handicrafts School) in 1911, then in the same year it changed again to Po Chang School (Craftsmen's Training School).

This school provided both Siamese and western craft courses, divided between printing, painting, sculpture, carving, nielloware, lathe, carpentry, and construction. The fact that the curriculum included both Siamese and western crafts demonstrates the school's concern not only with the possible extinction of the Siamese crafts, but also with the viability of its operation and future careers of its graduates, in relation to the ongoing popularity of western crafts. By the end of the 1920s, when it was widely known that artisanship and construction in Siam were in the hands of foreigners, especially Chinese immigrants rather than Thais, the school was expected to train the students not only in Thai crafts but in crafts which correlated to the market's demand. It aimed to train Thai craftsmen who would little by little take over the jobs from the foreigners.[2]

The Division of *Wicha Chang Ok Baebyang Kosang* (Division of Construction Design Craftsmen) was set up in 1912. The use of the term '*Baebyang*' (design drawing), showed that the course focused on a modern construction process, in which construction drawings were adopted as the main means to convey and execute designs. Subjects taught included sketching, Thai ornament, western

[1] J. H. Van der Heide, 'The Economical Development of Siam in the Last Half of the Century', *Journal of the Siam Society*, 3 (1906), 6–7. Quoted in Resnick, 'The Decline of Rural Industry under Export Expansion: A Comparison among Burma, Philippines, and Thailand, 1870–1938'.
[2] Seidenfaden, *Guide to Bangkok. With Notes on Siam*, 235–36.

ornament, drawing, brush painting, architectural drawing, and geometry. It therefore tended to focus on draughtsmanship rather than hands-on jobs. The absence of a course in modern construction must have limited the ability of the graduates to compete with experienced Chinese carpenters and builders, not to mention with European architects. Most of the students probably became draughtsmen.

The school extended its curricula continuously, and by 1930 it operated fourteen courses — printing, painting, sculpture, carving, nielloware, lathe, carpentry, drawing teaching, goldsmithing, lapidary work, silkscreen printing, photography, mother of pearl making, and newly established Architecture, developed out of the construction course.[1] Nat Phothiprasat, who returned to Siam in 1930 after the completion of his BArch Degree at Liverpool, immediately became Head of the Department of Architecture. M. C. Itthithepsan claimed in 1934 that the training of craftsmen in Siam in the last twenty years since the establishment of Po Chang School had not been fruitful for lack of a long-term plan, depending instead on ad hoc solutions mostly depending on imported curriculum and machines.[2] He called for a thorough and up-to-date plan that suited the local conditions. As regards this criticism, the actions of the government, especially regarding architectural training at the time, as well as the ways Phothiprasat would develop the curriculum, must be examined.

Siam's first school of Architecture

Before the emergence of a clear objective to set up an architecture school, a separate recognition of the need for a fine arts school in Chulalongkorn University was discussed by the Committee of Chulalongkorn University Management (*Kammakan Damri Rupkan Nai Chulalongkorn Mahawitthayalai*) during 1928 and 1931. The committee headed by Prince Rangsit proposed that the university, which then only had faculties of Arts and Science, Engineering, Medicine, and Political Science, should establish faculties of agriculture, veterinary medicine, forestry, mining, law, archaeology, fine arts, and music.[3] The report stated that the Law

[1] Bangkok, National Archives of Thailand, S R 0201.14.1/11 (Po Chang School)
[2] Kridakorn, *Rueng Kiaokab Sathapattayakam (About Architecture)*, pp. 64–47.
[3] Bangkok, Chulalongkorn University Archives, Ch 21.1, Box 2, Folder 37 *Kammakan Damri Rupkan Nai Chula 2475* (Committee of Chulalongkorn University Management 1932), pp. 1–11.

school was the most important and urgent. And despite their inclusion, fine arts and music were at the bottom of the list, signifying their lack of importance and urgency — both not surprisingly seen as something beyond necessity. Therefore, it was not until the period after the 1932-revolution that art was promoted, as the People's Party government saw it as a tool for nation-building.

As regards architecture in particular, prior to the 1932-revolution the Minister of Public Instruction, Chao Phraya Thammasak Montri, had produced a plan to promote construction education at all levels in order to take over the jobs from foreigners. This paralleled the observation by Luang Sukkhawatthanasunthon over the construction of the Memorial Bridge across the Chao Phraya River, that Thai labour was as good as Chinese for many kinds of work, but they lacked a proper training, and this allowed the domination of the Chinese.[1]

The plan was to establish vocational construction schools nationwide along with a special school offering a higher level of construction knowledge. The former were to train carpenters, plasterers, and painters, with the aim of producing graduates who were *Chang Khum Ngan* and *Chang Ka Ngan* (foremen) to substitute for *Chin Teng* (Chinese foremen). The first school of this kind, Uthaen Thawai School, was founded in 1933. In 1935, the Ministry of Public Instruction proposed to the government that the school should be given priority to execute construction works designed and estimated by the Fine Arts Department, for the benefit of the training of its students.[2] The school was also granted the privilege when it bid for construction projects of the government that it did not have to pay the entry fee or provide a deposit if selected.[3] By establishing the school and granting these privileges, the government hoped to train Thai carpenters and builders to compete with the Chinese.[4]

The second type of school at a higher level trained prospective architects for positions in the public sector. The main employers were the Department of

[1] Sukkhawatthanasunthon Luang, '*Withi Damnoen Kan Kosang Saphan Phra Buddhayotfa Khong Borisat Dorman Long Phurapmao* (Construction Methods of Phra Buddhayotfa Bridge by Dorman Long Company, Contractor)', *Khao Chang*, special issue (1932), 173–74.
[2] Bangkok, National Archives of Thailand, S R 0201.14.1/9 (Uthaen Thawai School)
[3] Bangkok, Chulalongkorn University Archives, Ch 22.5.2, Box 25, folder 40 *Baebplan* (Drawings)
[4] The bidding for the construction of lecture theatres' stands at the Faculty of Engineering on February 12th 1935 had four Chinese contractors out of eight candidates. Another two had European names. Among them was Uthaen Thawai School. See Ibid.

Municipal Works and The Fine Arts Department, which were responsible for most of the state's construction. They had previously been served by Europeans and by a limited number of Siamese architects who had graduated from Europe.[1] The government claimed that this level of school had already been set up at Po Chang School in 1930; therefore it was timely to transfer it to Chulalongkorn University.[2] The idea of placing architectural education within the university was not unlike the situation in Liverpool in 1901. The action was aimed to give prestige to architects to place them at the top of the construction team, completely differentiated from craftsmen, builders, and engineers.[3] In this respect, the actions in England and Siam were both concerned with the privilege of the profession.

The School of architecture was initially meant to be set up as an independent department in Chulalongkorn University. However, it started in the Faculty of Engineering on 23 May 1933. This was done despite the complaint of Phra Charoen Witsawakam, the Dean of the Faculty of Engineering, that he was unwilling to accept it due to his workload.[4] The decision demonstrated the idea that architecture was still much associated with *Chang*. As the *Chang* who designed and built buildings were also expected to be capable with structure and construction, by now much affiliated with modern civil engineering, it made sense to affiliate the department with the Faculty of Engineering.

The location of the architecture department within the Faculty of Engineering drew a criticism from M. C. Itthithepsan Kridakorn, who had graduated from the Ecole des Beaux-Arts. He argued that the training of architectural students within the Faculty of Engineering would produce no real architects, but only civil engineers equipped with some sort of basic architectural content.[5] He suggested instead that architectural students should be trained among other crafts students, so they could gain a balance of skills in sculpture, carving, and engineering.[6] These comments

[1] Tiptus, *Sathapanik Siam: Puen Than Bot Bat Pon Ngan Lae Naew Kid (Po So 2475–2537) [Siamese Architects: Foundation, Roles, Works, and Concepts (AD 1932–1990)*, p. 30.
[2] Natioanl Archives of Thailand, S R 0201.14/2
[3] Andrew Saint, *Architect and Engineer: A Study in Sibling Rivalry* (New Haven; London: Yale University Press, 2008), p. 467.
[4] Bangkok, Chulalongkorn University Archives, Ch 10, Box 1, Folder 1 *Khana Sathapattayakammasat* (Faculty of Architecture), p. 2.
[5] Kridakorn, *Rueng Kiaokab Sathapattayakam (About Architecture)*, p. 20. The article was first published in 1934 when the Department of Architecture was still under the Faculty of Engineering.
[6] Ibid.

were made despite the fact that the original Beaux-Arts discipline in France, where he had been trained, provided classes in mathematics and physics and required students to take a construction exam in which they were supposed to be able to calculate the structure that ensures the strength of the building.[1] This demonstrates the ambivalent nature of architecture that its training cannot escape.

This ambivalent nature, in which artistic and scientific aspects were arguably equally important, became an issue in Siam from the beginning of the establishment of the training. It was all the more complex in the Siamese context because practitioners who designed and built buildings were still perceived as *Chang* who needed to be capable with structure and construction, which by now was affiliated with modern engineering. Teachers in engineering were available only at the university, so the intention to put architecture in the higher-education level must have justified the government's decision in opposition to the opinion of M. C. Itthithepsan.

On the other hand, contemporary engineers, with whom architects had to work, tended to perceive architects as a sort of artist interested only in artistic matters rather than in technology.[2] The majority of the senior staff of the university who attended the meeting to establish the Department of Architecture actually commented that the curriculum draft proposed by Phothiprasat was too much oriented towards art, but Phothiprasat argued that it was in an experimental stage and could be adjusted.[3]

There was a plan to move the architecture school to operate at the site of the Department of Fine Arts, as well as establishing it as an independent department of Chulalongkorn University, at the beginning of 1934 due to the expanding number of students and lack of space.[4] This seemed like a development towards M. C. Itthithepsan's suggestion that architecture students should be trained among other art

[1] Richard Chafee, 'The Teaching of Architecture at the Ecole des Beaux-Arts', in *The Architecture of the Ecole des Beaux-Arts*, ed. by Arthur Drexler (London: Secker & Warburg, 1984), p. 82.
[2] An interview with An Nimmanhemin quoted from Tiptus, *Sathapanik Siam: Puen Than Bot Bat Pon Ngan Lae Naew Kid (Po So 2475–2537) [Siamese Architects: Foundation, Roles, Works, and Concepts (AD 1932–1990)*, p. 28.
[3] Bangkok, Chulalongkorn University Archives, Ch 10, Box 1, Folder 1 *Khana Sathapattayakammasat* (Faculty of Architecture), p. 5.
[4] Bangkok, Chulalongkorn University Archives, Ch 10, Box 1, Folder 8 *Khana Sathapattayakammasat* (Faculty of Architecture), p. 6.

students. However, it happened that the school was moved to the site of the Department of Fine Arts in that year while still affiliated to the Faculty of Engineering, but moved back in the following year.[1] The ambiguity and possible awkwardness of the profession, previously demonstrated in the writings by architects, were even more evident during the establishment of the training.

The issue of architect vs engineer in the establishment of the first architecture school of Siam demonstrated a difference between the original Paris' Beaux-Arts and Liverpool's Beaux-Arts, from which Chulalongkorn University subsequently adopted the curriculum. At Liverpool Prof. Reilly had equipped Phothiprasat to be able to calculate the ferro-concrete structure of state-of-the-art Sala Chaloemkrung Theatre, completed in 1933. To reiterate this, Reilly once stated that he wished the architect and civil engineer had not been separated, and that hopefully with the advancement of ferro-concrete the two professions would approach each other again.[2] Back at the Department of Architecture, Chulalongkorn University, the subject structure was taught by professors from the Faculty of Engineering. A student at that time recalled that the subject was very intense, equipping him to calculate a 2-storey structure without an engineer's assistance.[3]

The Department of Architecture received no annual budget at its establishing years.[4] It instead received the first establishing fund of 1,000 baths, only enough for buying tables and cabinets, from the university, taken from the Prince Chula Chakkrabongse fund for higher education.[5] Eleven students from Po Chang School were transferred to continue their studies as second year students at the Architecture Department, while eleven new students were enrolled (of the twenty five expected).[6] Two of the new students were daughters of the Minister of Public Instruction.[7] The curriculum was a three-year diploma. Nat Phothiprasat remained the Head with the

[1] Bangkok, Chulalongkorn University Archives, Ch 10, Box 2, Folder 28 *Khana Sathapattayakammasat* (Faculty of Architecture), p. 2.
[2] Reilly, *Scaffolding in the Sky: A Semi-Architectural Autobiography*, p. 50.
[3] Tiptus, *Sathapanik Siam: Puen Than Bot Bat Pon Ngan Lae Naew Kid (Po So 2475–2537) [Siamese Architects: Foundation, Roles, Works, and Concepts (AD 1932–1990)*, p. 59.
[4] Bangkok, Chulalongkorn University Archives, Ch 10, Box 1, Folder 1 *Khana Sathapattayakammasat* (Faculty of Architecture), p. 2.
[5] Ibid., p. 6.
[6] Ibid., p. 2.
[7] *Thi Raruek 72 Pi Khana Sathapattayakammasat Chulalongkorn Mahawitthayalai Po So 2476–2548 (The 72th Anniversary of the Faculty of Architecture, Chulalongkorn University 1933–2005)* (Bangkok: Faculty of Architecture, Chulalongkorn University, 2005), p. 83.

assistance from Siwawong Kunchon (lecture and studio) and Bunchuai Utcharat (secretary and drawing).[1] M. C. Vodhyakara Varavarn came to give lectures for the 2nd year class.[2]

The school of architecture was independently established as the Department of Architecture following the issue of the Act of Chulalongkorn University BE 2477 on 7 March 1935.[3] However, Phra Charoenwitsawakam, Dean of the Faculty of Engineering, remained Acting Director. Phothiprasat was transferred to become Director of the Architecture Division at the Department of Municipal Works, Ministry of the Interior. Siwawong Kunchon, whose degree was not Architecture but Decorative Arts, was, therefore, the only full-time staff member with assistance of Bunchuai Utcharat. Phothiprasat, after his move to the busy job at the Department of Municipal Works, served only as a part-time studio tutor.

Now the structure of the 3-year-course will be shown, for comparison with that of Liverpool. Subjects were categorised into four groups — primary subjects, secondary subjects, tertiary subjects, and supplementary subjects.

In the 1st year, four groups of subject were as follows:

Primary subjects

- Classical Architecture
- Construction; the main text book was Jaggard and Drury, *Building Construction*.[4]

Secondary subjects

- History of Architecture; the main text book was Banister Fletcher.[1]

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[1] Bangkok, Chulalongkorn University Archives, Ch 10, Box 1, Folder 1 *Khana Sathapattayakammasat* (Faculty of Architecture), p. 1. Bunchuai Utcharat studied Drawing at Po Chang School for four years and studied Architecture with Phothiprasat for three years at that school. Then he worked as painter and draughtsman at the Department of Outer Palace. He participated in Sala Chaloemkrung Theatre project which was designed by M. C. Samaichaloem Kridakorn and Nat Phothiprasat. see Bangkok, Chulalongkorn University Archives, Ch 10, Box 1, Folder 4 *Khana Sathapattayakammasat* (Faculty of Architecture), p. 1.

[2] Siwawong Kunchon Na Ayutthaya, '*Chotmai* (Letter)', *ASA*, 5 (1969), 18–19.

[3] '*Ratchakitchanubaeksa* (The Royal Thai Government Gazette)', vol 52 (1935), pp. 82.

[4] Siriwan Wetchawit, '*Kan Suksa Naew Khwamkit Lae Withi Suksa Prawatsat Sathapattayakam Khong Sattarachan Nat Phothiprasat* (A Study on the Idea and Method of Nat Phothiprasat in the Historical Study in Architecture)' (Bangkok: Silpakorn University, 1988), p. 2.

- Elements of Architectural Design

Tertiary subjects

- Architectural Drawing
- Outdoor Sketch
- Still life Class
- Theory of Repetition
- Siamese Ornament
- Mechanics

Supplementary subjects

- Measuring & Restoration Work
- 6 hours Sketch Design

In the 2nd year, four groups of subject were as follows:

Primary subjects

- Theory of Architecture
- Architectural Construction
- Studio
- Construction Drawing

Secondary subjects

- History of Architecture
- Material
- Structural Theory
- Thai Architecture

Tertiary subjects

- Architectural Rendering
- Theory of Application of Colour
- Perspective Drawing
- Life Drawing Class
- Surveying

Supplementary subjects

[1] Ibid.

- Measuring & Restoration Work
- 6 hours Sketch Design

In the 3rd year, four groups of subject were as follows:

Primary subjects

- Theory in Architecture
- Architectural Construction
- Studio
- Construction Drawing

Secondary subjects

- History of Interior Decoration
- Architectural Decoration
- Structural Theory

Tertiary subjects

- Life Drawing Class

Supplementary subjects

- Measuring & Restoration Work
- 6 hours Sketch Design

In terms of the teachers in each subject, another source that is the timetable of the school in 1937 provides the information.[1]

1st Year
Classics Architecture: Siwawong Kunchon
History of Architecture: Siwawong Kunchon
Construction: Bunchuai Utcharat
Sketch: Bunchuai Utcharat
Studio Work in Construction: Bunchuai Utcharat
Theory of Sketch: Bunchuai Utcharat

[1] Bangkok, Chulalongkorn University Archives , Ch 10, Box 2, Folder 18 *Khana Sathapattayakammasat* (Faculty of Architecture), p. 5.

Still Life: Bunchuai Utcharat

Design Geometry and Sciagraphy: Siwawong Kunchon

History: Siwawong Kunchon

Siamese Ornaments: Bunchuai Utcharat

Materials: Siwawong Kunchon

Theory of Repetition: Siwawong Kunchon

Studio Work: Bunchuai Utcharat

Mechanics: Luang Parinyayokwibun

Construction inspection (occasionally): Bunchuai Utcharat

2nd Year

Six Hours Sketch Design and Critic: Nat Phothiprasat

History: Siwawong Kunchon

Mechanics and Structure: Luang Parinyayokwibun

Perspective: Siwawong Kunchon

Building Materials: M. C. Vodhyakara Varavarn

Colour and Rendering: Siwawong Kunchon

Theory of Design: M. C. Vodhyakara Varavarn

Life Class: Siwawong Kunchon

Studio Work: M. C. Vodhyakara Varavarn

Construction: M. C. Vodhyakara Varavarn

Construction inspection (occasionally): M. C. Vodhyakara Varavarn

3rd Year

Six Hours Sketch Design and Critic: Nat Phothiprasat

Construction: Nat Phothiprasat

Siamese Art: Phra Phromphichit

Structure and Mechanics: Luang Parinyayokwibun

History of Decoration: Siwawong Kunchon

Surveying: Khun Chongnimmit

Theory of Design and Composition: Nat Phothiprasat

Studio Work: Nat Phothiprasat

Life Class: Siwawong Kunchon

Construction inspection (occasionally): Nat Phothiprasat

Figure 4.3.1: Class of 2476 (1933–34) at the Department of Architecture, Chulalongkorn University[1] Eleven senior students were transferred from Po Chang School, while the other eleven including two women were enrolled at the university.[2]

[1] *60 Pi Khana Sathapattayakammasat Chulalongkorn Mahawitthayalai Po So 2476–2536 (60th Anniversary of the Faculty of Architecture, Chulalongkorn University 1933–1993)* (Bangkok: Faculty of Architecture, Chulalongkorn University, 1993), p. 16.
[2] Bangkok, Chulalongkorn University Archives, Ch 10, Box 1, Folder 1 *Khana Sathapattayakammasat* (Faculty of Architecture), p. 2.

It has been shown that despite the help from some part-time staff in many subjects, after 1934 Siwawong Kunchon as the only full-time staff member had excessive teaching duties. The lack of funding and limitations of the Department's own building caused further difficulty in teaching of many subjects.

It has been shown that the three-year course was oriented towards the artistic side rather than scientific side of architecture, with a special emphasis on classical architecture.[1] Most of the subjects mainly followed the Liverpool curriculum and English textbooks. The first version of the document reporting the curriculum submitted to the Ministry of Public Instruction had even been written in English. It was then requested that it be translated into Thai.[2] The final version was written mostly in Thai but some descriptions were still in English or directly transliterated from English to Thai, as many technical terms did not have Thai terminology. It has also been shown that Thai architecture was a minor subject. History of Architecture was all about western architecture, starting with Egyptian art. Evidently the majority of subjects was new to Siam. Architecture, like other modern subjects, falls into the process of catching up with advanced civilisation.

The attempt to include Thai architecture in the curriculum was not without problems, because only a few experts were available to teach, not to mention the absence of a specific textbook. Thai art and Thai architecture were, therefore, minor subjects, only instructed in the first two years as tertiary and secondary subjects respectively. Thari Devahastin na Ayuthaya, one of the female students who enrolled at the department in 1933, recalled that the subject was taught by Ramphai Yatmongkhran.[3] She studied aspects from detailed pattern drawings to designs of houses. She later used such forms and elements in her designs at the Department of Municipal Works in the post-war period, when the Thai character was much encouraged.

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[1] Tiptus, *Sathapanik Siam: Puen Than Bot Bat Pon Ngan Lae Naew Kid (Po So 2475–2537) [Siamese Architects: Foundation, Roles, Works, and Concepts (AD 1932–1990)*, p. 50.
[2] Bangkok, Chulalongkorn University Archives , Ch 10, Box 2, Folder 18 *Khana Sathapattayakammasat* (Faculty of Architecture), pp. 3–10.
[3] *Thi Raruek 72 Pi Khana Sathapattayakammasat Chulalongkorn Mahawitthayalai Po So 2476–2548 (The 72th Anniversary of the Faculty of Architecture, Chulalongkorn University 1933–2005)*, p. 83.

Figure 4.3.2: A work of Unchit Wasuwat, a student from 1939 to 1941, showing a composition of classical elements [1]

Figure 4.3.3: A measured works of Unchit Wasuwat, a student from 1939 to 1941, showing Phra Prang Wat Phraram[2]

[1] *Pluk Ban Phid Kid Chon Ban Thalai (Building a House Wrongly, the Owner Will Be Upset until It Collapse) Printed as a Memorial for the Funeral of Unchit Wasuwat and Phaichit Wasuwat* (Bangkok: Rong Phim Sri Krung, 1942), unnumbered p. 2

[2] Ibid, un-numbeded p. 4.

Despite the heavy resemblance to the Liverpool mould, more detailed analysis reveals that some subjects functioned in a different way from their original ones at Liverpool. First, the Measured Drawing was taught at Liverpool, where C. H. Reilly normally assigned the students to accomplish it in the long vacation at the end of the 2nd academic year. Given the fact that measured work in Chulalongkorn University was not conducted by measuring Western classic architecture but ancient Thai architecture, it did not provide an opportunity for students to be more familiar with Western classic building design, which their classes focused on, but instead to compensate for the lack of texts about Thai architecture in the classes.

Reilly saw this exercise as the best way to allow students to 'dissect and reconstruct the master's works, which would make the subtlety of the original designs apparent and unfold the masters' minds gradually to the students'.[1] In Liverpool, the unfolding was supposed to be evident in the studio work. In Thailand, Reilly's idea tended to be achieved also by the appreciation of another style of architecture — Thai — but the unfolding could be more instant. This is because the groups of students went to measure a wide range of ancient architecture, both surviving buildings, such as the *Prang* (pagoda) of Wat Ratchapradit and Phra Pathom Chedi, and the ruins, such as Wat Phra Sri Sanphet, Prasat Hin (Khmer temple) Phimai, using their skill from the surveying class to measure, sketch, and then come back to make the drawings. In the case of ruins, or where the existing edifices had been partly demolished, the students needed to research the contemporary style found in other edifices and then apply it to the drawings.[2] Therefore, measured works at the School of Architecture of Chulalongkorn University also provided an exercise for students to reconstruct the lost architecture of the kingdom. This must have been perceived as good support for building up the knowledge and texts about the traditional architecture that was still unavailable.

Second, Sketch Design in Liverpool was assigned for students of every year to be accomplished in six hours every Monday. After that, on every Tuesday of the

[1] Charles Herbert Reilly, *The Liverpool Architectural Sketch Book; Being the Annual of the School of Architecture, University of Liverpool* (London: Architectural Review, 1906), p. preface.
[2] An interview with An Nimmanhemin quoted from Tiptus, *Sathapanik Siam: Puen Than Bot Bat Pon Ngan Lae Naew Kid (Po So 2475–2537) [Siamese Architects: Foundation, Roles, Works, and Concepts (AD 1932–1990)*, p. 60.

following week, the crits would be held in the hall where everybody in the school could attend. Reilly stated that the students at their early years were his main target for this subject because it was them whose imagination could be most easily ignited by exercises such as Palaces for Kublai Kahn, Grand Canal for Mussolini, and carving the cliffs of Dover into the monument of the sinking of all the world's navies.[1] Higher years saw more realistic programmes such as a shopfront or a reconstruction of a bridge. By doing these exercises, many students learnt to make extraordinary drawings which comprised the subjects, their outline plans, and sections on huge sheets of paper. It should be noted that Sketch Design at Liverpool was not as same as École des Beaux-Arts's *esquisse*, which was the sketch design that formed a part of the main project (*concours*). The students there had to finish it in twelve hours and to use it as the preliminary design, to which they had to stick, to complete the *rendu* (the final rendering) over the next one to three months. In working this way, alumnus M. C. Itthithepsan Kridakorn commented, the students had been forced to design too quickly without thorough research and analysis; and it had been even worse because they had not been able to change the scheme.[2]

At Chulalongkorn University, Sketch Design was conveyed in the same way as at Liverpool. Programmes also ranged from the conceptual, such as using a pile of rocks to construct something, to much more realistic projects, such as Khuntan Tunnel Gate and Public Toilet.[3] The subject must have played an important part in what alumnus Pon Chulasawek, regarded as a good foundation for his pressing practice in the government office, because it had equipped him the ability to design and make decisions quickly, and he had been able to execute the sketch within a limited time.[4] An extreme example was the case of Sanit Chimchom, who went on to work at the Department of Minicipal Works. He was commissioned by Luang Burakamkowit, the Director, to design the auditorium of Thammasat University within seven days.[5] The Director approved the design without amendment.

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[1] Reilly, *Scaffolding in the Sky: A Semi-Architectural Autobiography*, p. 209.
[2] Kridakorn, *Rueng Kiaokab Sathapattayakam (About Architecture)*, p. 25.
[3] '*Khao Chak Rongrian Khao* (News from the Old School)', *ASA*, 1 (1951), 51–58; Tiptus, *Sathapanik Siam: Puen Than Bot Bat Pon Ngan Lae Naew Kid (Por Sor 2475 - 2537) [Siamese Architects: Foundation, Roles, Works, and Concepts (AD 1932 – 1990)]*, p. 98.
[4] Tiptus, *Sathapanik Siam: Puen Than Bot Bat Pon Ngan Lae Naew Kid (Po So 2475–2537) [Siamese Architects: Foundation, Roles, Works, and Concepts (AD 1932–1990)*, p. 419.
[5] Ibid., pp. 419, 25.

Ironically, the Sketch Design at Chulalongkorn was conducted in a similar way to that of Liverpool, but to benefit the graduates in a similar way as at the Ecole des Beaux Arts, regarding the use of the sketch in the design development process without in-depth research and any chance to change it. Despite the apparent disadvantage, the Thai graduates, living under the dictatorship whose concern about architecture was not much more than as a symbol of civilisation, let alone the intrinsic contribution it could have offered to the users; saw it as the foundation of their ability to accomplish work in limited time. The subject was continued in the school until 2009.

To be more localised?

The differences in purpose between some subjects at Chulalongkorn and Liverpool, despite their having the same names, have been discussed. But perception of the overall similarity and the full load of advanced subjects included in the curriculum drew another criticism from M. C. Itthithepsan Kridakorn. He argued that the curriculum was not responsive to the reality of the contemporary construction industry in Siam, in which the graduates of the school would be obliged to work.[1] An example was the teaching of Construction by assigning students to copy construction drawings from foreign textbooks.

He commented that the curriculum should allow the majority of students to be trained as vocational architects who would graduate in a not-so-long period and work as employees in offices, mainly executing basic design and drafting. He claimed that only a few of the students should be given the opportunity to study advanced subjects in order to graduate as professional architects and set up their own offices. He was, however, not positive in the necessity of the latter case, as the backward situation of the construction industry in Siam reassured him that this would not happen in the near future. He insisted that the construction industry involving craftsmanship should be improved alongside the architectural education; otherwise the graduates' ability to design architecture would be useless, as no one could build it properly.

[1] Kridakorn, *Rueng Kiaokab Sathapattayakam (About Architecture)*, p. 39.

Figure 4.3.4: Classes of the Department of Architecture, Chulalongkorn University, before 1941 were conducted in the building that had previously been the house of the Rector[1]

Figure 4.3.5: A studio work of the Department of Architecture, Chulalongkorn University, between 1939 and 1941[2]

[1] *Thi Raruek 72 Pi Khana Sathapattayakammasat Chulalongkorn Mahawitthayalai Po So 2476–2548 (The 72th Anniversary of the Faculty of Architecture, Chulalongkorn University 1933–2005)*, p. 34.
[2] *Pluk Ban Phid Kid Chon Ban Thalai (Building a House Wrongly, the Owner Will Be Upset until It Collapse)*, unnumbered p. 3.

Another criticism came in an article '*Sathapattayasuksa* (Architectural education)' in Prachachart Newspaper.[1] The author, who used a penname, Nai Sonchai, also criticised the curriculum of the architecture school for following Liverpool too much and failure to adjust to suit Siam. He also claimed that the construction methods in textbooks could not be used in Siam, as they would be too expensive, and that the subject area about Siamese architecture was too minor. The graduates were not equipped with adequate practical knowledge and would put out of employment by experienced draughtsmen who had worked for a while and could do better than them with less payment.

To be progressive

Despite these criticisms, the policy of the government in the development of the architecture school pursued its original aim to train professional architects to substitute for Europeans in the public sectors. On 16 August 1937, to develop the curriculum further, the government decided to employ a foreign professor as Head of department with a three-year contract.[2] Prof.Lucien Coppé (1892–1975), a Belgian architect who had worked extensively in Bruges, took this position. Despite its aim to produce Siamese graduates to replace foreigners, the school could not help depending on yet another foreigner to make its plan come true. To assure the prestige of the department and the subject, the curriculum in the university needed a foreign 'professor', believed to be able to help Siam strengthen up this new subject to a high standard.

Lucien Coppé arrived in 1938.[3] As mentioned before (chapter 4.1), his arrival in Siam correlated with many other Belgian architects who went to work in other Asian countries, especially China, and in the Belgian Congo, at the time of an economic

[1] Nai Son Chai, '*Sathapattayasuksa* (Architectural Education)', *Prachachat*, 7 May 1936, p. 11. The government's Office of Advertisement sent the article to the Faculty of Architecture. It was kept in Bangkok, Chulalongkorn University Archives, Ch 10, Box 1, Folder 15 *Khana Sathapattayakam* (Faculty of Architecture), p. 2.
[2] Bangkok, National Archives of Thailand, S R 0201.19/47 (Chulalongkorn University Employs Foreigners)
[3] Bangkok, Chulalongkorn University Archives, Ch 19.2, Box 1, Folder 14 *Sathapattayakam* (Architecture). For a list of Coppé's work in Belgium, see 'Inventaris Onroeren Erfgoed', https://inventaris.onroerenderfgoed.be/ [accessed 18 July 2013], a Belgian online heritage database. Brief descriptions of the buildings, mostly in a historical and stylistic account, are available in the database. A further research on him as a go-between is worthwhile.

crisis in Europe.[1] With the help of Prof. Coppé, the department developed its curriculum into a five-year course in 1939.[2] It was then promoted to Faculty of Architecture, to award Bachelor of Architecture.[3] Admission became increasingly popular in the next couple of years. The course required students to acquire 70% of the mark after the 3rd Year in order to continue their 4th and 5th Year; otherwise they would finish with a 3-year diploma. Prof.Lucien Coppé taught the 4th and 5th Years. His students recalled his teaching in studios as a mixture between Classical and Modern, including the use of the arch and the simplified capital.[4] He, along with engineer Phraya Prakit Konlasat, also taught building systems including electricity, water works, and sanitary systems. Siwawong Kunchon, as full-time staff member, with the help of part-time staff Nat Phothiprasat and M. C. Vodhyakara, were responsible for the 1st to 3rd Year studios. In addition, secondary subjects were taught by Phra Promphichit (Thai ornament), Luang Parinya Yokwibun (Mechanics), Khun Chong Nimmit (Measured drawing), Bunchuai Utcharat (preliminaries), and Ercole Manfredi (Construction 1939–46). The teaching of Construction under Manfredi seemed to respond to the disadvantage of the teaching in the early stage, as he brought his students to the countryside to observe the origin of stones used in construction and decoration, and to visit his built works, such as a house with a cavity-wall and paddy husk infill as insulation.[5]

Modern-cum-traditional: the bachelor's degree and the new building

Despite changes, the school retained much of Liverpool's curriculum. The teaching still concentrated on Western classical orders and building types, and only English texts were used. Influence from outside the school, such as from magazines, both domestic and international, was limited. Apart from the fact that publications were carried out against the background of great economic difficulty as well as a poor printing technology so they rarely had pictures, foreign magazines were not easy for students to acquire from the limited number of bookstores. *Architectural*

[1] Coomans and Lau, 'Les Tribulations d'un Architectebelge En Chine: Gustavevolckaert, Au Service du Créditfoncierd'extrême-Orient, 1914-1954'.
[2] Bangkok, National Archives of Thailand, (3) S R 0201.59.1/21 (Department of Architecture, Chulalongkorn University)
[3] Ibid.
[4] Tiptus, *Sathapanik Siam: Puen Than Bot Bat Pon Ngan Lae Naew Kid (Po So 2475–2537) [Siamese Architects: Foundation, Roles, Works, and Concepts (AD 1932–1990)*, pp. 70–93.
[5] Ibid., p. 94.

Forum, *Pencil Point*, and *Architectural Journal*, were circulated, mostly in old issues given by professors, then bound in volumes in the Faculty's library.[1] These limitations had the effect that students' studio projects were mainly designed following the teacher's approach. This resembled to what had been done under traditional apprenticeship. Apart from the particular ideas of each teacher, the work was mainly prioritised towards function, orientation, climate, and budget.[2] This correlated with what was being promoted in publications, as seen in the previous chapter.

The progress and the obstacles of the curriculum after it was developed into a five-year course have been shown. It is now worth looking at the aims of the school and the government after an uneasy eight years of establishment. Part of the annual report 1940 is as follows:

> Before the establishment of architectural education in Thailand, the design and construction of buildings and all their accompanying decoration needed foreign architects and Thai architects who had graduated from abroad. There were a limited number of these people. Therefore the majority of the construction was in the hands of contractors who did it following their familiar way or did it without theory [*Lhak Wichakan*]. The aim of the Department of Architecture is, therefore, to promote this subject in Thailand. This will contribute to the construction in the country that will be done with up-to-date theory and the art that is suitable for our geography. And when there are enough Thai architects, there will be no need to have foreign architects. Furthermore, the architectural education will help Thais to research on existing Thai art, which is a good example, and to integrate it with modern knowledge in order to create an architecture that particularly belongs to Thailand as the everlasting culture of the nation.[3]

The aim of the authority, now under the nationalist Prime Minister Plaek Phibunsongkhram, who also served as the rector of the university, was high. The intention to train Thais to take over construction jobs from foreigners remained. It

[1] '*Chotmaihet Khong Nai Sathapanik* (A Chronicle of Mr.Architect)', *ASA*, 1 (1951), 34–40.
[2] ———, *Sathapanik Siam: Puen Than Bot Bat Pon Ngan Lae Naew Kid (Po So 2475–2537) [Siamese Architects: Foundation, Roles, Works, and Concepts (AD 1932–1990)*, p. 120.
[3] Chulalongkorn University Archives, Ch 10, Box 2, Folder 28 *Khana Sathapattayakammasat* (Faculty of Architecture), pp. 2–3.

aimed to change positions in not only the public sectors but also private ones, previously also dominated by the Chinese, who worked without 'theory'. Correlating with the aim to use architecture as a tool to civilise the country at the time of nation-building, and published in its texts, the school of architecture was aimed to train the professionals who would be responsible. A new aim was that the government and the school should revive Thai art and architecture to strengthen nationalism, to reassure Thailand's place in the world of civilised nations — modern yet history-and-identity-rich.

The faculty, for the first time after changing the curriculum to the Bachelor course, awarded the degree in Architecture to five graduates in 1941. It moved into its first permanent building designed by Prof. Coppé in the same year (Figure 4.3.6–Figure 4.3.9). The building was, therefore, a good manifesto for the school's ethos regarding 'appropriate' architecture of Thailand at the time.

Despite being symmetrical in plan with the main porch and columns at the middle, the building showed Coppé's new experiment along a conservative line of Modernism adapted to suit the local context. Parapets and reinforced concrete eaves were used to hide asbestos cement sheet roofing and to shade the windows respectively. Large glass windows were applied for classrooms and studios, making the most of natural light, while round windows lit the stairs at both ends. Between the large windows, Coppé placed a variety of geometric and abstract reliefs not seen in his previous work.[1] Adapted Thai ornaments were also applied for capitals and the decoration of front doors. The description of these reliefs and capitals in the announcement of the opening ceremony reads:

> Every column of the front façade has a particular pattern designed following architectural art. Especially at the entrance, Thai ornaments are used, such as for the capitals.[2]

[1] From an interview with Chaloem Rattanathatsani, Coppe's assistant, quoted in Tiptus, *Sathapanik Siam: Puen Than Bot Bat Pon Ngan Lae Naew Kid (Po So 2475–2537) [Siamese Architects: Foundation, Roles, Works, and Concepts (AD 1932–1990)*, p. 729.
[2] Bangkok, Chulalongkorn University Archives, Ch 18.5, Box 1, Folder 5 *Kan Poed Tuek Tangtang Nai Wanchat* (The Opening of New Buildings on the National Day), p. 22.

Figure 4.3.6: Faculty of Architecture, Chulalongkorn University (1941), by Lucien Coppé[1]

[1] Chulalongkorn University Archives

Figure 4.3.7: Ground floor plan of Faculty of Architecture, Chulalongkorn University (1941)[1]

Figure 4.3.8: Reliefs at the Faculty of Architecture, Chulalongkorn University (1941)[2]

[1] 'Bâtir... et équiper' *La technique des travaux*, 1 (1954).
[2] Tiptus, *Sathapanik Siam: Puen Than Bot Bat Pon Ngan Lae Naew Kid (Po So 2475–2537) [Siamese Architects: Foundation, Roles, Works, and Concepts (AD 1932–1990).*

Figure 4.3.9: Modern Thai ornament on capitals and windows at the Faculty of Architecture, Chulalongkorn University (1941)[1]

[1] Ibid.

The initial plan for a three-storey building was changed to a two-storey one, due to disputes with other Faculties' deans over the budget.[1] It was constructed by Sanga Wannadit, a prominent Thai contractor.[2] The building was described with two other new buildings of the university, the Department of Dentistry and Department of Phamacology, by the government press as *Akhan Baeb Thansamai* (modern buildings, in the sense of 'up-to-date').[3] The Thai art was applied in a modern way. In other words, it was modern but Thai. A Thai contractor was in charge of the construction rather than a foreign contractor — the Chinese. The building was therefore a prototype for modern Thai architecture and how it should be built. Ironically, the one thing that was not Thai was its architect, Prof. Lucien Coppé, whose name did not appear in the announcement of the opening ceremony.

At the end of 1941, Thailand was forced into alliance with Japan in World War II. During the war, shortages of drawing tools, paper, and colour affected the teaching.[4] Foreign magazines also became more difficult to acquire from bookshops. As regards the aim to 'help Thais to research on existing Thai art, to give a good example, and to integrate it with modern knowledge in order to create the architecture that particularly belong to Thailand that will be the everlasting culture of the nation', it was timely that the first text book, *Architecture in Thailand*, written in Thai by Phothiprasat, appeared in 1944, to be used in the school and for the public.

Classes were finally halted in 1944 and 1945 due to Allied bombing and the Japanese army's occupation of the Faculty's building. By 1944, Kunchon and Coppé left the faculty.[5] The teaching returned to normal at the end of 1945. Phraya Prakit Konlasat became the Dean from 1943 to 1954.[6] M. C. Vodhyakara Varavarn became Head of the Department of Architecture in 1950. Sarot Sukkhayang taught the Urban Planning to the 5th year class from 1943.[7] F. Fistono replaced Manfredi to teach construction and technology in 1946.[8]

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[1] Kunchon Na Ayutthaya, '*Chotmai (Letter)*'.
[2] The cost was 131,200 baht. See Bangkok, Chulalongkorn University Archives, Ch 22.5.2, Box 21, folder 12 *Baebplan* (Drawings)
[3] '*Sathansuksa Khong Chulalongkorn Mahawitthayalai Sang Laew Sed Ik Sam Lang (Three New Buildings of Chulalo*ngkorn University Completed)', *Khao Khosanakan* , 1 (1942), 195–96.
[4] ———, *Sathapanik Siam: Puen Than Bot Bat Pon Ngan Lae Naew Kid (Po So 2475–2537) [Siamese Architects: Foundation, Roles, Works, and Concepts (AD 1932–1990)*, p. 29.
[5] Kunchon Na Ayutthaya, '*Chotmai (Letter)*'.
[6] Phraya Prakitkonlasat added Urban Planning and Structure design in the curriculum. See Tiptus, *Sathapanik Siam: Puen Than Bot Bat Pon Ngan Lae Naew Kid (Po So 2475–2537) [Siamese Architects: Foundation, Roles, Works, and Concepts (AD 1932–1990)*, p. 51.
[7] Ladawan, '*Phra Sarot Rattananimman* (Sarot R. Sukkhayang)', p. 136.
[8] National Archives of Thailand, S R 0201.19/47, p. 72.

Figure 4.3.10: Class of the Faculty of Architecture, Chulalongkorn University during World War II[1]

[1] *Thi Raruek 72 Pi Khana Sathapattayakammasat Chulalongkorn Mahawitthayalai Po So 2476–2548 (The 72th Anniversary of the Faculty of Architecture, Chulalongkorn University 1933–2005)*, p. 31.

Post-war progress, localisation, and Modernism

In the post-war period, a number of architectural and engineering graduates were reported as inadequate for the requirements of government offices. Housing shortages, renovation projects for government buildings, and policies to improve rural dwelling conditions, further accelerated the need. But these issues did not cause architecture to be fully recognised by the public in the way that architects wished. Practical aspects and issues were paid more attention than aesthetics.

But if we recall a comment of M. C. Itthithepsan Kridakorn of 1934 that the construction industry in the country needed to be developed alongside architectural practice and education, we could say that the industry after the war was relatively more developed than in the 1930s. There were more Thai builders and contractors in the industry, some with good craftsmanship comparable to the Chinese. However, there were new challenges.

Following the war, material prices and wages increased dramatically causing problems for both state construction and private firms. M. C. Vodhyakara Varavarn, as Head of the Department of Architecture, Chulalongkorn University, proposed a plan of research into alternative materials, sending out students and lecturers abroad to learn new technologies for the improvement of the domestic situation.[1]

The plans revealed a usual idea in the relationship between imports and the locality regarding the transplantation of 'western' ideas and practices to Thailand. A relationship could be seen between M. C. Vodhyakara's call for research on local materials and his plan to send lecturers and students abroad to learn 'new' technologies. The former action reiterated that conventional materials and construction methods mainly derived from the West needed to be adapted. Alternatives had to be studied and produced to substitute for the imported or mainstream domestic products that dominated the market, yet were too expensive. The latter action, however, insisted on the necessity to import more radically new ideas, and possibly new technologies. These dual actions were seen as necessary as long as the stage of development in Thailand failed to reach the same standard as in the advanced countries.

[1] Bangkok, National Archives of Thailand, (2) S R 0201.69/57 (The Committee for Sourcing Construction Materials and Labour)

Almost two decades after the establishment of architectural practice and school in Thailand, where the transplantation of the concept, ideas, principles, and practice of architecture from the western world to Thailand had been done mainly by means of 'import', research on an alternative, something to emerge locally, was called for by the new Head of the department. It might be considered ironic if we assume that the idea of M. C. Vodhyakara stemmed from his Arts and Crafts background inspired by his teacher Edward Prior, that encouraged creative use of local materials and vernacular architecture, in itself an imported idea. However, the way he understood the essence of such western ideas found itself 'appropriate' to the local conditions. The nineteenth-century Arts and Crafts's ideology of locality, differently from the more-universal Beaux-Arts and Liverpool, fitted itself to the practical aspect of an overseas case. At the same time, the quest for new imports was not neglected but encouraged. The post-war ambition and action of the leading Thai architect, reflected in the education, remained hybrid.

In 1951, the school had twenty eight 1st year students, three of whom were women.[1] By requesting increased budgets, it aimed to admit fifty new students in 1953.[2] The material research initiated by M. C. Vodhyakara started with research on houses for farmers all over the kingdom, and the construction of a prototype house, were conducted between 1951 and 1952.

The curriculum largely remained unchanged, with some adjustment and addition. The course structure of the 2nd year in 1951 was as follows:

Studio Works

a. Studio in Design (Project and Sketch Design) 5 credits

Project Programmes ranged from a hunter's cottage, Library, Provincial Hospital, to Resort Hotel

Examples of Sketch Design programmes were Khuntan Tunnel Gate and Public Toilet

b. Studio in Construction 5 credits

[1] '*Khao Chak Rongrian Khao* (News from the Old School)'.
[2] Bangkok, National Archives of Thailand, (3) S R 0201.59.1/17 (The Improvement and Extension in Subjects of Chulalongkorn University)

Construction and Structure	3 credits
History	2 credits
Theory and Design	2 credits
Elements of Thai Architecture	1 credit (Note: the word 'element' implying the focus on pattern design more than construction)
Surveying	1 credit
Still life and Modeling	1 credit
Perspective	1 credit

Urban Planning or Civic Architecture, a Liverpool derivation, was previously taught only in the 5th year by Sukkhayang, but was now included in the 3rd year for the first time.[1] A plan to establish the Department of Urban Planning was also on the way, as the Act of Urban Planning had been issued and therefore the government needed people to work in this field.[2] For this speciality, the faculty wanted to send a lecturer to study Urban Planning abroad.[3] A plan to establish the Department of Fine Arts was also initiated, as the developing industry in the country needed to be value-added with art.[4]

As in the pre-war period, students needed to pass 60% in each subject in order to get a Diploma, but 70% in order to pass through the 4thyear; only one or two thirds of them had been successful annually.[5] In 1951, ten students passed through the fourth year but three of them failed.[6] There were thirteen students in the final year, ten were new, and the other three were from the previous year.[7] They had to do 2-month internship before the first semester.[8] Available places for internship were limited both before and after the war, as very few private offices were available.

[1] '*Khao Chak Rongrian Khao* (News from the Old School)'.
[2] See '*Khrongkan Raya 5 Pi Khana Sathapattayakammasat Chulalongkorn Mahawitthayalai* (A 5-Year Plan for the Faculty of Architecture, Chulalongkorn University)' (M. C. Vodhyakara Varavarn's Archive, 1951).
[3] Ibid., p. 2.
[4] Ibid., pp. 1–2.
[5] '*Khao Chak Rongrian Khao* (News from the Old School)'.
[6] Ibid.
[7] Ibid.
[8] Ibid.

Some students had a chance to accomplish an internship during the summer break of their 4th year in their professors' offices, government offices, or foreign construction companies.[1] Thesis projects were, for example, a Clinic, Doi Suthep Hotel, Exhibition Hall, Bangkok Train Station, Crematorium, and National Art Museum. What should be examined further is how the studio was taught.

Back in Europe, the post-war period saw radical changes in international architectural practice and education. Classical subjects were reduced and limited to the first half of the first year at Liverpool.[2] By the mid-1950s, the Beaux-Arts method has been nearly excluded from architectural education in the UK.[3] While the curriculum at Liverpool, the mould for Chulalongkorn's, started to move away from Classics towards Modernism, the curriculum of Chulalongkorn remained largely unchanged until 1954.

An Nimmanhemin, a new teacher freshly graduated from Liverpool and Harvard, actually attempted to introduce Modernist principles in the 4th Year studio as early as 1950.[4] He recalled that History still focused on Classic, Gothic, Renaissance, and Thai architecture. Urban Planning or Civic Design focused on the study of ancient cities with exercises on garden design, not to mention the lack of economic, social, and administrative issues. Theory of Design also focused on classical principles. Students' works therefore showed Classical influence, exploiting axes, symmetry, solidity, and massiveness. Understanding of construction, especially in reinforced concrete or wood, was not much shown. The visits by Richard Neutra (1952) and Walter Gropius (1953), who were received by professors, a few practitioners and some students, seem to have made little impact, but might at least have ignited an atmosphere of change.

[1] Tiptus, *Sathapanik Siam: Puen Than Bot Bat Pon Ngan Lae Naew Kid (Po So 2475–2537) [Siamese Architects: Foundation, Roles, Works, and Concepts (AD 1932–1990)*, p. 142.
[2] Nimmanhaemin, '*Khwam Plianplaeng Khrang Yingyai Nai Khana Sathapat Thi Khaphachao Dai Ru Haen Ma* (The Great Change in the Faculty of Architecture That I Have Known)'. Nimmanhaemin studied at Liverpool at the time.
[3] Crinson and Lubbock, *Architecture--Art or Profession?: Three Hundred Years of Architectural Education in Britain*, p. 5.
[4] Nimmanhaemin, '*Khwam Plianplaeng Khrang Yingyai Nai Khana Sathapat Thi Khaphachao Dai Ru Haen Ma* (The Great Change in the Faculty of Architecture That I Have Known)'.

Before examining the change, the ethos of the school and the context of architectural practice in Thailand in 1954 are worth summarising in statements from the pamphlet aimed at prospective students:

> Study Architecture to build the nation and your own future. […] The word "architecture" might be a new word and not familiar but it was actually the oldest art and practice of humankind before any professional definition. We mean the construction of all building types. Architecture is the subject of design, drawing, and planning of small things from furniture or a riverside pavilion, up to gigantic and imposing buildings and cities that respond to use, involve a search for appropriate structure and materials, and also a consideration of economy and labour. "Architects" or *Chang Phu Ok Baeb Kosang* [builders who design buildings] have been considered from the ancient time to have created *Kwamcharoen* [development/prosperity] of the nation regarding culture, art, and livelihood of the people. Architecture is also the most permanent record of humankind's history.[1]

While the hint of change towards Modernism was still absent, the advertisement demonstrated the status of the profession and the academy after two decades of formal establishment on Thai soil. It was clear that the word architecture and architect were yet to become familiar to the public. Therefore, they still needed additional explanation. While some pioneering architects tried to associate the subject and profession with high art elsewhere, such as in publications, others still could not completely dissociate it from a mere definition of construction and building in order to make the public understand and appreciate it easily.

Apart from the concept of architecture and architect, the pamphlet also described the demography and relationships within the school:

> There are one hundred and sixty eight students at the moment. One hundred and thirty of them are men, while thirty eight are women. They are close to each outer like cousins. Fifteen full-time and nine part-time staff are close like siblings. […] In the last two decades after the establishment, there have

[1] From the prospectus of the Faculty of Architecture, Chulalongkorn University quoted in Tiptus, *Sathapanik Siam: Puen Than Bot Bat Pon Ngan Lae Naew Kid (Po So 2475–2537) [Siamese Architects: Foundation, Roles, Works, and Concepts (AD 1932–1990)*, p. 37.

been three hundred and one hundred "*Phi*" [elder brothers/sisters] who have graduated with diploma and bachelor degrees respectively. We are proud to say that most of the architects [in Thailand now] are Thai, and ninety percent of them graduated from our Faculty.

Finally, also in 1954, a seed of change was planted in a particular way. M. C. Vodhyakara became the dean of the faculty, and Nat Phothiprasat returned from the Department of Municipal Works to be a full-time staff member of the school. During his time at the Department of Municipal Works, his work had mainly demonstrated a geometric, cubic, and simple use of forms, functional planning, and the use of local materials, all of which had also been reflected in his writings and part-time-teaching from the beginning. He promoted 'appropriateness', i.e. rationality and economy, as the rationale behind such works.

If rationality was a main principle of Modernism, it was never far away from being the main principle of Thailand's first architecture school's ethos right from its establishment. The point was that it had originated in the rationality of the Beaux Arts, and this was about to be linked with Modernist rationality without a clear break. In practice, the western rationality, like other imported ideas shown by the analysis of publications, had been already indigenised for the school. An example is M. C. Vodhyakara's message of welcome for new students in 1952, in which he had taught the freshers about using rationality over the personal fondness of forms:

> The Architect has a career like that of a god — he creates, not destroys, as Satan does. From my memory, appears Phra Witsanukam, the god of construction. In every work of an architect, he deems to convey delight, mental pleasure, and visual pleasure to people for his wisdom and that of fellow architects. Such wisdom would be achieved by an analysis of pure thinking being accompanied with rationality beyond the normal — beyond selfishness. The practice of pure thinking tends to be obstructed by a devil called Rakha who would distract the mind to slip away and mislead it towards a fondness for form. If this devil's power immerses itself into one's spirit, one's thinking can never be pure and rational and one cannot think beyond the normal. Therefore, it would be difficult for a person to elevate his creativity because his mind has been committed to the form about which

> he was passionate. The consequence is that he would just create a form. […] The wisdom that we look for is an infinite wisdom. It is permanent […] such as a paragon, bringing excellent architecture that remains great for hundreds of years, melodious music that will never be boring. […] Architects and artists from all eras therefore continuously practise the infinite wisdom. This is not unlike the religious way — practising infinite wisdom — the way to nirvana.[1]

M. C. Vodhyakara was critical of the issue of rationality as he stated that students in their early years tended to be copyists, copying what they like from magazines.[2] Therefore he insisted that, despite the course being similar to those in England and France, the differences of climate, living condition, and available materials were crucial.[3] Another crucial and unsolved issue, which, as M. C. Vodhyakara claimed, did not happen in Europe, was about an appropriate 'character' for modern Thai architecture that the school set as a problem for students in advanced years.[4]

Amidst the wind of change in international education of Architecture, the school finally reformed its curriculum toward Modernism in 1954, again following that of the University of Liverpool, where Reilly had turned his interest to the Bauhaus. As a result, the subject of classical architecture was reduced significantly. After helping to establish the reform of the curriculum, Photiprasat passed away just one day after the changes were approved.

As regards Modernist influence from outside the classroom, architects' works and writings in the *Association of Siamese Architects' Journal*, now republished as ASA, showed that Modernist ideas were not explicit at the beginning of the 1950s. As mentioned in the last chapter, towards the end of the decade, more accounts about what had been going on in the United States appeared in the journal, but they were at first superficial, then gradually became more critical. This happened alongside the gradual appearance of a Modernist grain in designs outside the classrooms.

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[1] Bangkok, M. C. Vodhyakara Varavarn's Archives, *Tonrab Nisit Mai* (Welcoming New Students) (1952)
[2] Bangkok, M. C. Vodhyakara Varavarn's Archives, M. C. Vodhyakara Varavarn's Letter to Mr.Brown (1952)
[3] Ibid.
[4] Ibid.

International magazines did not seem to impact the school much, for the number of magazines in the library in the post-war period was still limited. And such journals were actually not imported to the country for some years after the war.[1] It was not until the second half of the 1950s when new staff, who graduated from the USA, donated more magazines, such as *Architectural Record*, *Progressive Architecture*, *Forum*, and a French magazine, possibly *L'architecture d'aujourd'hui*, to the library.[2] Regular subscriptions to *Architects' Journal* and *Architectural Design* were taken out by the library of the Association of Siamese Architects after 1954.[3] But the impact upon students, if any, tended to be of a stylistic kind rather than conceptual, for they tended to 'look' at the magazines rather than to 'read' them.[4]

The school of Thai architecture: A modern tradition?

At the Faculty of Architecture, Chulalongkorn University, Phrom Phromphichit had taught Thai Architecture and ornament, hoping to produce future Thai architects equipped with principles in Thai architecture, patterns, and ornaments to design this kind of Thai-style work in the future. But apart from Phothiprasat's *Architecture in Thailand* (1944) and Phromphichit's *Buddhist Art and Architecture: Introduction* (1952), which covered general principles in Thai architecture, no other textbook comprehensively gathering Thai patterns and principles in more detail was published. The way architecture students depended so highly on Phromphichit was much like the way apprentices had learnt with their masters in old time. The knowledge and skill were exclusively transferred through a single person in a single school.

The school of architecture at Chulalongkorn University was the only school of architecture in the country for more than two decades, until a second school was established at Silpakorn University (University of Fine Arts) in 1955. Amidst the more-conservative political circumstances under the second term of Plaek Phibunsongkhram, who now promoted national culture and art even more intensely to resist communism, the second school initially instructed traditional Thai

[1] '*Chotmaihet Khong Nai Sathapanik* (A Chronicle of Mr.Architect)'.
[2] Tiptus, *Sathapanik Siam: Puen Than Bot Bat Pon Ngan Lae Naew Kid (Po So 2475–2537) [Siamese Architects: Foundation, Roles, Works, and Concepts (AD 1932–1990)*, p. 134.
[3] '*Raichu Warasan Nai Hongsamut Samakhom* (The List of Journals in the Association's Library)', *ASA*, 1 (1957), 115–16.
[4] Tiptus, *Sathapanik Siam: Puen Than Bot Bat Pon Ngan Lae Naew Kid (Po So 2475–2537) [Siamese Architects: Foundation, Roles, Works, and Concepts (AD 1932–1990)*, p. 134.

architecture. Thai art and architecture, treated as minor subjects at Chulalongkorn University, became the main part of the curriculum at the new school. While the changing ideas in architectural practice and at Chulalongkorn University gradually moved towards Modernism, the school at Silpakorn represented an achievement of the academy and traditional practice that had long sought a way to incorporate Thai art in the contemporary architecture of the country. This idea was to mix the Thai style with modern functions and apply Thai ornament by using modern materials such as concrete, but it could not escape a changing situation in real life soon after its establishment. Amidst rapid economic development under a new generation of military dictators after 1957 that entailed more need for modern buildings and certainly architects who could design them efficiently, the school finally extended its curriculum to modern architecture in 1966, reducing Thai architecture again to the status of a minor subject.

Conclusion

Two decades after its establishment, the first school of architecture in Thailand struggled through shortages of staff and funding, and deprivations due to the war. The obstructions were not unlike those being faced by the profession itself outside the school where architects faced overwhelming work with a limited budget. The training, like the practice, had to fight for its place in Thai society, since it was a new subject about which the public had no clear idea or no idea at all. The pioneering teachers attempted to make sense of the subject to the students; some of whom also had had little idea about architecture. The process involved a localisation of knowledge and ideas gained from advanced nations, where the architectural subject had already been established in the public interest, and an appreciation of art and architecture in the western sense, especially for their artistic value, were understood. As a result, Thai teachers faced the challenges of making sense of artistic value in architecture for students who would graduate to work in the society in which the 'necessity' of functional and hygienic buildings was prioritised and, in most cases, considered 'enough'. Furthermore, those values were based on the conventional principle of architecture learnt by Thai teachers in the West, but which started to be challenged by Modernism soon after the Thai pioneers had left the schools. Before they could establish such values in their students' minds and in their own country, the situation there started to change. They therefore had to catch

up with new ideas, knowledge and technology, only to localise them and adapt them to suit the local context again. This was because it was not fully relevant to apply Modernist values or machine aesthetics in a country where an industrial revolution had never taken place, and where the livelihood of the majority remained mostly unchanged. The teachers, therefore, tended to merge the new ideas with the old rationales that they had not yet fully established in the academy and society. In this sense, the 'rationality' of Modernism did not seem significantly to differ from the 'rationailty' of Classicism in the Thai context.

At the same time, an attempt to search for a contemporary position for so-called traditional art, as opposed to the wholesale import of the new, also faced difficulties, as to where the balance was, and how it should be done — not to mention the limited number of experts and resources. By the time they successfully established an institution to teach such art, they realised that the society, which had been still struggling for modernity, was not yet ready to support a revival — ironically, itself a modern concept.

The dependence on teachers' knowledge gained from their schools back in Europe, together with a poor situation of publication and the limited availability of international journals seemed to support the traditional mode of relationship between teachers and students in Thailand in which the former was almost the only source of knowledge and skills to be transferred to and practiced by the latter. In this sense, the training in the early period shared much with the practice of *Tam Yang Khru* (following teacher) in traditional apprenticeship under which the students' work had been developed from the teachers'. However, what was different was the hands-on jobs that were mostly absent from the modern training.

The transplantation of the concept and practice of architecture from Europe to Siam/Thailand has been examined. The in-depth examination of a few case studies to show different issues under the circumstances just discussed will reveal more about the process in which the products of the transplantation were created.

End of volume 1

Modernisation of Building:

The Transplantation of the Concept of Architecture from Europe to Thailand, 1930s–1950s

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Volume 2

5 Processes and Products: Case Studies

5.1 'Modern international style' architecture: Sala Chaloemkrung Theatre, 1930–33

The first case study, Sala Chaloemkrung Theatre, was the last major project of Siam's last absolute monarchy but was finished after the 1932-revolution that overthrew the old regime. The socio-political, cultural, and economic circumstances, as well as the architectural practice, in Siam under the last absolute monarchy have been described (chapter 3.2). Now the case study will demonstrate more clearly how these circumstances produced and received one of the most important projects at the time, and how it was related to the transplantation of the concept of architecture from the western world to Siam by pioneering Siamese architects between the 1930s and 1950s.

Since this project was initiated prior to the establishment of the school of architecture and the professional association, it is worth noting again that it was the period that involved the early career and works of Siamese architects, who returned to the country after graduation, starting to take over the jobs of foreigners in governmental offices.

The architecture in this period has until now lacked detailed scrutiny as regards its role in the history of modern architecture in Thailand. Most conventional literature has played it down by defining their focus as after the 1932-revolution, when Siamese architects started to dominate practice and set up their professional association and school, leaving it as the closing period for domination by foreign practitioners.[1]

Among more-recent research, Prakitnonthakan has argued that, amidst the economic downturn of the mid-1920s that was worsened by the world's economic depression in 1929, and the criticism of the absolute monarchy, public projects and palaces in the reign of King Prajadhipok (reigning 1925–35) were built in a way to

[1]Horayangkura et al., *Phattanakan Naew Khwamkid Lae Rupbaeb Khong Ngan Sathapattayakam: Adit Patchuban Lae Anakot (The Development of Concept and Design in Architecture: Past, Present, and Future)*; Tiptus, Tiptus, *Sathapanik Siam: Puen Than Bot Bat Pon Ngan Lae Naew Kid (Po So 2475–2537) [Siamese Architects: Foundation, Roles, Works, and Concepts (AD 1932–1990).*

convince the King's subjects of his ability and legitimacy as ruler.[1] Prakitnonthakan argued that such projects were intended to exhibit the King's benevolence and concern over the economic difficulty but, at the same time, applied old ideas of the traditionally hierarchical society, with the King at its pinnacle. Typical of the intention, as posited by Prakitnonthakan, was the construction of the Memorial Bridge across Chao Phraya River to enhance transport between Bangkok and Thonburi, and the turn to buildings with fewer ornaments, which were supposed to be seen as not extravagant. These structures, however, possessed traditional symbols along with their otherwise modern looks.

On the other hand, Chungsiriarak has argued that modern architecture and the idea that constituted it in the last years of the absolute monarchy were not particularly different from that of the period after the 1932-revolution, when the monarchy was put under a limited constitution. Both were not so much consequences of the ideological or political change, but due to the Siamese reception of international capitalist culture through the press, radio, jazz music and cinema, no matter whether under the absolute monarchy or democracy.[2] Being built to screen talkie films mainly from Hollywood, Sala Chaloemkrung Theatre, itself functionally a direct outcome of the international capitalist culture, is therefore an appropriate case to examine more deeply to see whether there was any significance in other aspects, and whether the seemingly positive reception of international capitalism expressed by the conception and realisation of this project was done with any political motivation.

Accordingly, this case study seeks to examine the statements posited by both Prakitnonthakan and Chungsiriarak. In other words, it will form a background for further examinations of other works conceived in the latter period after the 1932-revolution as to how different the rationales behind their conceptions were, be it the differences, posited by Prakitnonthakan, or the continuity, posited by Chungsiriarak. It will also demonstrate the performance of Siamese architects freshly graduated from Europe before they systematically established the architectural institutions in Siam.

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[1] Prakitnonthakan, *Kanmueng Lae Sangkhom Nai Sinlapa Sathapattayakam: Sayamsamai Thaiprayuk Chatniyom (Politics and Society in Architecture: Siam Era, Transforming Thai, and Nationalism)*, pp. 248–76.

[2] Chungsiriarak, *Sathapattayakam Baeb Tawantok Nai Siam Samai Ratchakanti 4 Tueng Po So 2480 (Western Architecture in Siam: Rama IV's Reign to 1937)*, p. 480.

The question of modern international style

In his book, *Architecture in Thailand,* the first textbook in Thai deliberately devoted to the history of architecture in the country, published in 1944, Nat Phothiprasat categorised Sala Chaloemkrung Theatre as the first example of 'modern international style' (*Baeb Sakon Samaimai*) architecture in Thailand. The intentional use of double-adjective in this word, both 'modern' and 'international', prompts a need to consider the meaning of such style not as mere 'international style', but something that was both 'modern' and 'international'.

Prakitnonthakan has posited that the categorisation of Sala Chaloemkrung Theatre as 'modern international style' demonstrated a difference between Phothiprasat's and contemporary European modernists' ideas about the 'International Style'.[1] This was because decorations, visible in the design of the theatre, would not have been applied if the theatre had been designed under the same ideology as the European Modern Movement. However, Prakitnonthakan did not question what International Style (with decorations) might have meant for Siam. This is because his argument only centred on the symbolic meaning of the style — in this case, the theatre that appeared to be a modernist building with decoration. His argument is that the buildings with decoration, being built by the monarchy, were in contrast with plain buildings built later by democratic governments after the 1932-revolution, which were symbolically and ideologically designed to be the opposite. In this sense, Prakitnonthakan's argument has challenged the conventional perception of the term 'International Style' by a symbolic meaning of the inclusion or absence of decoration in the otherwise modernist buildings. But the question here is what was perceived as 'modern international style' in Siam at the time? To start with, it is worth considering the projects for which Charles Beguelin was responsible after his return from a six-month break in Europe in 1924.

[1] Prakitnonthakan, *Kanmueng Lae Sangkhom Nai Sinlapa Sathapattayakam: Sayamsamai Thaiprayuk Chatniyom (Politics and Society in Architecture: Siam Era, Transforming Thai, and Nationalism)*, p. 274.

The early Modern Style: Charles Beguelin's post-1924 work

Charles Beguelin's projects after his return from a six-month break in Europe in 1924 show a great degree of change in design approach and give a glimpse of what was considered as 'modern' style in Siam at the turn of the 1930s. The first project under scrutiny is Bangkok General Hospital.[1] It is self-explanatory that the project was part of the quest for modernity in 1920s-Siam, in which health care and hygiene played a major role. The design shows more about how 'modern' style might have been associated with this situation.

The preliminary drawing with Beguelin's signature, dated the 11th September 1928, shows a complex organised around a courtyard. Its asymmetrical plan and massing broke away from typical designs of previous hospitals in the country, including those recently designed by Sarot Sukkhayang at Siriraj Hospital. The sizes, shapes, and arrangement of rooms and spaces were more deliberately correlated with their functions. Hygiene was unsurprisingly of high concern, reflected in the detached masses of toilets, laundry, and kitchen from the main building. Corridors around the courtyard on each floor provided good ventilation for all rooms adjacent to them.

Concrete slabs running continuously above windows in each floor were also deliberately used for shading more than in predecessors. More importantly, parapets were used to hide roofs, making the building's mass appear cubic and simple. It was the first building of its kind to use such a feature extensively for visual effect. This was partly made possible by the use of large thin cement sheets that allowed shallower roofs, suitable to be hidden behind parapets.[2] The windows and their frames were, however, conventionally arranged. Glass was used but not steel, as window frames were made of wood. Above all, there was no decoration.

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[1] The project was built in phases. The first phase of a new ward was constructed by Bangkok Dock Co. Ltd. in 1925, while the old wooden building was still in operation. See *The Straits Times*, 16 September 1925, p. 8. The next phase replaced the old building, which was pulled down. The construction cost was supported by state funds and donations. See 'Personal' *The Singapore Free Press and Mercantile Advertiser*, 29 April 1930, p. 8; 'Our Siam Letter', *The Singapore Free Press and Mercantile Advertiser*, 20 November 1926, p. 3.

[2] Horayangkura et al., *Phattanakan Naew Khwamkid Lae Rupbaeb Khong Ngan Sathapattayakam: Adit Patchuban Lae Anakot (The Development of Concept and Design in Architecture: Past, Present, and Future)*, p. 49.

Figure 5.1.1: A redrawn diagram showing ground and first floor plans of Bangkok General Hospital (1925–30)[1]

Figure 5.1.2: Bangkok General Hospital[2]

[1] Chungsiriarak, *Sathapattayakam Baeb Tawantok Nai Siam Samai Ratchakanti 4 Tueng Po So 2480 (Western Architecture in Siam: Rama IV's Reign to 1937)*, p. 565.
[2] *Thai Nai Patchuban (Thai at the Present),* (Bangkok: Rongphim Phanitsuppaphon, 1940), p. 26.

Figure 5.1.3: Bangkok General Hospital after an addition of the second floor[1]

Figure 5.1.4: Bangkok General Hospital after an addition of the second floor[2]

[1] ———, *Sathapattayakam Baeb Tawantok Nai Siam Samai Ratchakanti 4 Tueng Po So 2480 (Western Architecture in Siam: Rama IV's Reign to 1937)*, p. 564.
[2] *Khrobrop 101 Pi Rong Phrayaban Klang (The 101st Anniversary of Bangkok General Hospital)* (Bangkok: Bangkok General Hospital, 1999), p. 54.

A similar Modernist grain was also evident in another medical building designed by Beguelin. This was the Medical station built by the Department of Public Health at Loedsin Hospital in 1929 and opened at the end of 1930.[1] It is this project that was later mentioned by Phothiprasat in his article, 'Architecture explained' in 1934, as 'modern' architecture, comparing it with those in Germany and Austria after World War I in that, as Nat Phothiprasat understood, they were built in cubic and straightforward forms, with light, cheap, durable, and domestic materials, because of the country's economic difficulty.[2] He also added that one of the most important things was hygiene. In his conclusion he pointed out that such an approach was 'appropriate' for Siam at the time.

Evidence that 'modern style' was known among architects and Siamese elite in a particular way by the turn of the 1930s is shown in the letter from Prince Paripatra Sukhumbhand, the Minister of Interior, to Phraya Chindaphirom, the Minister of Justice, dated 18 July 1929, regarding Beguelin's wish to design the Court and Ministry of Justice in the 'modern style' not the Thai style or western style (chapter 3.2).[3]

Regarding Beguelin's works, it can be summed up that a Modernist grain had appeared in Siam since the mid-1920s at the latest, and started to be realised and conceptualised in a particular way, not much like what was happening in Europe. But the following question is whether only plain buildings without decoration were perceived as 'modern style'.

In response to this question, the issue of decoration in relation to 'modern style' in the West should be examined. Firstly, it should be noted that modern style in the West in the 1920s and 1930s included not only the so-called International Style but also what would become known after 1966 as Art Deco.[4] While decoration was a taboo for the former, it was not for the latter. Art Deco was widespread in Europe and America, appearing in a number of works by architects who were not Giedion and Pevsner's protagonists of Modernism. Furthermore, Art

[1] 'General News', *The Singapore Free Press and Mercantile Advertiser*, 11 July 1929, p. 5; 'Social Hygiene' *The Singapore Free Press and Mercantile Advertiser*, 18 November 1930, p. 11.
[2] Phothiprasat, '*Khwammai Khong Sathapattayakam* (Architecture Explained)'.
[3] Thawonsuk, '*Ngan Krasuang Yutitham* (Work in the Ministry of Justice)'.
[4] 'Art Deco Study Guide, Victoria & Albert Museum', http://www.vam.ac.uk/content/articles/a/study-guide-art-deco/.

Deco decoration was indeed a reinterpretation of the art from previous eras. The decoration at Sala Chaloemkrung Theatre also conformed to this principle, as it was not a traditional form but a new attempt to produce Thai art with the old symbolism, but with modern materials and style — therefore it was perceived as 'modern'. These relations among modern style, modernity, and decoration can be also observed in another grand project initiated before Sala Chaloemkrung Theatre.

Economically Modern: The Memorial Bridge

The Memorial Bridge was an infrastructure project whose initiation and design process, especially in relation to its architectural elements, not only reveals the relations among modern style, modernity, and decoration, but also forms a good background for an examination of Sala Chaloemkrung Theatre.

This project, named *Prathomborommarachanuson* (The Memorial of the great first King), the first to celebrate the 150th anniversary of the establishment of Bangkok as the royal capital by King Buddha Yodfa Chulalok (reigning 1782–1809), was initiated by King Prajadhipok at the beginning of 1928.[1] A committee was set up to decide what would be built as the memorial of the ancestral King.[2] King Prajadhipok supported the idea of Prince Purachatra, who claimed that the project should contribute to the economy more than aiming at beauty.[3] Realising that Bangkok had become congested and had expanded eastward but not westward due to the lack of transportation, the King finally decided to build a bridge to link Bangkok with Thonburi.[4]

The Memorial Bridge was the second bridge to cross Chao Phraya River. After a call for tendering and negotiation to reduce the cost, the British company, Dorman Long and Co., Ltd., finally won the tender for a 754 foot-long bridge for a total cost of 2,880,000 baht or £262,288.[5] By that time, the firm had in its portfolio bridges across the Nile in Sudan and Egypt, as well as the Tyne Bridge in Newcastle.

[1] Bangkok, National Archives of Thailand , S Th 0701.7.3.1.4/2 (Draft for the announcement of King Rama I Memorial Project)
[2] Therefore, it should be noted that *Pathombarommarachanuson* did not only mean the statue but the whole project. See Ibid., p. 3.
[3] Ibid., p. 13.
[4] Ibid., p. 52.
[5] The width was 54.72 feet and the height above the water surface was 24.60 feet. See 'Our Siam Letter', p. 9.

It was also undertaking another project, Sydney Harbour Bridge, with a far more superior size of 3,770 feet and budget of £4,217,721.

The design of the steel-structured bridge consisted of road, footpaths, and two tram lines with a sixty-metre-bascule opening.[1] The design of the approach on the Bangkok side set between two ramps a statue of King Buddha Yodfa Chulalok with accompanying features, designed by Prince Naris.[2] Viewed in plan, the Bangkok side had a u-shaped reinforced concrete viaduct that escalated towards the deck of the bridge. The approach from the Thonburi side had a straight viaduct towards the deck with other two roads diverging down to the embankment. These two approaches combining with the bridge formed the shape of an arrow flying from Bangkok to Thonburi. Three arrows were a main element in King Prajadhipok's emblem.

The winning design was chosen in London by a committee, comprising past and present civil servants from the Ministry of Commerce and Communication, all of whose experience and knowledge on Siam was great, headed by Prince Purachatra who served as director of the construction. But for Engineering professionals a reinforced concrete structure offered by the Danish company, Christiani & Nielsen, which subsequently opened its branch in Bangkok in the following year, was of more interest.[3] The material was considered more challenging and was supposed to require less maintenance. By that time Robert Maillart had completed a number of graceful single-span arched concrete bridges in Switzerland. Christiani & Nielsen itself was constructing bowstring concrete bridges in France and Sweden. Reinforced concrete was then a new material, drawing much more interest.[4]

As regards the decorative parts, the final tender of £262,288, which allowed Dorman Long to win the contract and was the cheapest among the tenderers, included £17,956 for 'decorations'.[5] This amount was the result of a reduction requested by the committee. The original tender had been £319,425, of which

[1] Ibid.
[2] Ammat Tho Luang Prakop Yantrakit (Yon Yaiprayun), '*Saphan Phra Buddha Yodfa* (Phra Buddha Yodfa Bridge)', *Khao Chang*, special issue (1933), 14–20.
[3] 'Our Siam Letter', p. 9.
[4] Walter Goodesmith, 'The Evolution of Design in Steel and Concrete', *The Architectral Review*, 72 (1932), 242–246.
[5] 'Memorial Bridge in Bangkok', *The Straits Times*, 21 September 1929, p. 9.

£75,093 had been devoted to the decorations. The decorations were designed by Sir John Burnet and Partners on behalf of Dorman Long and Co., Ltd. The architectural company was also the designer of Sydney Harbour Bridge's architectural components. In the designs of both bridges, the architect 'architecturalised' the otherwise functional structure by adding 60-foot-pylons at both ends. It was one of the most common ways to 'beautify' steel bridges since the second half of the nineteenth century.

This method of beautification was, however, criticised by progressive commentators who started to embrace truthfulness and the machine aesthetics of industrial structure. In Britain, historical ornaments attached to bridges, such as Doric columns on Waterloo Bridge and buttresses that supported nothing at Lambeth Bridge, were also criticised.[1]

By the time the bridges in Bangkok and Sydney were commissioned, Sir John James Burnet, a prominent Scottish Beaux-Arts architect who had received RIBA's Royal Gold Medal in 1923 and had been elected RA in 1925, was semi-retired, leaving the firm to be led by Thomas Smith Tait.[2] Tait was originally Beaux Arts but he had started to turn to modern design, in the sense of Art Deco and Streamlined Modern, at the end of the 1920s, when he designed the worker's village for Crittall window factory with white flat roofs and steel window frames.[3] In 1930 the American architect, Francis Lorne joined the firm, and its name was changed to Burnet, Tait and Lorne.[4] The firm continued to work in the new direction and became one of the most influential pioneers in British Modernism, producing Modernist works such as Royal Masonic Building (1933) and Saint Andrew's House, Edinburgh (1939).

[1] W.H. Thorpe, 'The Architecture of Engineering Structures', *Engineering*, 128 (1929), 417.
[2] Adolf K. Placzek, ed. *Macmillan Encyclopaedia of Architects*, vol 1 (New York: Free Press; London: Collier Macmillan, 1982), pp. 351–52.
[3] Dawn Caswell, 'The Economy of Style: Thomas S. Tait and the Interiors of St Andrew's House', *Architectural Heritage*, 1 (1999): 74–89.
[4] 'Thomas Smith Tait' Dictionary of Scottish Architects, http://www.scottisharchitects.org.uk/architect_full.php?id=200729 [accessed date 9 July 2013].

Figure 5.1.5: Steel framed-Neoclassical-Unilever House (1929–33) by Sir John Burnet and Partners shows a typical approach of the company's design in the 1920s.[1]

Figure 5.1.6: Perspective drawing of a building with shops and flats on Oxford Street showed a Modernist grain in Sir John Burnet, Tait and Lorne's design at the beginning of the 1930s.[2]

[1] 'Unilever House, Blackfrairs, E.C.', *The Builder*, 143 (1932), p. 1002.
[2] 'Perspective View of New Shops and Flats, Oxford Street, W', *The Builder*, 144 (1933), p. 1044.

Figure 7: A perspective drawing of Sydney Harbour Bridge (1923–32) and its architectural treatment by Sir John Burnet and Partners.[1]

[1] 'The Sydney Habour Bridge As It Will Appear When Completed', *The Builder*, 140 (1931), p. 7.

The original and the amended design of the pylons of the Memorial Bridge in Bangkok, therefore, showed part of the transition in Tait's architectural direction. The original decorations were specified as follows:

1. Four abutment pylons on Vibro-concrete piles with flanking stairways, £21,266
2. Carving on two pylons cast in concrete, £5,400
3. Forming bands and spots faience on pylons, £800
4. Four full-sized bronze panthers at base of pylon steps, £2,640
5. Twenty four flood light projectors in pylons, £583
6. Special glazing in pylons with heat resisting glass, £92
7. Decorative enrichment for light on pylons in bronze, £3,000
8. Eight bronze inscription plaques, £3,456
9. Reinforced concrete platform for memorial on Vibro piles with flanking stairways, £5,293
10. Reinforced concrete base for statue above deck level faced with black granite, £5,916
11. Equestrian statue modelled by Wm. McMillan A.R.A., £12,500
12. Bronze panel for podium designed by William Reid Dick, A.R.A., £2,400
13. Stairways from east approach roadways to central garden, £1,112
14. Tiled awning roof of shop fronts and plastering and moulding, including necessary structural and steel work and timber, £1,978
15. 40 ornamental cast iron lamp standards on approaches, £4,080
16. 120 ornamental cast bronze lanterns for the lamps, £2,964
17. 16 lanterns over bridge roadways hung from steel work, £103
18. Special decorative hand railings, £1,150

The amended design retained the pylons but with less decoration. The classical ornaments were replaced by streamlines. The hand railings were not decorative. And the faience and bronze panthers disappeared. £57,137 was therefore saved as the result of the revision. The proportion allotted to decoration was reduced from 23.5% to 6.8% of the overall construction cost — quite a significant amount for a small country still experiencing economic recession.

Figure 8: Preliminary perspective drawing and plan of the Memorial Bridge[1]

[1] National Archives of Thailand

Figure 9: A sketch of a pylon of Memorial Bridge (1930) by Sir John Burnet and Partners[1] Note the Neo Classical elements similar to what were proposed for Sydney Harbour Bridge. For the Bangkok Bridge, they were put on streamlined pylons.

[1] 'Bangkok Memorial Bridge: Sketch of Pylon', *The Builder*, 138 (1930), 94.

Figure 5.1.7: The final design of Memorial Bridge employed only streamlines on pylons[1]

[1] The cover of *Khao Chang*, Special Issue (1933)

Figure 5.1.8: Aerial view of nearly finished Memorial Bridge.[1] Note the arrow shape flying towards Thonburi. The hip-gabled-roofed-pavilion and flat-roofed-pavilions were temporary, possibly for royal inspections and ceremonies related to the bridge.

Figure 5.1.9: The final design of the statue of King Buddha Yodfa Chulalok, a sitting bronze-statue on reinforced concrete base and walls with modern Thai ornaments[2]

[1] 'Bangkok Bridge', *The Engineer*, 154 (1932), 82.
[2] Prakitnonthakan, *Kanmueng Lae Sangkhom Nai Sinlapa Sathapattayakam: Sayamsamai Thaiprayuk Chatniyom (Politics and Society in Architecture: Siam Era, Transforming Thai, and Nationalism)*, p. 97.

The final cost of the construction of the Memorial Bridge was £255,141.[1] A 'modern style' with Art Deco twist, designed by English architects who started to embrace Modernist ideas, appeared in Siam thanks to economic pressures.

An attempt to create 'modern Thai style' was also evident in the architectural elements including a base, background, and lamps, built with reinforced concrete, designed by Prince Naris, which accompanied the bronze statue of King Buddha Yodfa Chulalok at the approach of the bridge on the Bangkok bank. Attempts to develop modern Thai art by Prince Naris had been demonstrated before in Wat Benchamabophit and Wat Rachathiwat, where new materials had been applied, especially on the latter that had already included prefabricated reinforced concrete ornaments. It is now time to examine how Sala Chaloemkrung Theatre related to the issue of modern style, modernity, decoration, and the transplantation of the concept of architecture into Siamese society.

Sala Chaloemkrung Theatre (1930–33)

Sala Chaloemkrung Theatre was also a part of the celebration of the 150th anniversary of the capital initiated by King Prajadhipok. Its role as a memorial for the important event was embedded in its name 'Sala Chaloemkrung', 'the pavilion to celebrate the capital'.

In Bangkok by the second half of the 1920s, the popularity of traditional plays was replaced by that of modern plays, some of them translated European plays, while others were authored by Siamese.[2] Also popular were moving pictures, which were screened in more than twenty theatres. The theatres were, however, of poor quality, mostly like warehouses built with a wooden structure and roofed with corrugated zinc sheets, and were looked down upon by a Singaporean newspaper as 'probably the flimsiest and most ramshackle places of the sort in any of the larger cities of the world'.[3] Exits were generally limited in those theatres, raising concerns about stampedes if they caught fire.[4]

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[1] Luang Prakop Yantrakit (Yon Yaiprayun), 'Saphan Phra Buddha Yodfa (Phra Buddha Yodfa Bridge)'.
[2] Seidenfaden, *Guide to Bangkok. With Notes on Siam*, 55, 63.
[3] 'Notes from Siam', 18 September 1928, p. 12. See also Kittipong Wirotthammakun, ' *Yon Ramruek 70 Pi Sala Chaloem Krung (70* Years of Sala Chaloem Krung in Retrospect)', *Sarakhadi*, 222 (2003), 146–50.
[4] 'Sixteen Lives Lost in Fire', *The Straits Times*, 14 November 1930, p. 8.

Figure 5.1.10: A typical theatre in Bangkok in the 1920s [1]

[1] Chungsiriarak, *Sathapattayakam Baeb Tawantok Nai Siam Samai Ratchakanti 4 Tueng Po So 2480 (Western Architecture in Siam: Rama IV's Reign to 1937)*, p. 501.

The first talkie film was introduced at the end of 1929.[1] After its rapid popularity, many of the ramshackle theatres were converted to screen talkie films.

After his visit to the United States in 1929, King Prajadhipok, one of the greatest film enthusiasts in Siam at the time, decided to build a state-of-the-art theatre in Bangkok.[2] He put it in the group of projects for the celebration of Bangkok's 150th Anniversary as the capital, including the refurbishment of Chakri Mahaprasat Throne Hall and the Temple of Emerald Buddha, the construction of the Memorial Bridge and the statue of King Buddha Yodfa Chulalok that had been started. But unlike the other projects, King Prajadhipok used his personal money of 9,000,000 baht to build this modern theatre for talkie films and plays.[3] This amount was almost three times the total cost of the Memorial Bridge of 2,800,000 baht. It not only was the first proposed and built talkie theatre in the country, but was intended to be the finest one in this part of the world.[4]

The ambitious plan and great cost contradicts Prakitnonthakan's argument that the minimal ornamented design of the theatre might have been intended as less extravagant. A talkie cinema that cost almost three times the price of a bridge crossing a wide river combined with a statue of an ancestral King was extravagant in its own right, regardless of the style in which it was built. Therefore, it can be seen the other way around. The King indeed wanted to build an extravagant project, but, like the Memorial Bridge, he wanted to build it for the benefit of his subjects not only for his own glory. And he literally paid for the project in full without the state funding or public subscription allotted to the bridge.

The fact that the King had this ambitious plan and wanted to cover the huge cost with his personal funds amidst the economic instability can be seen as a decisive strategy to convince his subjects, who had been frustrated with the economic difficulty mainly caused by the excessive expenditure of the last reign, which the present government was still struggling to solve. The King wanted to show that he was still capable of providing some well-being in public life, especially of a modern

[1] 'Our Siam Letter', *The Singapore Free Press and Mercantile Advertiser*, 14 November 1929, p. 6.
[2] 'The King of Siam's Example', *The Singapore Free Press and Mercantile Advertiser*, 4 May 1932, p. 10.
[3] Kittipong Wirotthammakun, '*Rong Mahorasop Luang: Sala Chaloem Krung* (The Royal Theatre: Sala Chaloem Krung', *Khwam Ru Khue Pratip*, 3 (2003), 4–9.
[4] 'A Bangkok Sports Club Affair', *The Singapore Free Press and Mercantile Advertiser*, 25 August 1931, p. 12.

kind. The strategy was to provide a modern leisure place, a symbolic gift embedded with an atmosphere of modernity craved by Bangkok's urban dwellers.[1] The King wanted to rescue the deteriorating trust of some of his subjects in the absolute monarchy.

The questions regarding this ambitious goal for the design, were, therefore, discussed among architects, film experts, and contractors.[2] One of the earliest questions that came to the fore was, of course, that of who would design this state-of-the-art theatre unprecedented in the country. The responsibility fell to Mom Chao Samaichaloem Kridakorn, a Beaux-Arts graduate who was *Nai Chang Yai* (Chief master builder) at the Department of Outer Palace (*Krom Wang Nok*), Ministry of the Royal Household. Since only a handful of Siamese architects had started to take over the jobs from Europeans and the professional association was yet to be established, let alone the architectural school and publications, this opportunity given to a freshly graduated Siamese architect by the King was both generous and challenging. The King risked losing his money and his strategy of benevolence if the outcome came out imperfect as a result of the architect's lack of experience. The architect too risked losing an opportunity to establish a firm recognition of his new profession among the Siamese public, and especially from the client of highest profile — the King. But if everything went well, a win-win situation would be achieved by both client and architect, or, in a wider scenario, the *ancien régime* and the new professionals.

An impression of M. C. Samaichaloem's response to the King's wish can be gained through contemporary witnesses:

> For Sala Chaloemkrung project, M. C. Samaichaloem wished to make it luxurious […] and [make it] the best. He did it all himself. He searched for everything himself, day and night. In the daytime, he had to inspect the construction. At night time, he had to have audiences with the King, showing the King all the stuff he had acquired and asking him for advice. It

[1] Lawrence Chua has even specifically posited that an air-conditioning system to be installed in the theatre would help to create a decent atmosphere for audience, ensuring their good manner, especially standing for the playing of the royal anthem. See Lawrence Chua, 'Absolutism and Air-Conditioning in Early Twentieth-Century Bangkok Cinemas', *Senses & Society*, 2 (2011), 216–21.
[2] 'A Bangkok Sports Club Affaire', *The Singapore Free Press and Mercantile Advertiser*, 25 August 1931, p. 12.

was not easy at all to achieve such a luxurious theatre […] the most luxurious in Asia at the time.[1]

Sala Chaloemkrung Theatre is very beautiful. Being harmoniously designed in every detail, it has been appropriate and modern in every era. Credit should be given to M. C. Samaichaloem's great skill in design.[2]

As with the Memorial Bridge, Prince Purachatra was the construction director. Phraya Sripipat Rattanarat Kosathipbodi (M. R. Mul Darakorn), the Director-General of the Department of Privy Purse (*Athipbodi Krom Phrakhang Khangthi*), chose the site.[3] The theatre was built at the intersection of Charoengkrung Road and Tripet Road in Wang Burapha area, next to Ming Mueng Market, one of the busiest commercial districts of the capital.[4] Bangkok Dock Company was the contractor.[5] The construction started on 1 July 1930.[6]

During the construction, the revolution of 24 June 1932 put the King under a constitution. Despite a seemingly smooth transition in the first place, a sign of political turmoil occurred in March 1933, when Pridi Phanomyong, a prominent member of the People's Party serving as the Minister of State, proposed a draft National Economic Development Plan including state welfare and land reform. He was accused by many, including the King, of being a communist. The King was sued by a normal citizen, Thawan Ritthidet, for the first time in the history of Siam, accusing him of intervening in politics. These incidents led to a divide in the cabinet and caused Phraya Manopakorn Nithithada, the royalist Prime Minister, to dissolve the National Assembly on 1 April and to govern the country with emergency decrees. Phanomyong was exiled to France. The relationship between the People's Party and the King turned sour after 20 June, when Phraya Phohon Phonphayuhasena, a senior member of the People's Party, staged a coup d'état to take over the power from Phraya Manopakorn Nithithada.

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[1] An interview with M. C. Ratsathit Kridakorn, M. C. Samaichaloem's wife, quoted in *Sala Chaloemkrung*, (Bangkok: The Crown Property Bureau, 1992), p. 24.
[2] An interview with Kaiyasit Tantiwetchakun, Manager of Sala Chaloemkrung Theatre from 1943 to 1972, quoted in Ibid., p. 34.
[3] Wirotthammakun, '*Rong Mahorasop Luang: Sala Chaloem Krung* (The Royal Theatre: Sala Chaloem Krung'.
[4] Ibid.
[5] 'Siam's New Theatre' *The Straits Times*, 13 August 1931, p. 12.
[6] 'Sala Chaloemkrung', *Sinlapa Watthanatham*, 9 (1993), 78–80 (p. 78).

Figure 5.1.11: The site of Sala Chaloemkrung Theatre before construction (map surveyed in 1921)[1] It was situated at the southeast corner of the intersection where Charoenkrung Road and Tri Phet Road met — a commercial heart of Bangkok.

[1] *Phinit Phranakorn 2475–2545 (Observing the Capital 1932–2002)*, p. 81.

Figure 15: The opening day of Sala Chaloemkrung Theatre on 2 July 1933[1]

[1] National Archives of Thailand

Figure 16: People from all walks of life, distinguishable by their clothes, flocked to Sala Chaloemkrung on its opening day, 2 July 1933.[1]

[1] 'Sala Chaloemkrung', *Bangkok Times*, 3 July 1933, p. 7.

Despite the fact that Sala Chaloemkrung Theatre was the King's brainchild, he did not go to open the theatre on 2 July 1933. Four months after the opening, Prince Boworadej, a senior military member, led royalist forces to overthrow the government, but they were finally suppressed by the government force after a two-week conflict. Despite his denial of any support for the rebels, the government's distrust of, and subsequent conflicts with the King contributed to his abdication in 1935. Finally the King visited the theatre he had spent so much money to build only twice. He went to live in England until he died in 1941.

The political turmoil, however, did not seem to prevent Bangkok citizens from all walks of life being extremely excited by the grand opening of the theatre on 2 July 1933. Sri Krung newspaper reported that 'the opening of Sala Chaloemkrung Theatre was a gigantic affair. There was an enormous crowd. Trams on the street had to stop'.[1]

Sala Chaloemkrung Theatre was operated by Saha Cinema Co., Ltd., in which the King's Privy Purse originally held a great share. Once the new regime reorganised the management of the Privy Purse by separating the King's private fortune from state funds, and managing it through the newly established Crown Property Bureau from 1937, his share of the company was transferred to the new bureau.

One year after the opening of the theatre, M. C. Vodhyakara Varavarn included it among other new facilities and institutions in his article about how art was important for the progress of the nation.

> Look at our country in the last two years, we can see an increasing number of places related to art such as Architecture School, Performing Art School, Household and Culinary School [...] Association of Siamese Architects, Siam Art Society, Sri Krung Studio, Sala Chaloemkrung Theatre, [...] What does all of this mean? Is it not the undoubtedly necessary and significant *Khwamcharoen* [development and progress] [...] our country is confidently progressing into *Khwamcharoen*.[2]

[1] 'The Opening of Sala Chaloemkrung Theatre Was a Gigantic Affair. There Was an Enormous Crowd. Trams on the Street Had to Stop.', *Sri Krung*, 5 July 1933, p. 2.
[2] M. C. Vodhyakara Varavarn, '*Sinlapa* (Art)', *Chotmaihet Samakhom Sathapanik Siam*, 3, (1934), 5–7 (p. 6).

Figure 17: An elevation of Sala Chaloemkrung Theatre[1]

Figure 18: Entrance Hall of Sala Chaloemkrung Theatre [2]

[1] 'Bangkok's New Palatial Theatre', *The Straits Times*, 8 January 1933, p. 3.
[2] *Ngan Sathapattayakam Khong Mom Chao Samaichaloem (Architecture of Mom Chao Samaichaloem)*.

Sala Chaloemkrung Theatre became 'a very self-contained centre of amusement for that increasing class of people who like to go out in the evening'.[1] This statement signifies not only the role of the theatre in promoting a change of Bangkok people's life style but also the more-dynamic social strata after the 1932-revolution.

The theatre was equipped with the latest light and sound systems designed by a Siamese engineer, Phraya Prakopyantrakit (Yon Yaiprayun). The neon lights displaying the theatre's name on the top of its front façade were the largest in Asia.[2] Besides the main 1,500-seated auditorium, there were a small 350-auditorium, private rooms for royal screening, and dance rooms.[3] It also included rooms designed as dining saloon, soda fountain, and quick lunch counter, 'planned exactly like those in advanced countries'.[4] It was also the first air-conditioned theatre in Asia.[5] The air-conditioning machine was a chilled water system.[6] M. R. Thanatsri Sawaddiwat recalled his first experience of the first air-conditioned cinema:

> In the past, cinemas had been halls with zinc-sheet-walls and fans. It had been so hot inside like watching films in zinc-sheet-warehouses. Then it was indeed at Sala Chaloemkrung that, when I was seven years old, I was shivering while I was watching a film because Thailand's winter was not as cold as the air-conditioning in the theatre.[7]

However, the use of this advanced technology in the tropics was not without problems, as, within two months of the opening of the theatre, it was sometimes out of order, making the cinema-goers extremely stuffy in the air-tight auditorium.[8]

There were mostly films from abroad on screen. Some Thai films were screened occasionally, but not many were being produced. The theatre was

[1] 'Sala Chaloemkrung', *Bangkok Times*, 3 July 1933, p. 7.
[2] 'Up-to-Date Talkie "Best in Far East" At Bangkok', *The Singapore Free Press and Mercantile Advertiser*, 3 July 1933, p. 12.
[3] Ibid; 'Bangkok's New Palatial Theatre', p. 3.
[4] 'Hot "Talkies"', *The Singapore Free Press and Mercantile Advertiser*, 2 September 1933, p. 4.
[5] 'Sala Chaloemkrung'
[6] Phad Kaewsiplad, '*Kan Chom Rongmahorasop Sala Chaoemkrung* (Visiting Sala Chaloemkrung Theatre)', *Khao Chang*, 3 (1937), 167–71 (p. 170).
[7] *Sala Chaloemkrung*, 28.
[8] 'Hot "Talkies"'.

designed also to be able to hold theatrical and operatic plays with minor adjustment.[1] During World War II, when transportation from abroad was difficult, plays were put on instead of films.[2]

Now let us look at the design of the theatre and examine how it was related to the establishment of the concept of architecture in the country at the time. As it was located at an intersection, it was clearly visible from two roads, a good justification for the site selection of a commercial building. The architect eliminated the perpendicular angle by chamfering the corner. By doing so, he made the building communicate visually not only with the two roads, on which it was located, but also with the other two at the intersection. The design of the large neon sign on top of the façade exhibiting the name of the cinema further pursued these advantages by dividing the signage into three parts and placing them on parapets, visible from all four roads. This design approach for the neon sign became a norm for cinemas in the country. In Europe, Cineac (1934) designed by Jan Duiker also adopted a similar approach.

As regards other possible connections to European Modernist works, exploitations of corner sites had been seen as early as the beginning of the 1920s in Erich Mendelsohn's Mosse House in Berlin where he had smoothed the corner using horizontal lines to celebrate the movement of traffic and pedestrians.[3] In Bangkok, M. C. Samaichaloem, however, gave a rather practical explanation that this chamfering of the corner was aimed to increase visibility, and, thus, the safety of the traffic intersection.[4] Despite the differences, both were designed with the relationship between the building and the urban setting in mind. The main entrances were placed at three sides of the chamfered corner. Besides all the practical reasons, all of these were familiar features of the latest cinemas and theatres situated at intersections in European cities at the end of the 1920s. This was also the case with the so-called modern style adopted for façades which we now call Art Deco. It is not too oversimplified to generalise that Art Deco, stripped Classicism, and a less

[1] 'Bangkok's New Palatial Theatre', p. 3.
[2] Wirotthammakun, '*Rong Mahorasop Luang: Sala Chaloem Krung* (The Royal Theatre: Sala Chaloem Krung'.
[3] Erich Mendelsohn, *Erich Mndelsohn, Complete Works of the Architect* (London: Triangle Publishing, 1992), p. 28.
[4] *Ngan Sathapattayakam Khong Mom Chao Samaichaloem (Architecture of Mom Chao Samaichaloem),* p. 16.

doctrinaire Modernism were perceived as modern worldwide, and difficult to distinguish from each other. Exterior appearance and approach, therefore, put Sala Chaloemkrung Theatre on a par with the most modern theatres in advanced countries.

The overall planning was asymmetrically arranged, thanks to the corner position. This reflects a challenge possibly perceived by M. C. Samaichaloem from the first place, as students' work at the Ecole des Beaux-Arts where he had been trained was always of non-place-specific square-site, resulting in almost automatic laying out of symmetrical plans. In this sense, it shows how the Beaux-Arts graduate dealt with real life after the normative training.

At the corner of the building, visitors arrived at the main hall and its ticket offices. Ascending by a grand staircase, they arrived at the next hall, the transitional space that allowed two new axes to be created; the former leading to the main auditorium, while the latter led further upstairs and to a restaurant. The main auditorium was flanked by galleries, through which the audience could go via a number of doors. They could proceed further outside to courtyards. Such well thought-out planning had not been seen in any theatre in the country. The change in emphasis to effective planning rather than overloaded decoration on interior and exterior surfaces, again, conformed to what had earlier been promoted in the design of theatres in Europe.

Apart from the public area for all walks of life, a private entrance and lobby were placed at the south side adjacent to a driveway where VIPs could proceed either straight into the main auditorium or take stairs or lift to private rooms. This was initially supposed to be used mainly by the King, but we know only from a photograph that he finally used it at least once in two visits. No information about its use by commoner VIPs has been found.

Figure 5.1.12: The neon sign of Sala Chaloemkrung Theatre, visible from all four roads at the intersection[1]

Figure 20: Cineac (1934) by Jan Duiker[1]

[1] National Archives of Thailand

Figure 21: Contemporary theatres and cinemas in England that exploited the corner with entrance and signage.[2]

[1] Gregor Stemmrich, 'Johannes Duiker' Media Art Net, http://www.medienkunstnetz.de/works/handelsblad-cineac/images/1/ [accessed date 1 August 2013].
[2] *The Builder*, 134 (1928), 286; *The Builder*, 139 (1930), 328, 563.

Figure 22: Ground floor plan of Sala Chaloemkrung Theatre[1]

[1] Chungsiriarak, *Sathapattayakam Baeb Tawantok Nai Siam Samai Ratchakanti 4 Tueng Po So 2480 (Western Architecture in Siam: Rama IV's Reign to 1937)*, p. 520.

Figure 23: First floor plan of Sala Chaloemkrung Theatre[1]

[1] Chungsiriarak, *Sathapattayakam Baeb Tawantok Nai Siam Samai Ratchakanti 4 Tueng Po So 2480 (Western Architecture in Siam: Rama IV's Reign to 1937)*, p. 520.

Figure 24: King Prajadhipok departing from Sala Chaloemkrung Theatre via the VIP entrance[1]

[1] *Sala Chaloemkrung*, p. 34.

As regards decoration, modern Thai features in the form of cast metal plates, presumably cooperation between the architects and royal craftsmen, were used in many parts of the building. On the top of the exterior wall at the front, there were three circular plates depicting important characters in Thai literature: Hanuman, Mekhala, and Yak Ramasun. Above the main entrance was located a garuda, the Siamese King's emblem. The original one was made in brass, but it was later stolen. A new one was carved in wood in 1971. The window above each door carried three metal rings and three arrows, symbolising King Prajadhipok's emblem. In the entrance hall there were also cast metal plates depicting angels in Thepphanom, Pathom, and Phrom Si Na posts, the basic posts of Thai performance.[1]

Above the stage of the auditorium were located another set of metal plates, depicting Phra Pratonthap (the god of dance), Phra Witsanukam (the god of crafts), and Phra Panja Singkorn (the god of music). In front of the main room at the corner of the first floor was located yet another set of metal plates, depicting Mekhala and Yak Ramsun from Ramakien, a classical epic.[2] The metal plates, alongside streamlines on the auditorium's ceiling, suggest so-called Art Deco influence. But considering that this term was not invented until 1966, the design of the decoration could have been an independent attempt to invent modern Thai art, utilising modern materials and techniques, not unlike that attempted by Prince Naris featuring elements of the statue of King Buddha Yodfa Chulalok at the Memorial Bridge. And in this case, the metal plate decorations were reminiscent of *Nang Yai*, a type of traditional performance featuring perforated leather characters.

Other features worth mentioning are the parapets that hide the asbestos cement sheet-hipped roof, increasingly used in the capital to achieve 'cubic' forms that were 'modern' without risking the potential failure of flat roofs caused by leakage. Large windows with glazing were used but they were still of a conventional type, i.e. combination of opening panels, not modernist strip windows. The building still looked rather opaque.

[1] 'Sala Chaloemkrung', *Arhchitecture and Design*, 9 (1994), 89–94 (p. 91).
[2] Kittipong Wirotthammakun, '*Yon Ramruek 70 Pi Sala Chaloem Krung (70* Years of Sala Chaloem Krung in Retrospect)', *Sarakhadi*, 222 (2003), 146–50 (p. 148).

Figure 25: Interior spaces of Sala Chaloemkrung Theatre[1]

Figure 26: Asbestos cement sheets were used for roofing behind parapets at Sala Chaloemkrung Theatre[2] **A chamferred corner at the intersection increased visibility for vehicles approaching it.**

[1] *Ngan Sathapattayakam Khong Mom Chao Samaichaloem (Architecture of Mom Chao Samaichaloem)*, unnumbered p. 5.
[2] Prakitnonthakan, *Kanmueng Lae Sangkhom Nai Sinlapa Sathapattayakam: Sayamsamai Thaiprayuk Chatniyom (Politics and Society in Architecture: Siam Era, Transforming Thai, and Nationalism)*, p. 45.

The Modernist machine aesthetic was still out of the question at Sala Chaloemkrung Theatre. The modern look of exterior and interior features, similar to new theatres in the West, and the housing of state-of-the-art machines, including film projectors, light and sound system, and the air-conditioning machine, were the most important points and enough to make Bangkok's residents proud of it. The use of modern Thai art representing traditional theatrical characters further localised the progress into something developed by and for the Siamese, not just a mere import.

Back in the auditorium on the opening day of the theatre, 2 July 1933, after the screening of the King's photo and the Royal Anthem, a photo of M. C. Samaichaloem Kridakorn, the architect, was projected on the screen. The audience applauded, saluting the architect.[1] For an architect to receive such high recognition had not happened before. This reiterates that the theatre must have been perceived as significantly modern, a great achievement and pride of the city. Above all, the theatre was also the most modern building in town yet designed by a Siamese architect, not a foreigner — also something that had never happened before. The praise for the achievement was, therefore, aimed not only at the building, but also at the architectural profession.

Apart from M. C. Samaichaloem, whose name appeared as the architect, Nat Phothiprasat, who had just set up the first architecture school of the country, was responsible for the calculation of the reinforced concrete skeleton-structure. Equipped by an intensive course about reinforced concrete at Liverpool and practical experience from his internship in the United States, he ensured a proper use of reinforced concrete structure for a masterpiece in Siam's capital. Considering the context of his training, he escaped the scepticism about the exploitation of modern materials in architecture felt by conservative icons in Britain such as Sir Edwin Lutyens, who claimed that a half-baked understanding by contemporary British architects about steel and concrete had led to bad designs in the guise of a buzzword — new — that had deprived architecture of prestige.[2] Phothiprasat further escaped this scepticism by being responsible for a duty normally accomplished by an

[1] 'The Opening of Sala Chaloemkrung Theatre Was a Gigantic Affair. There Was an Enormous Crowd. Trams on the Street Had to Stop.'
[2] Edwin Lutyens, 'Tradition Speaks', *The Architectural Review*, 72 (1932), 163–64.

engineer, assisting his Beaux-Arts fellow to achieve the state-of-the-art work that gave credit to the architectural profession.

Sala Chaloemkrung Theatre was meant to mark another step towards materialist modernity in Siam. It was made possible by the capability of newly graduated Siamese architects, and, above all, by the benevolence of the King, who used his own money to build the state-of-the-art edifice for his subjects. Along with the King's support for the construction of the Memorial Bridge, the practice was not unlike that of previous Kings who, as the ultimate rulers, or what Prince Chula Chakrabongse described as '*Lords of life*', had unquestionably cared about the spiritual and physical well-being of the people, building and maintaining monasteries and later modern facilities.[1] A number of healthcare facilities, executed by the royal government in this reign, were further evidence for this.

But alongside the materialist modernity among the urban middle class, intellectual debates about democracy were also developing. This correlated with questioning the excessive spending of the previous reign and the inefficiency of the monarch in dealing with the economic depression. Despite the young King's foreseeing a necessary change in response to the changing society, a number of senior members of the royal family, ironically appointed by the King to give him advice as a first step towards democracy, did not support major change. As a result, the materialist progress advocated by the monarch failed to convince progressive middle classes about the legitimacy of the institution of absolute rule.

After the revolution in 1932 that put the monarchy under a limited constitution, the royal projects, including Sala Chaloemkrung Theatre, which had been built under the old ideology to respond to modernity using a conventional architectural approach that also sought to embrace modernity, formed a background for more 'modern' architecture and buildings to be erected by the new regime. Architecture might have been successfully used to demonstrate materialist modernity in the absolute monarchical Siam, but it was not successful in a political sense. Once the old regime had been politically stripped away, the new regime should have been able to exploit architecture for the same materialist progress to secure its

[1] See Chakrabongse Prince of Thailand Chula, *Lords of Life: The Paternal Monarchy of Bangkok, 1782–1932* (London: Alvin Redman Limited, 1960).

eligibility. How they used architecture to build modern culture in the new society, as well as how the concept of architecture was developed, will be examined in the next chapters.

Returning to the opening day of the theatre, Phraya Sripipat Rattanarat Kosathipbodi, the Director-General of the Department of Royal Treasury, opened the theatre instead of the King. After he had made an auspicious marking on the main front doors of the modern theatre, a Buddhist ceremony was held inside to ensure the auspiciousness of its business. Despite the absence of an official account, a photograph has been included in a book published by the Crown Property Bureau to commemorate a renovation of the Theatre in 1992. It depicts a massive accumulation of offerings on a column that must have been considered the most important one, located somewhere in a dark corner of the Theatre. Auspiciousness, it seems, still played an important part in the erection and operation of this piece of modern architecture from the beginning.

Still extant in 2013, Sala Chaloemkrung has experienced its rises and falls, brought alternately by its up-to-date and out-of-date qualities that have been changing throughout its eighty year-history. Today it retains a prominent position in Thailand's theatrical scene, housing mainly traditional performances with modern techniques. Many might say that its survival has been mainly due to the management's ability to adapt through time. Some might argue that it has been because of the auspiciousness ceremony executed at the beginning. But as the theatre has been perceived from its conception until now as a gift from King Prajadhipok to the Thai people, and since for more than five decades the monarchy has returned to being one of the most important institutions of the country after a brief overshadowing by the People's Party, it is no exaggeration to say that the survival of the theatre has been supported, to a great extent, by the failed attempt of the monarch to use it to help him secure his legitimacy in the first place.

Figure 27: The Buddhist ceremony on the opening day of Sala Chaloemkrung Theatre[1]

Figure 28: A sacred shrine at a column of Sala Chaloemkrung with offerings[2]

[1] 'Sala Chaloemkrung', p. 11.
[2] *Sala Chaloemkrung*, p. 61.

5.2 Up-to-date architecture and buildings of the People's Party, 1933–44

The examination of Sala Chaloemkrung Theatre has shown the process that created 'architecture', or, to be more precise, 'modern international style architecture', as it was called in Nat Phothiprasat's book, *Sathapattayakam Nai Prathet Thai (Architecture in Thailand)*, in Siam under the last absolute monarchy. Despite its talk-of-the-town status as a state-of-the-art 'theatre', no evidence regarding discussion about it as 'architecture' during the period of its conception and construction has been found. This is perhaps not surprising because it was built before the establishment of the architectural publications and architectural school. And it is also not surprising that this prestigious project was later added to the first architectural canon of the country when the profession and the school had been formally established.

As an attempt by pioneering Siamese architects to transplant the concept of architecture from Europe to post-1932-revolution Siam, as well as the application of it in urban planning and regulations has already been examined (chapter 4.1), this chapter will examine how contemporary architecture was conceptualised, designed, and constructed by the pioneering Siamese architects and the new regime; how it was used and perceived by the public; and how all of this differed from what had happened under the old regime. It will also examine if there was any acute differentiation between architecture and building perceived by the public reflecting the way the pioneering architects tried to differentiate. The analysis will not only examine the differences but question overlapping qualities of both terms, architecture and building, in order to understand more about the complexity of the conceptualisation and reception of architecture at that time.

Concerning contemporary architecture in Thailand, Sir Josiah Crosby, a British diplomat who served in the country for a quarter of a century, commented, in 1945, that it was erected following western models and lacked anything to excite or admire.[1] He criticised the aim of Siamese new generations who struggled to improve the country, claiming that they left a lot of things to be done practically rather than artistically; usefulness was the rule, so the development in art did not

[1] Crosby, *Siam: The Crossroads*, p. 28.

correspond with the political development after 1932. By Crosby's standards, the modern architecture in Siam must have been a second-rate copy of that from the West. But how did the Siamese elite conceive their contemporary architecture?

Following its overall plans to create hygienic, orderly, and imposing cities, and demonstrating this in its establishment of offices and through regulations related to building construction and town planning, the democratic government applied the same principles in its public buildings.

Not many significant projects were, however, built during the first five years under the new regime. One of the most important was the main building of Thammasat University, the second of the country established in 1934 by the democratic government as an open-university for free accessibility of the majority to the democratic ideology of the new regime. The building was designed in 1934 and opened in 1936. Facing the Chao Phraya River, which was still a main artery of the city, rather than a football ground, the building was symmetrical and plain with a main hall in the middle topped with a spire. The spire roofed with teak tiles was alledgedly inspired by a pencil, which Mew Aphaiwong, the architect, intended to emphasise the wisdom of education.[1]

The whole building was actually the result of a combination and adaptation of four existing buildings previously belonging to a barracks on the site. This signifies not only a practical solution in terms of economy, but the persistence of a traditional idea that buildings could grow and adapt themselves through time.

The reinforced concrete canopy at the entrance was an outstandingly Modern feature among other more-conventional elements. The mix-and-match building could hardly be associated with any particular style known to the western canon. This was possibly why Phothiprasat included this building in the category 'architecture of the present time' in his book, *Sathapattayakam Nai Prathet Thai (Architecture in Thailand)*, without specifying its style. It was therefore, 'modern' in the sense that it was the 'architecture of the present time' for Siam, but not necessarily a 'modern style'.

[1] *Khue Winyan Seri Pridi Phanomyong (The Liberal Spirit: Pridi Phanomyong)* (Bangkok: The Committee for Memorial Book Commemmorating the 100th Anniversary of Pridi Phanomyong, 2000), p. 131.

Figure 5.2.1: Thammasat University (1934–36)[1]

Figure 5.2.2: The reinforced concrete canopy of Thammasat University [2]

[1] National Archives of Thailand
[2] Photo by Chomchon Fusinpaiboon

Crosby's criticism, that the Siamese only followed western models, therefore seems unconvincing regarding the main building of Thammasat University that was site-specific, symbolised with the local ethos, and was freely composed in various styles unfitted to any western categorisation.

But the works of the new regime that have drawn critical interpretations by recent scholars are those possessing an appearance seemingly influenced by European Modernism. The issue of symbolic meaning of architecture was first raised by Prakitnonthakan, who argued that the People's Party used plain buildings without ornaments to symbolise the elimination of hierarchy in Siamese society following the overthrow of the absolute monarchy.[1] The idea was, as Prakitnonthakan posited, first evident in the Pyre at Sanam Luang, the royal ground dedicated for the funeral of the government's soldiers who fought the royalist rebels in 1933. The fact that it was the first pyre for commoners on ground in the centre of Bangkok previously reserved for royal ceremonies and funerals already demonstrated the People's Party's aim to eradicate all royal privilege. But Prakitnonthakan further claimed that this was reinforced by the design of a temporary pyre of non-traditional design without ornaments. After the funeral, the Protecting Constitution Monument commemorating the defeat of the rebels was built at Bang Kaen, the area north of Bangkok where the rebels had been crushed. Its design was similar to the central pillar of the temporary pyre.[2]

As there is no account particularly mentioning the rationale of the design, an alternative interpretation based on the comparison of the People's Party's designs with what had been done under the last absolute monarchy will be offered. When we consider that Sala Chaloemkrung, the royal theatre discussed in the previous chapter, had already adopted an International Style-cum-Art Deco manner to demonstrate its 'modern' quality, the way the People's Party used a new style possibly inspired by the International Style or Art Deco to represent the modern era is already convincing, regardless of the absence or presence of ornaments.

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[1] Prakitnonthakan, *Sinlapa Sathapattayakam Khana Ratsadon: Sanyalak Thang Kanmueng Nai Choeng Udomkan (The People's Party's Art and Architecture: Ideological and Political Symbolism)* (Bangkok: Matichon, 2009), pp. 62–96.

[2] Somdet Chaofa Kromphraya Naritsaranuwattiwong and Somdet Kromphraya Damrongrachanuphap, *San Somdet Pim Chalong Phrachonmayu Somdet Phrathepratratchasuda Khrop Samrob (Princes' Correspondence, Published for the Celebration of Princess Mahachakri Sirindhon's Three Circles Birthday)*, vol. 4 (Bangkok: Ongkan Kankha Khurusapha, 1991), 133.

Figure 5.2.3: *Phra Men*, the temporary royal funeral pyre, of King Vajiravudh at Sanam Luang in 1926[1]

Figure 5.2.4: The temporary pyre for the government's soldiers at Sanam Luang in 1934[2]

[1] National Archives of Thailand
[2] Ibid.

Figure 5.2.5: The Monument commemorating the suppression of the royalist rebels in 1933 was opened in 1936 at Bang Khen.[1]

[1] National Archives of Thailand

The posited argument has to be considered under two headings: the aims of the People's Party for overthrowing the absolute monarchy, and the contemporary nature of so-called modern style architecture previously pointed out in previous chapters. First, the People's Party's ultimate goal was to lead Siam to achieve the stage of *Siwilai*, *Araya*, and *Khwam Charoen*, against which the absolute monarchy, despite having the same goal, was perceived as being the main burden. Second, the so-called modern styles in Europe represented modernity and being up-to-date, essential ingredients in the Siamese idea of *Siwilai*, *Araya*, and *Khwam Charoen*

Therefore, like the royal theatre, the funeral pyre and the monument were designed, to use Bhabha's words, to be 'almost the same but not quite (the same)' as buildings of modern styles in Europe. The most important point was not that the 'modern' edifice of the 'modern' era should be designed in an abruptly different way of those belonged to the absolute monarchy, but they should be designed along the same lines as what was perceived as 'modern' in the West. But they did not necessarily have to be designed following the West's rigid principles — not to mention ideologies.

Furthermore, the fact that the new regime and its architects offered a modern style funeral pyre, instead of using a traditional and elaborate pyre resembling those of the royals, conformed with their idea of respecting and upholding tradition — the Siamese tradition belonging not only to the monarchy but to the nation — alongside the quest for *Siwilai*. In this sense, it did make sense that they did not break the tradition, avoiding elaborate designs of pyres comprising symbolic elements that had been traditionally reserved for the royals.

This hybrid practice continued to be seen after Thammasat University, the funeral pyre, and the monument. It should be pointed out that a keyword adopted in the massive erections of public buildings in the following period was *Thansamai*. The term *Thansamai* means 'modern' in the sense of 'up-to-date'. But, before discussing more deeply the meaning of the term, it should be noted here that, contemporary with *Siwilai*, *Thansamai* had also been in use long before this period: at least since the late nineteenth century. It signified the notion of catching up in

time.[1] It was not exactly equivalent to *Samaimai*, which means modern in the sense of 'new age' per se, particularly because it was in no way independently constituted or was simply set against 'old age', but it needed something to be relative to, and to catch up with. In this sense, the Siamese wanted to catch up with the progress of their perceived leading civilisation of the time — the West. Having got rid of the absolute monarchy, which was seen as a main hindrance in the quest for catching up, the term *Thansamai* was now used like a mantra, especially in architecture, by the People's Party. Case studies of significant projects, designed by Sarot Sukkhayang and Mew Aphaiwong, and built in the latter half of the 1930s under the new regime's propaganda of *Thansamai* will now be examined.

General Post Office (1934–40)

The first example is the new General Post Office. The first post office run by the Government of Siam had been opened in 1883. In 1927, there were eleven post offices in Bangkok.[2] The central post office moved to a new site, previously the British Legation, in 1926. This site was convenient for transporting post, as it faced a main road and had the river at the back. However, functional inconvenience caused by the fact that it had not been purpose-built reduced it to the role of a temporary office, and a plan for a permanent building housing post, telegraph, telephone exchange, and administration was proposed in the same year.[3]

In 1928, the project for a new building was initiated by Phraya Prakitkonlasat (Runnachit Kanchanawanit), the Director of the Department of Post and Telegraph, and a preliminary scheme was designed.[4] A photo of the sketch, depicting a symmetrical-modern-looking-building with a clock tower at one corner, kept in the National Archives of Thailand indicates no more details except that it was designed by the chief architect of Credit Foncier de l'Indochine, Bangkok. The instability of the economy, however, led to this £100,000 project being dropped.[5]

[1] Winichakul, 'The Quest For "Siwilai": A Geographical Discourse of Civilizational Thinking in the Late Nineteenth and Early Twentieth-Century Siam'
[2] Seidenfaden, *Guide to Bangkok. With Notes on Siam*, p. 41.
[3] 'Our Siam Letter', p. 3.
[4] Khon-krung-kao, '*70 Pi Akhan Praisani Klang* (70th Anniversary of the General Post Office)', *Warasan Tra Praisaniyakon*, 11 (2010), 24–28 (p. 25).
[5] 'New Post Office for Bangkok', *The Singapore Free Press and Mercantile Advertiser*, 29 December 1928, p. 10.

It was re-initiated in 1933 when Luang Krairoek Ratchasewi (Nab Krairoek) was Director of the department, but halted again when he moved to another department.[1] In 1934, Luang Kowit Aphaiwong (Kuang Aphaiwong), the next Director, re-initiated it and appointed a committee of five members, consisting of the Director's assistant and four executives of the department, to push it forward. Their report stated the necessity of building a new office urgently as follows:

1. The existing buildings had deteriorated and provided insufficient space. Scattered and hidden spaces caused difficulty in preventing embezzlement.
2. Insufficient day light caused excessive use of electricity and bad ventilation caused an unhygienic atmosphere.
3. Separate offices in different buildings and sites caused inconvenience of administration and unnecessary expenditure.
4. General Post Offices in almost all countries were deemed important places for the nation and were built grandly and impressively as people from all walks of life come to use them.
5. The government would save a large amount of money by building the project, while the country's economy would benefit from the big construction site.[2]

Aside from the practical issues, the value of modernity and prestige are also obvious. By this time other important cities in the region already had purpose-built and prestigious General Post Offices. Examples are Saigon (1886–91 by Gustave Eiffel), Batavia (1913 by John van Hoytema, a Dutch architect), Singapore (1920–28 by Keys & Dowdeswell from Shanghai), and Manila (1926 by Juan M. Arellano). Bangkok's new General Post Office evidently had to be architecture, not a mere building.

[1] Khon-krung-kao, '*70 Pi Akhan Praisani Klang* (70th Anniversary of the General Post Office)', p. 25.
[2] Bangkok, National Archives of Thailand , (2) S R 0201.12/9 (The General Post Office Project)

Figure 5.2.6: Bangkok Post Office in 1916 after the renovation of the building previously the house of Phra Pricha Konlakan (Sam-ang Amattayakun)[1]

Figure 5.2.7: General Post Office was housed in scattered buildings in the previous site of British Legation (the vast premises rendered in green) from 1926[2]

Figure 5.2.8: A Perspective drawing of the unbuilt General Post Office (1928) by chief architect of Credit Foncier de l'Indochine, Bangkok[3]

[1] Povatong, *Chang Farang Nai Krung Siam: Ton Pan Din Phra Phutthachao Luang (European Builders in Siam: The Begining of King Chulalongkorn's Reign)*, p. 34.
[2] *Phinit Phranakorn 2475–2545 (Observing the Capital 1932–2002)*, p. 40.
[3] National Archives of Thailand

Figure 5.2.9: Manila Central Post Office (1926) depicted in a postcard[1] It is an example of how important such a building type was for a country in the same region as Siam.

Figure 5.2.10: An undated perspective drawing of the proposed General Post Office, Bangkok, the scheme of either 1933 or 1934[2]

[1] Reproduction of the postcard by Rose Croix
[2] National Archives of Thailand

The professionals and persons involved in the realisation of the General Post Office project were mixed and complex in terms of their nationalities. The project committee chose Thai architects; Sarot Sukkhayang, Director of the Architecture Division, Department of Fine Arts, as architect, and Mew Aphaiwong, the Director of Post and Telegraph's half-brother, who had designed Thammasat University, as assistant architect.[1] The sculptures and bas-relief were executed by Prof. Corado Feroci, the Italian sculptor, and his Thai students at the Fine Arts School. H. Herman was the German engineer in charge. The main contractors were Chinese; Dan Bangyin, who built the rear wing and the foundation of the building, and Eiw Yitho, who built the front part. Supporting contractors were European. H. Gerson executed flooring, doors and windows, decoration, and painting, and G. Backer was responsible for particular doors and windows.

Given that this building was one of the most prestigious projects initiated by the People's Party to date; the presence of so many foreigners in the list of participating parties demonstrates that, despite the successful completion of Sala Chaloem Krung Theatre under the last absolute monarchy, Thai architects still needed to secure the new regime's trust in their ability to handle prestigious projects, and the General Post Office was another chance.

On the other hand, the inclusion of sculptures created by the Fine Arts School demonstrated that the People's Party's aim to use art in assisting the nation-building campaign to achieve the stage of modernity seemed promising.

The building was opened on the national day, 24 June 1940. The state press called it *Sinlapakam Baeb Thansamai* [modern (up-to-date) art].[2] This reiterates the unquestionable status of this building as architecture, and the status of architecture as art. A gigantic pair of reinforced concrete figures of Garuda clutching horns was set on top of the building, and brass ones at the main gates with accompanying rod-iron patterns.[3]

[1] Khon-krung-kao, '*70 Pi Akhan Praisani Klang* (70th Anniversary of the General Post Office)', p. 26.
[2] '*Kan Kratham Phithipoed Tuek Thithamkan Krom Praisani Thorarek* (The Opening Ceremony of the General Post Office)', *Khao Khosanakan*, 5 (1940), 1076–81.
[3] The Garuda clutching horns was the logo of the Department of Post and Telegraph, created in the time under the absolute monarchy, combining the emblem of the kingdom with a traditional horn, the idea presumably derived from logos of European post offices.

Figure 5.2.11: General Post Office (1940) as depicted in the book commemorating its opening ceremony[1]

[1] *Nangsue Thiraruek Nueng Nai Phithi Poed Tuek Mai Khong Krom Praisani Thoralaek 24 Mithuna2483 (The Book Commemorating the Opening Ceremony of The new Building of the Department of Post and Telegraph 24 June 1940)* (Bangkok: Department of Post and Telegraph, 1940), unnumbered p. 1.

Figure 5.2.12: The gigantic scale of the General Post Office compared with its surroundings in 1946 (top) and 1968 (bottom)[1]

Figure 5.2.13: One of the reinforced-concrete-Garuda and horn sculptures (the symbol of the Post and Telegraph Department), located at the top corners of the façade of the General Post Office.[2]

[1] Khon-krung-kao, '*70 Pi Akhan Praisani Klang* (70th Anniversary of the General Post Office)', p.27.
[2] Ibid.

The building was designed in response to the five points raised by the project committee in 1934. The spacious T-shaped building housed all departments under one roof, prioritising the convenience of administration and minimising unnecessary expenditure. It had a reinforced concrete structure and masonry walls, the most modern and durable materials of the time, to assure the durable building's ability to accommodate the business. Large glass windows were applied to maximise day light. Proper ventilation was used to ensure hygiene. Such large-scale construction contributed to the country's economy. Its clear and rationalised plan distributing functions must have helped in prevention of embezzlement. The main hall with an open-plan-space was not only grand in appearance, but also coincident with Thongyu Iambunim, the MP of Nonthaburi's suggestion to the Prime Minister on 17 June 1939 that government offices should be open-plan, since divided rooms encourage absence and laziness in officials.[1]

In this sense, the architecture could be seen as an agent to deliver functional convenience, transparency in administration, economic stimulation, hygiene, and a good work ethic. Most goals of the project were achieved. But an account implying failure is also evident. James A. Michener quoted a famous newspaperman in 1952:

> In Bangkok they have one of the world's most beautiful post offices. Very modern. Eight different post boxes for letters. City Mail. Air Mail. Up Country Mail. Up Country Air Mail. Europe. Asia. North America. Africa. Then at five o'clock a little old man with a cart comes along and empties all the boxes into one big pile.[2]

The account reiterates the prestigious status of this architecture as a guarantor of Thailand's modern image represented in its beauty and systematic management. The separation of mail boxes strengthened the sense of users that they were connected with every corner of the globe in this building. But, at the same time, a counter-modern element is demonstrated by its official use. The separation of mail boxes were practical nonsense for the member of staff who collected from them. They worked better only in the symbolic aspect. But that was probably what was most important for the authority.

[1] Bangkok, National Archives of Thailand, (2) S R 0201.69/21 (An Opinion of Thongyu Iambunim about Government Offices)
[2] James A. Michener, *The Voice of Asia* (Bangkok: Bantam Books, 1952), p. 164.

Figure 5.2.14: The main hall of the General Post Office, spanned with reinforced concrete beams lit with natural light through large windows[1]

Figure 5.2.15: One of the Garuda and horn sculptures with an offering at the 70th anniversary celebration of the building in 2010[2]

Figure 5.2.16: A welded metal Garuda and horn sculpture in an iron gate at the main entrance[1]

[1] Vasu Poshyanandana, '*70 Pi Praisani Klang Bangrak* (70th Anniversary of the General Post Office, Bangrak)', http://vasuposh.blogspot.co.uk/2010_07_01_archive.html [accessed 8 July 2013].
[2] Ibid.

Figure 5.2.17: Modern elements of the General Post Office[2]

[1] Vasu Poshyanandana, '*70 Pi Praisani Klang Bangrak* (70th Anniversary of the General Post Office, Bangrak)', http://vasuposh.blogspot.co.uk/2010_07_01_archive.html [accessed 8 July 2013].
[2] Ibid.

Furthermore, not unlike Sala Chaloemkrung Theatre built by the old regime, the General Post Office built by the new regime also engaged a pre-modern realm that still lingered. During World War II, despite it having been a main target of the Allies' air strike, the building survived. There was even an account about people having seen the reinforced concrete Garuda sculptures flying out from the building and pushing away bombs from the aeroplane.[1] A journalist later asked Kuang Aphaiwong, the Director of the Post and Telegraph Department: 'When this building was built, what mystic stuff did you put into it, so that it survived the bombs?' He replied 'Yes. When this building was built, there was no corruption. Wasn't that mystic stuff?'[2] Both the question and answer equally reflected persisting practices. Myth and corruption were not uncommon in both the absolute monarchical and the democratic Thailand.

Ministry and the Courts of Justice (1939–43)

As mentioned in the last two chapters, the project to construct a new court and Ministry of Justice started as early as 1927. Charles Beguelin was initially in charge of the design but the project was halted after the revolution of 1932.[3] The design that was built during 1939 and 1943 was the consequence of another project under a new set of committees.

The background of the new project was that after 1932 the democratic governments gradually accomplished their attempts to amend the unequal treaties between Siam and foreign countries regarding extra-territorial jurisdiction by 1938.[4] This was considered one of the greatest achievements of the People's Party, since Siam became fully juridically independent. In this sense, an alleged pseudo-colonial status was for the first time lifted. Plaek Phibunsongkhram, the nationalist Prime Minister, therefore, approved the project to build a new Ministry and Courts of Justice in 1939, stating that it would be the 'permanent and honoured office, upholding the nation's pride and fame'.[5]

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[1] *Anuson Nai Ngan Phra Ratchathan Ploengsop Pantri Khuang Aphaiwong (The Memorial for the Funeral of Colonel Khuang Aphaiwong)*, ([n.p.]: [n. pub.], 1968), p. 49.
[2] Ibid.
[3] Wichiansiri and Phunsin, *Anuson Ngan Phraratchathan Ploengsop Maha Ammat Aek Chao Phraya Srithammathibet (Chit Na Songkhla) [Memorial for the Funeral of Maha Ammat Aek Chao Phraya Srithammathibet (Chit Na Songkhla)]*, p. 76.
[4] 'What the New Siam is Achieving' *The Singapore Free Press and Mercantile Advertiser*, 10 December 1937, p. 8.
[5] Bangkok, National Archives of Thailand, (2) S R 0201.7/13

Figure 5.2.18: The old Court of Justice (left) was designed by Joachim Grassi and built in 1882.[1]

[1] National Archives of Thailand

Figure 5.2.19: A temporary pavilion for the treaty amendment ceremony[1]

[1] *Thai Nai patchuban (Thai at the Present)*, p. 19.

The Prime Minister commanded that the new court should consist of all types of court.[1] Luang Seriroengrit suggested that architects to design the building should come from only one department; otherwise the design would be done in different styles.[2] The cabinet appointed a committee for the project on 7 July 1939; the architects, Sarot Sukkhayang and Mew Aphaiwong, who had designed the General Post Office, were members of that committee.[3]

As this project was one of the last major projects of Sarot Sukkhayang in his pre-war career, his latest ideas on architecture will be discussed first. The best source for this was his description of his visit to Paris Exposition 1937 published in *Silpakorn* Journal, one of the few journals focusing on art in Thailand, in 1938, one year before he was commissioned for the project. In the article, Sukkhayang surveyed international modern architecture and gave his personal comments.

By observing German, Italian, and Soviet Pavilions, he was made aware that international exhibitions can also engage political propaganda. He mentioned Alvar Aalto's Finnish pavilion that had been praised by western architects and journalists, but stated that the pavilion's timber construction did not amaze people like him from a country that was full of wood, because it was the most appropriate material for them (chapter 4.2). In observing other pavilions, he mentioned that the current era was about using glass but he also wondered about its suitability to Bangkok's sun. He criticised the relief on the wall of the British Pavilion, designed by Oliver Hill, as 'scrabbily drawn' and the Belgian Pavilion, designed by Henry van de Velde, whom Sukkhayang called the 'old professor of Europe' as 'awkwardly modern'. It can be considered that Sukkhayang's tour was not a serious study trip to learn about Modernism. It was rather a shopping trip where he could deliberately choose features of 'modern styles' from Europe that he deemed 'appropriate' for Siam, and ignore others that were irrelevant. Sukkhayang's judgement on the new designs was based on his conventional idea of Beaux-Arts, yet embraced changes and local climate.

[1] National Archives of Thailand, (2) S R 0201.7/13
[2] Ibid.
[3] Ibid., p. 5.

Figure 5.2.20: Italian, German, and Soviet Pavilions exhibiting their political agendas at Paris Exposition 1937[1]

Figure 5.2.21: Belgian Pavilion at Paris Exposition 1937 by Henri van der Velde[2]

Figure 5.2.22: British Pavilion at Paris Exhibition 1937 by Oliver Hill[3]

[1] *Art and Power: Europe under the Dictators 1930–45*, ed. by Dawn Ades (London: Thames and Hudson; Hayward Gallery,1995), p. 67.
[2] *Exposition Internationale des Arts et des Techniques Applique la Vie Moderne, Paris, 1937. Album Officiel* (Paris: Exposition internationale des arts et techniques, 1937), p. 35.
[3] Ibid.

Back in Siam, the design process of the new courts and Ministry of Justice began with Luang Chakprani Sri Sinisut's visit to Europe to look at Ministries and Courts of Justice.[1] This step was important because the officials believed that Siam, which had already gained a full autonomy in jurisdiction and, therefore, had somehow assumed an equal status to advanced countries, should have an elegant Court of Justice as in those countries.[2] Finally the Federal Supreme Court of Switzerland was chosen as the model.[3]

Amidst the encouragement by the nationalist government under Phibunsongkhram's regime for Thais to do business and take over the market from foreigners, Luang Pradit Yutthakan won the bidding of this project with a budget of 215,000 Baht in March 1939. Sarot Sukkhayang, Luang Burakam Kowit, and Luang Chakprani Sri Sinwisut were the construction supervisors. The first phase was opened at 24 June 1941, the National Day.

It was not clear that what aspects of the Neo-Classical Federal Supreme Court of Switzerland had been adopted as a model because the final design of the first phase of the Courts and Ministry of Justice in Bangkok seemed, as M. C. Vodhyakara Varavarn criticised, to have copied Hitler's buildings.[4] Its simplified elements that made it aligned with the work in conservative line of Modernism might also have resembled those of the Italian Fascist regime. Either way, despite the authority's deliberate intention to 'follow' a western country's model, the architect's justification of 'appropriateness' resulted in something, again, 'almost the same but not quite' the same as other countries' models.

[1] He also observed the activities of Juvenile Courts of Germany, Italy, Belgium, and the Netherland in the same trip. See '*Prawat San Yaowachon Lae Khrobkhrua Klang (The Histo*ry of Juvenile Court)', http://www.coj.go.th/museum/court/childandfamily.html [accessed date 5 Aug 2013]

[2] '*Banthuek Chao Phraya Sri Thammathibet 25 Prutsachikayon 2481* (The Memoire of Chao Phraya Sri thammathibet 25 November 2481)' in *Thiraruek Nai Kan Sadet Phraratchadamnoen Song Prakop Phithi Poed Akhan Thithamkan Sanphaeng Lae Sandika 15 Pho Kho 2506 (The Memorial of the Royal Visit for The Opening Ceremony of the Civil Court and the Supreme Court)* (Bangkok: Rongphim Chuanphim, 1963), pp. 15–29 (p. 21).

[3] Ibid.

[4] Bangkok, M. C. Vodhyakara Varavarn's Archive, Architectural Gossip, Part of *Khwammai Khong Watsadu Lae Kan Okbeb Sathapattayakam* (Definition of Materials and Architectural Design) (1964), p. 2.

Figure 5.2.23: Federal Supreme Court of Switzerland[1]

Figure 5.2.24: Ministry of Justice, Bangkok (1941), and officials[2]

[1] 'Schweizerisches Bundesgericht', http://www.bger.ch/ [accessed date 3 August 2013].
[2] National Archives of Thailand

Figure 5.2.25: An old postcard depicting the stripped classicist General Post Office at Palermo (1926–34), an example of Italian Fascist Architecture[1]

Figure 5.2.26: Nazi German buildings as depicted in a popular magazine *Chiwit Thai (Thai Life)* in 1941[2]

[1] 'Postcards of the Past Sicily', http://www.oldstratforduponavon.com/sicily.html [accessed 19 July 2013].
[2] '*Phap Dan Yoeraman* (Pictures from Germany)', *Chiwit Thai*, 20 (1941), 3–6.

Whether the design of the Courts and Ministry of Justice was like that of its European model was not much the case as long as it was perceived by the Thai public as '*Sinlapakam Baeb Thansamai*' [modern (up-to-date) style art], as dubbed in the opening ceremony.[1]

The building details were described as 'steel-reinforced concrete structure, normal *Mon* brick walls, asbestos cement fibre roof, with parapets', all of which were enough to exhibit the progress of the nation. The symbolic quality of the building was reiterated in the Ministry's float participating in the National Day parade on 23 June 1941 that was modeled after the building's façade. It won the third prize in the category of 'Exhibiting progress'.[2] The construction of the second phase was done by Thai Yonok Company. The government might have satisfied by the fact that it was a Thai company, but the construction was delayed and it was finally opened in 1943.

The Court and Ministry of Justice, inaugurated and built a few years after the General Post Office, had entirely Thai participants in its realisation. By commemorating the full independence of jurisdiction, having a prestigious building like those in the West to house it, and having all parties in its design and realisation of the Thai race, the building symbolised not only another step for Thailand but also the progress of Thai professionals. This especially for the architectural profession, for the most senior Thai architect, who had graduated from Europe, went back to Europe for the first time to survey new ideas, but did not follow them anymore. Instead, he asserted his authority over those new ideas by freely selecting only the relevant ones, ignoring the rest, and even disdaining some of them. Then he went back to use the selected ones in his fully independent home country.

Both General Post Office and the Court and Ministry of Justice, designed by Sukkhayang and Aphaiwong, shared a particular material on their surfaces. They had exposed aggregate render with rustication on their walls that faced main streets, made to a pattern as indicated in the construction documents by Sukkhayang.[3]

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[1] See Bangkok, National Archives of Thailand, (2) S R 0201.97.3.1/4 (The Report about the Opening Ceremony of the Ministry of Justice)

[2] Rangkhon, '*Phap Wan Chat* (National Day Pictures)', *Chiwit Thai*, 20 (1941), 23.

[3] *Watthanatham Thang Kan San (The Culture of the Court)*, (Bangkok: Ministry of Justice, 1943). Quoted in Pinai Sirikiattikun, '*Na Thini Maimi "Khwamsuem": Thanon Ratchadamnoen Pho So 2484–2488* (A Place Without "Cultural Slackness": Rajadamnern Boulevard, 1941–45)', *Na Chua*, 6 (2009), 8–51 (p. 30).

Figure 5.2.27: The Ministry of Justice's float participating in the National Day parade on 23 June 1941 was modeled after the new Ministry and Court of Justice's façade.[1]

Figure 5.2.28: The perspective drawing of the proposed second phase of the Ministry and Courts of Justice, and the building as realised.[2] Note the pattern on the façade.

[1] Rangkhon, '*Phap Wan Chat* (National Day Pictures)', p. 24.
[2] Pinai Sirikiattikun, '*Na Thini Maimi "Khwamsuem": Thanon Ratchadamnoen Pho So 2484–2488* (A Place Without "Cultural Slackness": Rajadamnern Boulevard, 1941–45)', p. 30.

Figure 5.2.29: The rear of the first and second phases of the Ministry and Courts of Justice, and the old Court of Justice, which would be demolished to make way for the third phase[1]

[1] *Krung Thep 2489–2539 (Bangkok 1946–1996)* (Bangkok: Department of Fine Arts; Siam Cement Foundation, 1996).

Sirikittikun pointed out that this method of rustication was intended to make the building look as if built with stone masonry or stone clad walls — an elegant yet too-expensive material.[1] He further pointed out that this particular finish was made to increase the (western style) elegance of the buildings as perceived by the Thai elite and architects at the time.

The buildings that used stone cladding in Thailand before the construction of these projects were Phra Puttharattana Sathan in the Grand Palace, Wat Benchamabophit (The Marble Temple) by Prince Naris, and Anantasamakhom Throne Hall by Italian architects. For the fake rustication too, there were examples predating these two buildings. One was the Neo-Classical Siam Commercial Bank designed by Annibale Rigotti (1910). Actually the technique had been adopted for centuries from Palazzo del Te in Italy to Italianate buildings and Georgian terraces in Britain, where stucco-walls were made to look like stones. The application of masonry only for walls facing streets, leaving back sides as normal brick walls, was also widely used in British inter-war buildings and also shortly after the World War II, when the conventional elegance of stone cladding was still desirable but less affordable.

The technique adopted for the General Post Office and the Court and Ministry of Justice was therefore a combination of methods in both conventional and quasi-modern-western architecture that happened to be adopted for modern style architecture in Thailand. It was indeed a double-denial of Puginian principles of truthfulness in architecture — expressing the materials as they were, and avoiding the exhibition of an elegant front façade, while ignoring the rest.[2] But the Thai pioneering architects and elite ignored it as long as they could achieve the image of modernity in their own way. As a result, this practice reiterates that the pioneering Thai architects did not depart from the design practices in Siam under absolute monarchy by the previous generation of both European and Thai architects but, under the new regime, even departed from the hegemony of the western architectural establishment.

[1] Sirikiattikun, '*Na Thini Maimi "Khwamsuem": Thanon Ratchadamnoen Pho So 2484–2488* (A Place Without "Cultural Slackness": Rajadamnern Boulevard, 1941–45)', 8–51 (p. 30).
[2] See Augustus Welby Northmore Pugin, *Contrasts; and the True Principles of Pointed or Christian Architecture* (Reading: Spire Books Ltd. in association with the Pugin Society, 2003).

Figure 5.2.30: A corner of the General Post Office where a side façade with exposed aggregate finishes meets a white-washed back façade[1]

Figure 5.2.31: A corner of a building at the Moor, Sheffield, built in the 1950s shows a stone cladding façade facing the street and a normal brick façade at the rear side.[2]

[1] Sirikiattikun, '*Na Thini Maimi "Khwamsuem": Thanon Ratchadamnoen Pho So 2484–2488* (A Place Without "Cultural Slackness": Rajadamnern Boulevard, 1941–45)', 8–51 (p. 29).
[2] Photos by Chomchon Fusinpaiboon

Figure 5.2.32: Fake rustications on a building in Turin (left), on the ground floor of Georgian terraced houses[1] (right), and Siam Commercial Bank[2] (1910) (bottom)

[1] Photos by Chomchon Fusinpaiboon
[2] 'Siam Commercial Bank, Talad Noi Branch', http://www.pbase.com/image/86368609 [accessed date 9 August 2013].

The Democracy Monument and the renewal of Ratchadamnoen Boulevard (1939–1943)

The last case study of 'architecture' by the People's Party is a massive project commissioned by the Crown Property Bureau, which had been established by the democratic government in 1937 to manage the state's properties confiscated from the monarchy's Privy Purse (theoretically the Kingdom's properties not the King's personal ones). The whole project consisted of the redevelopment of Ratchadamnoen Boulevard, previously built by King Chulalongkorn and opened in 1903.[1] The original boulevard comprised three parts; the first led from the Royal Palace to the city's inner-ring canal, Khlong Rob Krung; the second and middle part lined with tamarind trees and rod-iron benches ran from the canal to another canal, which marked the edge of the old town; and the third and last part, lined with Mahogany trees, ran towards Dusit Park, the King's suburban complex. The democratic government claimed to continue King Chulalongkorn's ambition to create an imposing boulevard with government offices and stores as in *Araya Prathet* (civilised countries).[2] The site of the project was the middle part of the artery, Ratchadamnoen Klang Boulevard.

Together with the Democracy Monument, there would be stores, offices, apartments, theatre, and hotels, to literally form the modern centre of the capital. Another part of the boulevard, which ran toward Dusit Park at the north, would be reserved for governmental offices.[3] The first phase to be executed was the monument, and then came the extension of the boulevard and the construction of ten buildings consisting of stores in the first two floors and apartments in the upper floors. The nationalist government intended that here the 'commerce of the Thais could be conducted in the centre of the city where Thais from all walks of life could live'.[4] The latter phase consisted of first-class hotels and a theatre, which 'would be another grand and luxurious theatre in the East, surpassing the ones in Tokyo, Manila, and Singapore'.[5]

[1] Povatong, '*Thanon Ratchadamnoen: Prawat Kan Kosang* (Ratchadamnoen Boulevard: The History)', p. 36.
[2] Bangkok, National Archives of Thailand, (2) S R 0201.69/30 (The Cabinet Assembly Project)
[3] National Archives of Thailand, (2) S R 0201.69/12 (The Project for Ministries to be Built at One Place)
[4] National Archives of Thailand, (2) S R 0201.69/30
[5] Rak, '*Thai Sang Mueng* (The Thais Build the City)', *Chiwit Thai*, 4 (1941), 21–24.

Figure 5.2.33: A map surveyed in 1921 shows existing Ratchadamnoen Klang Boulevard running from east (right) to west (left, towards the Royal Ground and the Royal Palace).[1] The built-up areas adjacent to the boulevard were still sparse.

[1] *Phinit Phranakorn 2475–2545 (Observing the Capital 1932–2002)*, p. 67.

This massive renewal project was therefore not a cutting of a Haussmanian boulevard through a medieval town but a creation of a modern centre of a city in the middle of a semi-urban area. The first edifice erected on the boulevard for the project was the Democracy Monument, whose foundation stone was laid by the para-military-leader, Prime Minister Plaek Phibunsongkhram, to commemorate the change of the country's administrative system, on 24 June 1939 after that date had been declared the National Day.[1] The budget was 250,000 baht.[2]

The Premier had exercised his undemocratic power from the beginning of the project when a design competition was held — one of the first of its kind in Thailand, and the most important of its time. Prof. Lucien Coppé won the competition against designs submitted by almost all architectural professors and architects in the country.[3] However, his scheme was abandoned, replaced by a new design incorporating everything the Premier had had in mind from the beginning. He wanted to include in the monument every symbolic detail of the revolution. M. L. Pum Malakul, an architect of the Department of Municipal Works, was responsible for the design while Prof.Corrado Feloci was the sculptor of the added reliefs. Christiani & Nielsen was the contractor. M. C. Vodhyakara Varavarn found the design imposing but lacking in tranquility.[4] The features and their symbolic meanings were described in *Khao Khosanakan*, the state-run journal as follows:

1. Four wings with their height of twenty four metres from the ground and the distance from the fortress at the centre of twenty four metres represent 24 June, the day that the country's administrative system has been changed. The four wings also represent the glory of democracy.

2. Seventy five cannons buried around the monument represent BE 2475 (AD 1932), the year of the administrative change.

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[1] 'Siam Monument to Democracy', *The Singapore Free Press and Mercantile Advertiser*, 26 June 1939, p. 3.
[2] '*Anusawari Prachathippatai* (Democracy Monument)', *Khao Khosanakan* , 3 (1940), back cover.
[3] Tho-Phutao, '*Prakuad Baeb Laithaeng* (The Design Competition of Clues)' in *Thi Raruek 72 Pi Khana Sathapattayakammasat Chulalongkorn Mahawitthayalai Po So 2476 - 2548 (The 72th Anniversary of the Faculty of Architecture, Chulalongkorn University 1933 - 2005)* (Bangkok: Faculty of Architecture, Chulalongkorn University, 2005), pp. 14–19.
[4] Bangkok, M. C. Vodhyakara Varavarn's Archive, Architectural Gossip, Part of *Khwammai Khong Watsadu Lae Kan Okbeb Sathapattayakam* (Definition of Materials and Architectural Design) (1964)

3. The reliefs at the bases of the four wings depict the story of the People's Party who prepared and staged the administrative change.
4. The tray of constitution on the fortress at the centre of the monument is three metres high to represent the third month (June according to Thai calendar), that was the month when the administrative change took place. It is the biggest tray in Thailand, cast in brass and copper and weighing four tons.
5. Six swords at the six doors of the fortress represent the six principles of the People's Party.[1]

For Phibunsongkhram, suitable proportions of features that would have constituted a good design following architectural principles were not as important as the symbolic meanings of the elements. And the architect responded to the Premier's wish. But the numerical representation of dates and the People's Party's principles in the dimensions still did not cover another important aspect that lingered from the old to the new regime — auspiciousness.

At the opening ceremony on 24 June 1940, the Prime Minister arrived at the venue at 8.45am and the ceremony started at 9.08am, times calculated in advance by an astrologer following a principle of auspiciousness. After that not only did a brass band play the national anthem and celebrated themes, but Buddhist monks also chanted and received offerings. There was only one number that had not been calculated following the auspicious principle. It was the date of the ceremony. It had to be 24 June as that was the national day. No account indicated that it was an inauspicious date, but the pink silk that had been supposed to be pulled up by balloons to uncover the symbolic tray of the constitution fell to the ground. The Premier was upset by this, as the incident was widely criticised by the people at the time as bad omen for the new administrative system.[2] And, according to traditional belief, this bad omen could have been partly created by the leader's inadequate *Barami* (prestige and virtue) to rule. And in hindsight the hectic fifteen years of the new regime could be regarded as a proof of the bad omen. The coexistence and negotiation between the power of the leader of a modern nation and the supernatural,

[1] '*Anusawari Prachathippatai* (Democracy Monument)'
[2] Craig J. Reynolds, *National Identity and Its Defenders: Thailand Today* (Bangkok: Silkworm Books, 2002), p. 38.

an ancient power — even more ancient than the monarchy, reflects a common circumstance along the path to modernity of Thailand and a neighbouring country, postcolonial Indonesia, where Anderson found 'archaic-magical' and developed-rational' theories of power existing side by side.[1] Despite different periods, the case of both countries demonstrates as Geertz stated that:

> Whatever the curve of progress may be, it fits no graceful formula — disables any analysis of modernization which starts from the assumption that it consists of the replacement of indigenous and obsolescent with the imported and up-to-date. […] A tense conjunction of cultural conservatism and political radicalism is at the nerve of new state nationalism[2]

Rattakasikorn criticised that the monument raised little interest among the public because the Thai public had not been part of the revolution from the first place.[3] He argued that the majority had lived sufficiently or humbly under the absolute monarchy. They might have enjoyed the change that initially seemed to improve things, but they saw no reason to appreciate the gigantic monument that commemorated a revolution in which they had not actually participated.

Amidst the instability of the global situation due to World War II, the parliament approved the proposal of the redevelopment on Ratchadamnoen Boulevard in October 1939 after Pridi Phanomyong, the Minister of Finance and the Director of the Crown Property Bureau, defended the project as viable and beneficial in three respects.[4] First, the Crown Property Bureau, not the government, would pay for it. Second, ordinary people could own the property and gain access to their livelihood, while the bureau would benefit from their rent. Third, the project would benefit the country's construction industries, such as the Siam Cement Company.

[1] Benedict Anderson, 'The Idea of Power in Javanese Culture', in Claire Holt, ed., *Culture and Politics in Indonesia* (Ithaca: Cornell University Press, 1972), pp. 51–69.
[2] Geertz, *The Interpretation of Cultures: Selected Essays*, p. 320.
[3] Saengarun Rattakasikon, '*Anusawari Thi Thai Tham* (The Monuments Built by the Thais)', in *Saeng Arun 2*, ed. by Lada Rattakasikon (Bangkok: Amarin Printing, 1981), pp. 102–03.
[4] Bangkok, National Archives of Thailand, Ng 3 S Ph 2482/18 (Budget for Ratchadamnoen Boulevard Redevelopment)

Figure 5.2.34: The design of the Democracy Monument by M. L. Pum Malakul (1939)[1]

[1] *Thai Nai patchuban (Thai at the Present)*, p. 34.

Figure 5.2.35: The Democracy Monument under construction by Christiani & Nielsen Co. Ltd, a reinforced concrete construction specialist[1]

Figure 5.2.36: Democracy Monument (1939–40)[2]

[1] National Archives of Thailand; 'Christiani & Nielsen, Company Profile', http://cn-thai.co.th/en/?page_id=7 [accessed 29 July 2013].
[2] National Archives of Thailand

Figure 5.2.37: Photos from a state-run-magazine *Khao Khosanakan* depicting a military parade passing the Democracy Monument and a military show at Sanam Luang, the Royal Ground, on the National Day, 24 June 1940[1]

[1] '*Anusawari Prachathippatai* (Democracy Monument)'.

The first phase of the redevelopment on Ratchadamnoen Boulevard had been designed by Mew Aphaiwong, the architect of the Crown Property Bureau, and was supervised by Sarot Sukkhayang, the Head of Architecture Division, Fine Arts Department, and Luang Burakam Kowit, *Nai Chang Yai* (Chief engineer/architect) of Bangkok Municipality. Models of seven buildings along the boulevard were made by the Fine Arts Department at the request of the Crown Property Bureau.[1] A report about construction in progress in *Chiwit Thai (Thai Life)* Magazine of March 1941 was headed '*Thai Sang Mueng* [The Thais build the city]'. The article ended with the lines:

> Has everybody prepared him/herself to view the new city which has been building with ten millions-baht-budget? Please come to rejoice that it is being constructed, and then go back to revive *Watthanatham* [culture] and await its opening on 24 June 1941.

Published at the height of Phibunsongkhram's nationalism that encouraged (and later enforced) citizens to improve their cultural life and to be civilised, the gigantic project was deemed not just to serve any citizen, but 'civilised' ones. The redevelopment of the boulevard was finally completed and opened on National Day 1941 with a total cost of 2,396,000 baht.[2]

Once the boulevard was finished, it could have been seen, as Prakitnonthakan posited, like other projects built by the new regime, as a stage set for the new era that had departed from the out-of-date past and tradition of the previous regime.[3] But considering the fact that the government still had to encourage its citizens to improve cultural life to suit modern time, and, in this case, modern buildings, the question of how the government assured that its citizens would dwell in the modern urban realm properly comes to the fore.

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[1] Pinai Sirikiattikun, 'Remaking Modern Bangkok: Urban Renewal on Rajadamnern Boulevard, 1939–41', in *Old–New: Rethinking Architecture in Asia*, (Bangkok: The 8th Silpakorn Symposium on Architectural Discourse, 2009), 280–299 (p. 298).
[2] National Archives of Thailand, (2) S R 0201.69/30, p. 46.
[3] Prakitnonthakan, *Kanmueng Lae Sangkhom Nai Sinlapa Sathapattayakam: Sayamsamai Thaiprayuk Chatniyom (Politics and Society in Architecture: Siam Era, Transforming Thai, and Nationalism)*, p. 352.

Figure 5.2.38: The redevelopment of Ratchadamnoen Boulevard in progress[1] Note the scale of the redevelopment including the boulevard, building complexes, and the Democracy Monument, compared with the existing shop houses on a narrow street, to be demolished, on the right.

Figure 5.2.39 (left): The construction of a building in the complex along Ratchadamnoen Boulevard on the cover of a magazine, *Chiwit Thai (Thai Life)*, March 1941.[2] The story inside was headed '*Thai sang mueng* [The Thais build the city]'.

Figure 5.2.40 (right): The construction of the complex along Ratchadamnoen Boulevard in progress as reported in a magazine, *Chiwit Thai (Thai Life)*, March 1941[3]

[1] National Archives of Thailand
[2] Rak, '*Thai Sang Mueng* (The Thais Build the City)'.
[3] Ibid.

Figure 5.2.41: Ratchadamnoen Boulevard in 1946[1]

Figure 5.2.42: Ratchadamnoen Boulevard after the National Day parade of 1941: full of people who came to celebrate the festival on the 60-metre-wide street[2]

[1] SOAS Library Archive. William Hunt Collection, retrieved from Sirikiattikun, 'Remaking Modern Bangkok: Urban Renewal on Rajadamnern Boulevard, 1939–41', 280–299 (p. 293).
[2] Rangkhon, '*Phap Wan Chat* (National Day Pictures)'.

Figure 5.2.43: Ratchadamnoen Boulevard and one of its buildings depicted with a modern car and citizens in a school textbook *Citizens' duties and morals*, 1948[1]

[1] *Nathi Phonlamueng Lae Sinlatham (Citizens' Duties and Moral)* (Bangkok: Ministry of Public Instruction, 1948), p. 23.

Pinai Sirikiattikun pointed out in his article *Remaking Modern Bangkok: Urban Renewal on Rajadamnern Boulevard, 1939-41*, that the building complex was not only the 'stage set' for civilised Thailand but a 'tool' to civilise Thai citizens, in terms of their public and private manners and behaviours, in order to exhibit a civilised image for the country.[1]

This was done by the government as part of its attempt to 'revive the culture' of the Thais. Taking this line, Sirikiattikun investigated the use of the buildings after the boulevard's completion from 1941 to 1945. The use of the building was restricted by a code of conduct that correlated with the manners for which the government had been campaigning. For example, the code for people working and living in the buildings stated that they should dress 'properly'; should not cook with coal as it was considered unhygienic and annoyance to other units; and should not pour water from upper floors, otherwise they might face penalties. The prohibited behaviours had not been a problem in the traditional way of life in Siam where people's houses were scattered about in the vicinity of towns whose morphology had been minimally densified rural areas rather than towns in the western sense.[2] But problems occurred when the urban form was changed and density was increased if people's bodily practices remained the same.

Here, on Ratchadamnoen Boulevard, the new regime tried to make the centre of the city a special zone where citizens should behave in a civilised way. Measures against residents who had not understood the 'public-ness' of space were taken to secure the government's purpose of using these '*Tuek Samaimai* (modern buildings)' as '*Sathanti Choedchu Kiat Khong Pratetchat* [the place that cerebrates the nation's dignity]'.

The redevelopment project of Ratchadamnoen Boulevard seems to have served the government's purpose well as an enormous stage set for the new and civilising Thailand. It boosted the economy as well as showing the pride of the Thai nation. Ultimately, it was even a tool to civilise the citizen who used it.

[1] Sirikiattikun, '*Na Thini Maimi "Khwamsuem": Thanon Ratchadamnoen Pho So 2484–2488* (A Place Without "Cultural Slackness": Rajadamnern Boulevard, 1941–45)', 8–51.
[2] See Chitrabongs.

Figure 5.2.44: An advertisement discouraging the 'uncivilised' habit of squatting in public space printed in a magazine *Sang Ton-eng* (Building oneself)[1] The sign read 'Bus stop, Ratchadamnoen Boulevard Route'

Figure 5.2.45: A picture advertising the nationalist government's discouragement of an 'uncivilised' habit, taken from a magazine, *Sang Ton-eng (Building oneself)* and reprinted in another magazine *Chiwit Thai (Thai Life)*, March 1941[2] The heading reads 'Is it appropriate?' The caption reads 'Our city is progressive and prosperous. And its streets are grand. Have you ever thought that clothes hung in the streets and being naked are hindrances to progress?'.

[1] *Sang Ton-eng*, 20 (1942), unnumbered p. 8
[2] 'Is it appropriate?', *Chiwit Thai*, 5 (1941), p. 34.

Figure 5.2.46: Advertisement disdaining the behaviour of taking baths in canals and letting children excrete in the streets of the city, taken from a magazine, *Sang Ton-eng (Building oneself)* and reprinted in a magazine, *Chiwit Thai (Thai Life),* October 1941[1]

[1] '*Phuea Watthanatham* (For Culture)', *Chiwit Thai*, 28 (1941), 37.

It later happened that the construction of a building by a Thai contractor in the redevelopment project of Ratchadamnoen Boulevard was not of a good standard. The building No. 4 at Tanao Road, Khok Wua Intersection, collapsed during construction on 3 April 1943. It was designed and constructed by Sanga Phanit Company, owned by Sanga Wanadit, and the contract was made when Chun Pinthanon was the Director of the Crown Property Bureau.[1]

Sanga Phanit had been a pioneering firm of Thai contractors working at large scale among the foreign contractors who dominated the industry a decade earlier. The firm had accomplished the Vajiramongkut Building of Vajiravudh College in 1932, the first major modern work built by a Thai contractor (See Chapter 2.3). One decade later, Sanga Phanit must have been still in the forefront, generating pride in the government about the Thais' progress in industry and being able to compete with foreign business. This must have been an important reason why the firm secured this prestigious contract. When such an important work suffered structural collapse, M. C. Vodhyakara Varavarn recorded the incident that three or four workers had tragically died. The government set up an investigation committee, but nothing more was heard.[2] The modern buildings of the renewal project of Ratchadamnoen Boulevard commissioned by the dictator who called himself the leader of a democratic regime, with equality as one of its principles, did not guarantee that a tragedy happening to lower-class workers would be treated fairly.

Dictatorship, ignorance, and corruption, as well as inequality, were the same old stories as with the old regime, and they lingered on with the new elite, who claimed to civilise their citizens and the half-modern-half-indigenous society they ruled and were part of.

Despite the fact that no press coverage discovered so far directly dubbed the Democracy Monument and the buildings along Ratchadamnoen Boulevard as 'architecture', and M. C. Vodhyakara Varavarn even called the latter 'not of any significance' buildings[3], their prestige as a whole project, among the authority and the public was unquestionable. Both of them were also selected by Nat Phothiprasat

[1] Bangkok, National Archives of Thailand, (2) S R 0201.69/38 (The Construction and Repair of Buildings on Ratchadamnoen Boulevard)
[2] Bangkok, M. C. Vodhyakara Varavarn's Archive, Architectural Gossip, Part of *Khwammai Khong Watsadu Lae Kan Okbeb Sathapattayakam* (Definition of Materials and Architectural Design) (1964)
[3] Ibid.

to be included in his book *Architecture of Thailand*.[1] In this sense, it is possible to state that whether a monument or a group of buildings could be 'architecture' depended on the socio-political context, in which they were located. In this case, a group of buildings, regardless of its quality, might not be perceived as architecture on its own but could be done so when it was combined with a monument as part of a prestigious project in Thailand' nation building period.

After examining how 'architecture' was conceptualised and realised by the authority, architects, and the public, it is now timely to examine the same processes involving less prestigious 'buildings' to see if there were clearer differences between architecture and buildings. This examination will deal with Ercole Manfredi's designs for Chulalongkorn University.

Ecole Manfredi's modern educational buildings for the new regime (1935–41)

The last two case studies in this chapter designed by Ecole Manfredi apparently were never called 'architecture' but seemingly bore a Modernist grain more than any other cases mentioned. The former was Matthayom Howang School, completed in 1936; the latter the Faculty of Dentistry, Chulalongkorn University, opened in 1941.[2] Whether it was his inclination towards a modern 'style' or other factors that led to them being built as they were will be examined now.

The school initially used for its teaching the vacant 'Windsor Palace' built for the deceased Crown Prince Vajirunahit, until in 1935 the government wanted to build the National Stadium on the site. It therefore commissioned a new building for the school on Phraya Thai Road in the premises of Chulalongkorn University. The school moved into its new building in 1936.

[1] Phothiprasat, *Sathapattayakam Nai Prathet Thai (Architecture in Thailand)*, pp. 359–60.
[2] Bressan, 'Ercole Manfredi: One of the Great Architects of Bangkok (1883–1973)', p. 5.

Figure 5.2.47: Matthayom Howang School, later Building No.1 of Triam Udom Suksa School (1935–36)[1]

[1] Chulalongkorn University Archives

In 1937, the government announced a new national education plan to reduce secondary education from eight to six years. Graduates who wanted to continue their studies at higher education level had to attend a pre-university school run by each university. Chulalongkorn University commented that it was not ready to open its own pre-university school due to a limitation of space, teachers, and budget. Especially as regards space, it pointed out that the only school under the administration of the university was Mathayom Howang School, and it was likely to be used for this purpose. However, it could not accommodate separated departments for boys and girls, which would constitute about six hundred students.[1] The plan to establish the pre-higher education school was, therefore, related to the issue of whether co-education should be established in Siam.

The issue of co-education had being discussed for some time and there were pros and cons proposed by many parties of the society.[2] Using the building of Matthayom Howang School, Triam Udom Suksa School of Chulalongkorn University was finally established in 1938, enrolling 252 boys and 109 girls.[3] It therefore became the first co-educational school (at a higher than elementary level) in Siam, while Matthayom Howang School was gradually dissolved and terminated its classes in 1941. This was therefore the first place that girls could mingle with boys, which had previously happened only in university. Together with other new phenomena initiated by the new regime, including female representatives in parliament and a beauty pageant, the co-ed school was another challenge from modernity in terms of gender in Thailand. The students roll expanded year by year so it needed more space. The second and third buildings were built in 1941.

In terms of its planning, the building of Matthayom Howang School that was later handed over to Triam Udom Suksa School differed from the conventional purpose-built educational buildings, i.e. school, college, and university, that had first appeared in Siam in 1870 with Sunanthalai School (Royal Seminary). From that period until the beginning of the 1930s, educational buildings were mostly built to symmetrical plans in various styles, ranging from Classical and Gothic to Thai. The

[1] Bangkok, Chulalongkorn University Archives, Ch 10, Box 1, Folder 8 *Khana Sathapattayakammasat* (Faculty of Architecture), p. 15.
[2] M. L. Manit Jumsai, '*Sahasueksa* (Co-Education)', *Prachachat*, 15 December 1937, p. 3.
[3] Bangkok, Chulalongkorn University Archives, Ch 7.1 Box 3, Folder 55 *Song Raingan Kansueksa Prachampi Phutthasakkarat 2483* (Annual Report 1940).

circulation was by single-loaded corridor or of bungalow type, which had corridors surrounding the rooms. One exception was the asymmetrical planning at 'Long Building' of Suankulap Witthayalai School, which was built in 1911, lying almost two hundred metres along a street with a porch neither in the middle nor at the end. Chuengsiriarak pointed out that this implied a more practical aspect in design at the time of expansion in primary education, and that the building was intended to accommodate a large number of classrooms at the edge of the site rather than pursuing aesthetic quality in design composition.[1] However, Povatong's research later revealed that the plan had originally been symmetrical, but the second phase of construction did not happen, as there was later a new plan to establish Po Chang (Craftsmen's Training) School on the intended site.[2]

Chuengsiriarak pointed out another important example, regarding the bungalow plan. It was the new building at Saint Joseph's Convent School completed in 1913 in response to the school's expansion. Its simple reinforced concrete balustrades and columns, tapered from the ground to the second floor with simple capitals supporting the reinforced concrete beams of the first floor corridors, were not unlike the articulation of temporary timber buildings of bungalow style, which had been and were still popular for educational buildings in Siam.[3] This demonstrated a genealogy from the timber bungalows that had been supposedly temporary through to reinforced concrete structures that retained the simplicity and practicality, yet were more permanent and hygienic.

[1] Chungsiriarak, *Sathapattayakam Baeb Tawantok Nai Siam Samai Ratchakanti 4 Tueng Po So 2480 (Western Architecture in Siam: Rama IV's Reign to 1937)*, p. 214.
[2] See Pirasri Povatong, *Tuek Yao Rongrian Suan Kulap Witthayalai Prawatsat Sathapattayakam (Long Building, Suan Kulap College: The Architectural History)* (Bangkok: Chulalongkorn University, 2011), pp. 11–12.
[3] Chungsiriarak, *Sathapattayakam Baeb Tawantok Nai Siam Samai Ratchakanti 4 Tueng Po So 2480 (Western Architecture in Siam: Rama IV's Reign to 1937) (Western Architecture in Siam: Rama IV's Reign to 1937)*, p. 418.

Figure 5.2.48: Original plan of Suan Kulap College (1911)[1]

Figure 5.2.49: Suan Kulap College as built[2]

Figure 5.2.50: St Joseph Convent School (1913)[3]

[1] Povatong, *Tuek Yao Rongrian Suan Kulap Witthayalai Prawatsat Sathapattayakam (Long Building, Suan Kulap College: The Architectural History)*, pp. 11–12.
[2] Chungsiriarak, *Sathapattayakam Baeb Tawantok Nai Siam Samai Ratchakanti 4 Tueng Po So 2480 (Western Architecture in Siam: Rama IV's Reign to 1937)*, p. 432.
[3] Ibid.

Moving on to the period of the Matthayom Howang School at the beginning of the 1930s, educational buildings were still being built to the same principles as decades before. A pioneering feature might, however, be seen in two new buildings of Chulalongkorn University both completed in 1935. The Science (Physics) Building and the Faculty of Engineering had parapets to hide their roofs, making them appear to have cubic forms. However, the plans of both were still Classical with a porch and main hall as well as a staircase at the centre. The announcement at the opening ceremonies of both buildings pointed out that the achievement of the university in providing Bachelor degrees in both faculties, and the increasing number of students, had made it necessary to have modern (up-to-date) buildings.[1]

The description of the buildings' features included no account about style, but in keeping with the notion of the country's progressing technology and industry, they were built with ferro-concrete, having exposed Bang Bua Thong brick walls, flat roofs as decks, and a stepped auditorium for 300 students 'built following good examples abroad'.[2] No matter what style they were built in, the buildings were already appraised by a foreign press as 'modern and commodious'.[3] They were also mentioned in *Khao Chang*, an engineering and construction journal, as *Tuek Baeb Mai* (new style building).[4] The Science building had whitewashed masonry walls, the Engineering School exposed brick walls. The latter were previously visible only in industrial buildings, and might have been used in this educational building as a gimmick inspired by the architect, Sarot Sukkhayang's alma mater, the Red Brick University of Liverpool. In the Engineering School's main hall, three stucco reliefs created by the School of Fine Arts under the supervision of Prof. Corrado Ferroci and set in streamlined stucco frames, were used to portray the progress in Siam's engineering, including traditions of old Siam, represented by figures in traditional dress with temples, and palaces, as backgrounds. The Faculty of Engineering later built its second building in a similar style with a difference in its exposed brick layering.[5]

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[1] Bangkok, Chulalongkorn University Archives, Ch 22.5.2, Box 25, folder 40 *Baebplan* (Drawings)
[2] Ibid.
[3] 'New Education Facilities in Siam', *The Singapore Free Press and Mercantile Advertiser*, 2 August 1935, p. 7.
[4] 'Tuek Witsawakam Mai (The New Engineering Building)', *Khao Chang*, 2 (1935), 166.
[5] It was completed in 1940. The contract for the construction of the second building was done between the university and Nai Eiw Yiholiangthai, a Chinese contractor, on 30 December 1938. The

Figure 5.2.51: Science (Physics) Building (1935)[1]

Figure 5.2.52: Faculty of Engineering (1935)[2]

budget was 97,000 baht. See Bangkok, Chulalongkorn University Archives, Ch 22.5.2, Box 20, Folder 6 *Baebplan* (Drawing), p. 1.

[1] *9 Thotsawat Patthanakan Thang Kaiyaphap Chulalongkorn Mahawitthayalai (9 Decades of the Physical Development of Chulalongkorn University)* (Bangkok: Chulalongkorn University, 2007), p. 33.

[2] '*Tuek Witsawakam Mai* (The New Engineering Building)'.

Figure 5.2.53: Three stucco reliefs in the entrance hall of the Faculty of Engineering, Chulalongkorn University (1935)[1]

[1] Photos by Chomchon Fusinpaiboon

Regarding the buildings just discussed, features like parapets or the deliberate exhibition of reinforced concrete columns resembling the articulation of timber ones in bungalow-like buildings visible in Matthayom Howang School were not new, not to mention concrete-slab eaves that had become a common feature in contemporary public buildings. But all these helped confirm that the style adopted in Matthayom Howang School was modern at the time.

What was really new for educational building appeared in its planning. On both floors, despite a linear arrangement of same size classrooms in the middle, rooms of various sizes were arranged in a less rigid order at both ends, where two groups of separated entrances and stairs were also placed. The functions of the other rooms remain unclear, as an original drawing has yet to be found, but they probably consisted of teacher's room, library, meeting room, first aid room, and administration; the director's room was on the first floor. The only unambiguous reading is the lecture room at the west end of the first floor because its windows, one of them circular, were deliberately placed in steps in both walls, reflecting the function inside.

The separation of boys and girls at breaktime is not clear, but this was likely from the evidence regarding seven female students of Chulalongkorn University, the elder sister institution of Matthayom Howang School, in 1927, the first year the university accepted women, despite a lot of criticism from the public. This indicates that they had their breaks separately from male students:

> Firstly we only socialised among women. But once we did experiments in laboratories we had to do it in groups in which some men were included. […] The dean really cared about us, allocating us in a room on the first floor near to the teachers' office. There was also a porter who brought food for us so we did not have to mingle with men in the canteen.[1]

The first group of female students who were from the Faculty of Arts and Science did not like to have lunch at the canteen because they had to walk past groups of Engineering students who liked to tease them verbally as there were no

[1] Thaichiang Thammarak, '*Rueng Khong Nisit Ying* (A Story of Female Students)' in *Chula 50 Pi (50th Anniversary of Chulalongkorn University)*, (Bangkok: Chulalongkorn University, 1967), pp. 79–87 (p. 84).

girls in that faculty.[1] After more female students were enrolled; a purpose-built common room for female students was built.[2]

Back to Matthayom Howang School, the second building, used mostly for scientific subjects[3], was designed in BE 2481 (1938–39) by Kimchuang (Kanchana) Hengsuwanit, an engineer, when the school became Triam Udom Suksa School. An original drawing of it shows a room devoted as *Hong Phak Nak Rian Ying* (Female students' common room), while there is no equivalent room indicated as male students' common room.[4] As in Chulalongkorn University's Science Building a decade earlier, a teachers' room was placed near the girls' room.

In sum, boys and girls mainly studied together in the same classes except for 'particular subjects that are of benefit for particular genders'.[5] But they were supposed to have breaks separately. Boys could commute to the school on their own, but girls had to use the school's cars except for those who lived nearby or those who had parents' private cars to commute.[6] Girls were not allowed to take off their suits except when they were in the girls' common room.[7] Cosmetics and accessories except for watches were also not allowed.

Together with the deliberate use of whitewashed walls, the articulations of spaces and elements discussed should have been sufficient to show that the architect had started to explore a Modernist approach to design. However, except for the metal pipes, no element could have been claimed for 'machine aesthetics'. Glass was sparingly used for a few windows, such as that of the stair wells and lecture room, whereas most rooms had applied wooden panels. All the window and door

[1] Temsiri Bunyasing, '*Chiwit Nisita Chulalongkorn Mahawitthayalai Po So 2481–2 485* (Life of Female Students at Chulalongkorn University 1938–1942)' in *70 Pi Chulalongkorn Mahawitthayalai Ramluek Adit (the 70th Anniversary of Chulalongkorn University: A Retrospect)* (Bangkok: Chulalongkorn University, 1987), pp. 66–67 (p. 66).
[2] Bangkok, Chulalongkorn University Archives, Ch 22.5.2, Box 23, Folder 21 *Baebplan* (Drawing), p. 35.
[3] Sanan Sumit, '*Khwamsongcham Nai Rongrian Triamudom Sueksa* (The Memory at Triam Udom Suksa School)' in *50 Pi Rongrian Triamudom Sueksa 2481–2531 (The 50th Anniversary of Triamudom Suksa School 1938–1988)* (Bangkok: Traimudom Suksa School, 1988), pp. 18–22.
[4] The consulting engineer of the project was Luang Yuktasaewiwiwat. See Bangkok, Chulalongkorn University Archives, Ch 22.5.2, Box 20, folder 8 *Baebplan* (Drawing). For the engineer, Kimchuang (Kanchana) Haengsuwanit, see Ch 22.5.2, Box 23, Folder 22 *Baebplan* (Drawing), p. 11.
[5] Bangkok, Chulalongkorn University Archives, Ch 7.1 Box 3, Folder 55 *Song Raingan Kansueksa Prachampi Phutthasakkarat 2483* (Annual Report 1940), p. 4.
[6] Ibid.
[7] Ibid., p. 74.

frames were of wood. Khun Chong Nimmit, a *Nai Chang Yai* (Master builder) at the Department of Fine Arts commented in his article about design guidelines for schools that these materials were appropriate for Siam, as wood was an abundant domestic material and doors were opened all the time for ventilation, therefore, glass was unnecessary.[1]

The issue of necessity in terms of the use of domestic materials and the avoidance of ornament was not unlike what had been applied to schools built in the absolute monarchy era. The practical and economic rationale, however, could be an adequate explanation of the Modernist look. The architect might have been excited to try a new approach, whereas the client was satisfied by the cheap cost, as the building of Matthayom Howang School cost only 48,500 baht, comparable with the better-equipped-Science Building and Faculty of Engineering of a similar size, completed one year earlier at costs of 70,000 and 75,000 baht respectively.[2] In contrast, the new Thai-style building of Vajiravudh College, slightly larger in floor area and completed four years earlier, had cost 105,900 baht.[3]

After designing Matthayom Horwang School, Manfredi entered an academic career, teaching construction, acoustic design, studio, and history at the Faculty of Architecture, Chulalongkorn University, from 1939 to 1946. At the university, he further explored a Modernist approach in academic building design. Chemistry Building 1, perhaps involved a minimum contribution from him, as Sarot Sukkhayang probably laid out the symmetrical plan and specified the multi-paned glass window, with planning and materials similar to those of the Science Building and the Faculty of Engineering, as early as 1937. The building was completed in 1940. Another building that was definitely Manfredi's work, as only his signature appeared on the original drawing, was the Department of Dentistry, completed in 1941, the last case study of this chapter.

[1] Khun Chongnimmit, Chongnimmit, Khun, '*Sathan Sueksa* (Educational Facilities)', *Silpakorn*, 1 (1938), 66–70.
[2] '*Tuek Witsawakam Mai* (The New Engineering Building)'; 'New Education Facilities in Siam'.
[3] Nithi Sathapitanonda, Worachat Michubot, and Nat Krairirk, *100 Pi Sinlapa Sathapattayakam Vajiravudh Witthayalai (100th Anniversary of the Architectural Art of Vajiravudh College)* (Bangkok: Laizen Publishing, 2010), p. 23.

Figure 5.2.54: Reconstructed drawings of Matthayom Howang School, later Building No.1 of Triam Udom Suksa School (1935–36)[1]

Figure 5.2.55: Building No.2 of Triam Udom Suksa School (1941)[2]

[1] Chungsiriarak, *Sathapattayakam Baeb Tawantok Nai Siam Samai Ratchakanti 4 Tueng Po So 2480 (Western Architecture in Siam: Rama IV's Reign to 1937)*.
[2] *Kot Rongrian Triam Udom Suksa Haeng Chulalongkorn Mahawitthayalai (Rules of Triam Udom Suksa School of Chulalongkorn University)*, (Bangkok: Chulalongkorn University, 1941).

Figure 5.2.56: Faculty of Dentistry, Chulalongkorn University (1940–41)[1]

[1] '*Akhan Thantaphetsat Haeng Chulalongkorn Mahawitthayalai* (Faculty of Dentistry, Chulalngkorn University)', *Khao Khosanakan*, 6 (1941), 1484.

The initiation of the Department of Dentistry dated back to 1928. It was an effort of Prof. Colonel Luang Vach Vidhyavadhana, a professor at the University of Medicine, who had studied Dentistry at the University of Pensylvania. The project was not realised at Chulalongkorn University until 1940, when Plaek Phibunsongkhram, the nationalist Prime Minister was rector. It was seen as timely, for dental practice in Siam was led by a handful of foreign dentists and was costly.[1] Before its establishment, Luang Vach Vidhyavadhana had travelled to England, Germany, USA, and Japan to observe Dentistry schools.[2] The building was among two other *Akhan Baeb Thansamai* (modern style 'buildings', again, in the sense of 'up-to-date'), the Department of Architecture and the Department of Pharmacology at the university, both completed in 1941.[3] It should be noted that these were discussed by the state's press as 'building' not art or architecture like the more-prestigious projects mentioned above.

Located in a vacant plot of land between two small roads, Chulalongkorn Soi 11 and Soi 12, which connect Phraya Thai Road and Race Course Road, the 2-story-building was used for specific instruction in Dentistry, while basic subjects were still taught at the University of Medicine. It was eleven metres wide and one hundred and sixteen metres long. It was aligned on an east-west axis, correlated with the main and other buildings of the university, which occupied adjacent blocks. It was almost symmetrical in plan, but the ends were different in size according to their different functions. In the 10 x 20-west end were located the main entrance hall, stairwell, janitor's room, public toilets, rear entrance, and male students' common room. There were toilets and cloakrooms on both floors. An attic room was on top at this end. In the east end was located another main entrance hall, stairwell, public toilets, rear entrance, and female students' common room, with toilets and cloakrooms on both floors. An auditorium was also located at this end, making it 10 metres longer than the other. The building was therefore asymmetrical yet balanced, thanks to the west end mass' symbolic superiority that weighed against the opposite

[1] '*Tang Phanaek Thantaphaetsat* (The Establishment of the Department of Dentistry)', *Khao Khosanakan*, 3 (1940), 144–45 (144).
[2] 'Faculty of Dentistry, Chulalongkorn University, '*Prawat Khana Thantaphaetsat* (The History of the Faculty of Dentistry)', http://www.dent.chula.ac.th/main.php?filename=history [accessed 19 July 2013].
[3] '*Sathansuksa Khong Chulalongkorn Mahawitthayalai Sang Laew Sed Ik Sam Lang* (Three New Buildings of Chulalongkorn University Completed)'. The construction cost was 149,000 baht.

end's larger mass thanks to the university's emblem on top and the larger canopy cantilevering above the entrance that faced perpendicularly onto the road. The ninety-six-metre linear part in the middle contained classrooms, laboratories, museum, staff, and head of department's rooms. The Dean's room and secretary's office adjacent were on the first floor, next to the east end.

There were two sizes of room. The small size occupied one five-metre-bay, the large size two bays. Despite the conventional module of room sizes, the repetition of windows was not uniform. There were two sizes of window. Larger ones allowing more natural light to enter were placed in particular laboratories and lecture rooms. The design of the windows was special. They had been used before in other science buildings at the university, designed by Sarot Sukkhayang as early as 1928. Each unit comprised a horizontal lower part, which could be opened by tilting it, and a vertically hinged upper part, whose three panels could be separately opened. Since cross ventilation was adopted in every room, the closed lower parts could prevent wind from disrupting experiments on the laboratory tables. Apart from that, all parts could be altered to suit particular conditions of climate. Other rooms with normal functions, such as cloakrooms for students, had normal double-windows. They were arranged in steps in the auditorium, following the raked floor.

Applied to the building's reinforced concrete structure were white-washed brick walls and terrazzo. Tiles, wooden, and concrete floors were used in rooms of different purposes. The three-metre-wide-verandahs provided not only circulation, but a buffer zone for the south-and-hotter side of each floor. The lower was shaded by the upper one, being supported by columns between every 5-metre-bay. The upper verandah, running along the full length of the building with its reinforced concrete ballustrades acting as the beam, however, had no columns to support its roof. The overhanging roof, a three-metre-cantilever above the verandah, plus an extruding one hundred and ten centimetre-wide-concrete slab, was supported by the triangular reinforced concrete beams that were the roof structure. The lean-to roof they supported was hidden behind parapets. The upper floor verandah also served occasionally for unusual purposes, even for dinner receptions and performances on special occasions. In this sense, it is appropriate to mention its name in Thai,

Rabieng or *Chaliang.* Just as in traditional Thai houses, given proper dimensions and orientation, this space was used multi-functionally by its users.

The Faculty of Dentistry characterised the approach and vocabularies used in Manfredi's later work, Building 3 at Triam Udom Suksa School of Chulalongkorn University, completed a few blocks away. It saw a similar approach to planning and composition, as well as to material use.

In sum, the hybrid Modernist design of both educational buildings might have given sufficient sense of modernity for the new school and faculty of the university under the new democratic regime. Once the former building was occupied by Triam Udom Suksa School in 1938, the modern look must have represented the school's pioneering mission as the first co-educational school in Siam. Once the latter building was opened for the Faculty of Dentistry, its rational appearance must also have represented an achievement in Science. However, separate entrances for male and female students and their separated common rooms at different ends, alongside criticism of the appropriateness of co-education in universities, not to mention that of the first pre-university school, demonstrated that the seemingly Modernist designs still had to compromise with the conservative practice that lingered on in the new so-called democratic society.[1] But this was not the reason why they were never dubbed as 'architecture'. It was rather because of the nature of their humble status as compared with the monument, the Court of Justice, and the General Post Office. Even so, the analysis has shown that they were not designed to be less comfortable for users or less appropriate for the time. And considering the aspect of non-intentional use, the use of verandahs in the same way as those of the traditional Thai house appeared to be a creative act by the users, possibly based on their intrinsic perception of multi-purpose space.

[1] For a criticism about co-education, see 'Trouble with Siam's Co-Eds', *The Singapore Free Press and Mercantile Advertiser*, 23 June 1938, p. 9.

Figure 5.2.57: Site plan, Faculty of Dentistry, Chulalongkorn University[1]

[1] Faculty of Dentistry, Chulalongkorn University

Figure 5.2.58: Ground Floor Plan, Faculty of Dentistry, Chulalongkorn University[1]

[1] Faculty of Dentistry, Chulalongkorn University

Figure 5.2.59: First Floor Plan, Faculty of Dentistry, Chulalongkorn University[1]

[1] Faculty of Dentistry, Chulalongkorn University

Figure 5.2.60: Adjustable windows for laboratories and classrooms (upper row) and normal double windows for other rooms of Faculty of Dentistry, Chulalongkorn University[1]

Figure 5.2.61: A cross-section, Faculty of Dentistry, Chulalongkorn University[2]

[1] Faculty of Dentistry, Chulalongkorn University
[2] Ibid.

Figure 5.2.62: Archival photos from the 1940s and 1950s show how the airy-three-metre-wide verandah on the first floor of the Faculty of Dentistry, Chulalongkorn University was used occasionally[1]

[1] Vach Vidyavaddhana Museum, Faculty of Dentistry, Chulalongkorn University

All case studies examined are more or less prestigious projects conceived and realised by the new regime. Regardless of their prestige, 'modern', in the sense of 'up-to-date' architecture in Siam/Thailand erected during the 1932-revolution and the World War II was deemed to demonstrate the country's progress, to secure the nation's status among other civilised nations, and even to civilise its own citizens.

Its conceptualisation by the authorities was mainly about the catching up with the West — the ongoing process carried out since the period under absolute monarchy. In this sense, the People's Party used architecture to mark the point of departure of the nation from the ancient regime, but they did not depart from the quest for *Siwilai*, initiated by the old regime that was now seen as a hindrance. However, some designs did depart from the hegemony of western principles. This too had already happened under the absolute monarchy.

On the other hand, continuity was not limited just by the overall quest for *Siwilai*, but by the traditional behaviours, beliefs, practices, and rituals originally related to buildings. No matter how prestigious some buildings were, the fact that they were categorised by the elite and architectural professionals as art and architecture, the new concepts, did not prevent some users and the public associating them with pre-modern ideas. This was adopted by the elite too on some occasions, such as the opening ceremonies of buildings where auspiciousness had to be secured.

The point of departure was, however, gradually evident in the professions and industries related to architecture that the new regime preferred Thai professions and industries, rather than foreigners, to realise its projects. Thai architects, under the authority's trust and command, mixed and matched old and new features of architecture that they deemed appropriate for their country under their largely conventional ideas and principles learnt from European schools. The outcomes looked almost the same as those works that originated in the western world, but they did not possess quite the same rationales in the underlying ideas. The architects even created new meanings for some features. In this sense, the newly established profession started to depart from its role model, and so did its operation and products.

Figure 5.2.63: Faculty of Dentistry, Chulalongkorn University in 1948. [1] **Presence of stains, stimulated by hot and humid climate, was already visible on white-washed walls. But this should not have undermined the 'modern' image of the building at the time.**

[1] Faculty of Dentistry, Chulalongkorn University

Figure 5.2.64: (Clockwise from top left) Building No.1, 2, 3, and the newly finished No. 4, which was built in relatively a similar manner of its predecessors, of Triam Udom Suksa School in 1956, depicted in the school's year book[1] Stains were clearly visible on Building No.3. Again, this did not seem to undermine the prestige of these (originally) white-washed cubic buildings at the time as captions under the photos admired them using words like 'grand', 'paradise', 'beautiful', 'jewels', and 'pride of the city'.

[1] *To Ao 2499 (Triam Udom Suksa School 1956)*, (Bangkok: Traim Udom Suksa School, 1956), p. 42.

It is worth mentioning here that both continuity and departure were particularly evident in one aspect — the attempt to create modern Thai art. On one hand, the incorporation of modern Thai art in architectural decoration continued in some projects from the time under the absolute monarchy through to the time under the new regime. On the other hand, the meaning of the art, now departing from its traditional meaning to involve more the concept of national character, was more promoted by the new regime in its nation-building campaign. The next chapter will scrutinise some case studies related to this aspect.

5.3 National character on the world's stage: Thai pavilions in international expositions, 1935–58

The last chapter has examined projects conceived and realised by the People's Party from the 1932-revolution to the World War II as 'modern', in the sense of 'up-to-date', to demonstrate the country's progress, to secure the nation's status among other civilised nations, and even to civilise its own citizens. In the quest for catching up, in which architecture and buildings played an important part, traditional behaviours, beliefs, practices, and rituals originally related to traditional buildings were introduced both explicitly and implicitly, intentionally and unintentionally.

Contemporary with the erection of up-to-date architecture and buildings, the concept of national character in architecture was always a concern. This was evident in architectural publications and education. In practice, the incorporation of new forms of Thai art in modern functional buildings continued from the time under the absolute monarchy through to the time under the new regime. From the cast iron decorations of Sala Chaloemkrung Theatre depicting gods and goddesses of performance to the reinforced concrete Garuda of the Central Post Office, these attempts were evident, if overshadowed by the 'modern' character of the buildings.

This chapter will examine a group of case studies deliberately intended to exhibit Thai art in modern functional buildings — Thai pavilions in international expositions. It will examine the meaning of the Thai art in relation to architecture. It will also examine how this meaning, already created since the reign of King Vajiravudh (1910–25), was continued and adapted under the new regime.

Dignity and national character in architecture

The notion of incorporating Thai art in modern buildings, initiated under King Vajiravudh's nationalism and carried over in the following reign, to balance the quest for progress and change and the maintaining of tradition and status quo of the absolute monarch, could have been said to have failed politically, for the 1932-revolution finally occurred and put King Prajadhipok under a constitution. Under the new regime the practice was transformed amidst the socio-political

circumstances of democratic-turned-paramilitary nationalism, which differed from the royal nationalism of King Vajiravudh. Now the promotion of Thai art was deliberately based not only on its artistic quality but also, and perhaps more importantly, on its nationalist one. It was positioned as national art to assist the democratic-turned-dictatorial government's nation-building project.[1]

In a lecture broadcast in 1935, later published in 1937, and again partly in 1952, Phra Phromphichit (Phrom Phromphichit), a prominent master builder, who had been a talented apprentice of Prince Naris under the absolute monarchy and had continued his work under the new regime, pointed out the significance of national arts.[2] Dismissing a claim that Thai art did not have a principle, an assumption presumably due to lack of Thai text about Thai art for the public, a consequence of the traditional training relying on apprenticeship and oral mode of knowledge transfer, he started his article by pointing out that Thai art had principles not only for art's sake but also for its relation to philosophy. For example, he posited that good monastery designs could delight people's minds, and made them appreciate Buddhism. But after the brief explanation about Thai art's artistic and philosophical values, he elaborated much more about art's role to secure the nation's dignity. The main idea was as follows:

> The maintenance of arts that are a representation of a nation's character and competence is found in every country. [...] The maintenance of national arts is the maintenance of the nation itself. A nation without its own art is not recognised as a *Charoen* [developed, advanced, and prosperous] nation. The Department of Fine Arts has realised this and therefore has adopted the policy to incorporate the character of the Thai nation into our fine arts and architecture. Any architectural project of adequate budget should include the Thai character.[3]

Given that it was the first public lecture and article to discuss the linkage between Thai art and the dignity of the nation among international peers up to that

[1] See the policy of the newly established Department of Fine Arts to use art to help building nation and citizens, as well as the policy to 'revive' national arts in 1933 in Bangkok, National Archives of Thailand, S Th 0701.1.1/1 (Establishment of the Department of Fine Arts)
[2] The first publication was Phra Phromphichit, '*Pranit Sinlapakam Khong Thai* (The Thai Fine Arts)', *Silpakorn*, 1 (1937), 36–43.
[3] Ibid.

time, it was a one step further than King Vajiravudh's aim in royal nationalism that Thai art should be passed on to the next generations to remind them of an appropriate balance between tradition and modernity. This is not to dismiss the persistence of the latter notion initiated by the King, but rather to suggest that it was strengthened in a different way, showing that the position of the Thai nation on the world stage was more crucial. Now, the national character in architecture would demonstrate not only that the nation was progressing, but that it possessed a unique character based on its own culture, and was not a mere modernising country trying to imitate all things from the West.

As a result, the national character was perceived in terms of another quality that projected the country's very own progress, a progress that could not have been projected just by modern arts perceived as something from the West that the Thai nation had to catch up with. The significance of national character in arts was intended by both Phromphichit and the authorities to allow not only Thais to give recognition to their ancestors but westerners to recognise and identify the Thais in their present state. No case study can better support this argument than an examination of the Thai pavilions at international expositions.

Pre-1932-Siamese Pavilions in international expositions

International expositions had their root in mid-nineteenth-century Europe.[1] Their purposes were not only boosting the host countries' business or demonstrating their economic strengths and artistic resources, but also reassuring their leadership in political and scientific progress.[2] But as the original notion of progress was heavily associated with the West as the centre of the world at the time, so-called non-western independent countries, such as the Ottoman Empire, Iran, China, Japan, and Siam, shared a dilemma about how to represent their progress and their identity at the same time.[3] The issue of identity, therefore, became as important as the exhibition of products they wanted to sell.[4]

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[1] See John E. Findling and Kimberly D. Pelle, *Historical Dictionary of World's Fairs and Expositions, 1851–1988* (Westport: Greenwood, 1990).
[2] Robert W. Rydell, *All the World's a Fair: Visions of Empire at American International Expositions, 1876–1916* (Chicago: University of Chicago Press, 1984), p. 2.
[3] Maurizio Peleggi, *Lords of Things: The Fashioning of the Siamese Monarchy's Modern Image* (Honolulu: University of Hawaii Press, 2002), p. 144.
[4] This issue was also evident even in the country generally perceived as advanced and modern already such as France that included its Rural Centre in Paris Exposition 1937 alongside exhibitions showing

Before 1932, Siam had participated in a number of international expositions, starting semi-officially with the Great London Exposition of 1862, and it then officially entered the Expositions Universelles in Paris of 1867, and the Centennial Exposition in Philadelphia of 1876. At a later Expositions Universelles in 1878, an imaginative and quite awkward design of Siamese pavilion, possibly built by the French, was also shown, as well as the main indoor exhibition of Siam. Eleven years later, a traditional Siamese pavilion, designed and constructed in Siam by the Siamese Government, was dismantled and transported to be exhibited separately, in addition to Siam's exhibition in the Palais des Industries Divereses, on the Rue du Cairo as part of the Expositions Universelles in Paris of 1889.[1]

Across the Atlantic, Siam also participated in the Centennial Exposition Philadelphia in 1876 and Columbia Exposition 1893 in Chicago respectively. Models of a country house and a floating house were exhibited there. At Chicago a collection of antique jewelry loaned by the Queen was also displayed, yet a remark in the catalogue stated that 'nowadays, Siamese wear European jewelry'.[2] The message was clear. The Siamese elite wanted to demonstrate that they had their own history, but they were also modern. A dichotomy between 'their' history, which was Siamese, and 'others'' modernity was therefore created.

After the participation at the World's Columbian Exposition in Chicago of 1893, the Exposition Universelles in Paris 1900 was the first year that Siam had its own pavilion for its exhibition. The challenge was that the exhibition pavilion, a modern functional building, had also to express the identity of Siam. The Siamese royal government therefore chose to incorporate 'history' in 'modernity', but this was done by a French architect, E. Chastel, the son-in-law of the consul for Siam in France, in a style categorised as 'stylised interpretation' of Siamese architecture.[3] It appeared to be two halls linked with a bridge, itself acting as a gate. The forms and elements were borrowed from Siam's royal and monastic architecture. Peleggi pointed out that the design did not succeed, as it was only mentioned in the Siamese catalogue and did not gain any press coverage.[4]

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its modern and progressive side. It showed France's country life's ability to adapt itself with the modern world. Therefore, France was still French and was not homogenised by the modern world's alleged hegemony. See Shanny Peer, *France on Display: Peasants, Provincials, and Folklore in the 1937 Paris World's Fair* (Albany: State University of New York Press, 1998), p. 2.

[1] *L'exposition de Paris de 1889* (Paris: Sceaux, 1889), pp. 64–67.

[2] Peleggi, *Lords of Things: The Fashioning of the Siamese Monarchy's Modern Image*, p. 155.

[3] Ibid., 149.

[4] Ibid.

Figure 5.3.1: The exhibition of Siam with a supposed Siamese gate, possibly built by the host, at the London Exposition of 1862. It was placed adjacent to the exhibition of Japan housed in the pavilion seen behind the Siamese gate[1]

Figure 5.3.2: A supposed Siamese Pavilion possibly built by the host at the Paris Exposition of 1878.[2]

[1] Yoshida Mitsukuni, ed. *Zesetsu Bankoku Hakurankaishi 1851–1942 (The Illustrated History of World Exposition 1851–1942)* (Kyoto: Shibunkaku Shuppan, 1985), p. 145.
[2] Thailand Convention and Exhibition Bureau

Figure 5.3.3: Siamese Pavilion, specially built then dismantled in Siam and re-erected at the Paris Exposition of 1889. It was located on the Rue du Cairo in addition to Siam's exhibition in the Palais des Industries Diverses[1]

[1] *L'exposition de Paris de 1889*, p. 369.

Figure 5.3.4: Siamese Pavilion at Paris Exposition of 1900[1]

[1] Thailand Convention and Exhibition Bureau

Perhaps, due to the unsatisfactory first attempt, the Department of Public Works, which was established in 1899 to ensure the quality of government constructions, took the responsibility to design the next Siamese pavilion for St. Louis Purchase Exhibition in 1904. Although the architects were still European (the in-house Italian architects), the pavilion was designed after a proper model, the ordination hall of Wat Benchamabophit, a new Buddhist temple designed by Prince Naris then still under construction. The pavilion was constructed by American carpenters on site.[1]

The decision to choose Wat Benchamabophit, an attempt by Prince Naris to design modern Siamese architecture by experimenting with reinforced concrete, marble clad walls, and stained glass windows on an inventive plan laid out on a grid system, might have been based on the intention to exhibit the latest 'modern Siamese' architecture rather than a mere incorporation of ancient art in a modern functional building. But it was still not enough to convince a foreign critique like H. E. Hamilton King, who commented that the Siamese government were exhibiting no more than a mere old architecture of national style:

> Avoiding the spectacular and the curious, the commission has confined themselves to that which represents actual conditions of the country at the present time. […] If the exhibit were to be criticized in any direction indeed it would be in failing to convey a proper impression of Modern Siam. But this failure arises from the thought that as the new ideas in architecture, transportation, industries, etc., are indistinctively occidental rather than Siamese, it were better […] to give emphasis to the more strictly national characteristics.[2]

The Siamese already chose a modern example of Thai architecture to show because they did not want to be seen as only following western models, and they too had their own civilisation that was still developing. But a western man saw no difference between old and new Siamese style architecture, overgeneralised everything exotic as non-modern. In either way, both the Siamese and western man continued to share one idea — progress, in which western/modern architecture was included, originated in the West.

[1] See J. H. Gore's letters of 17 June 1904 to C. A. Carter and that of 6 July 1904 to the Siamese Royal Commision for the Loiusiana Purchase Exhibition in Bangkok, National Archives of Thailand, R 5 B 11/53 (Misecellaneous)

[2] From a typewritten copy of the article by H. E. Hamilton King's article in *The World's Fair Bulletin*, kept in National Archives of Thailand, R 5 B 11/52 (Misecellaneous)

Figure 5.3.5: Siamese Pavilion at Louisiana Purchase Exhibition 1904 modeled after the central part of Wat Benchamabophit[1]

[1] 'Exterior of Siam (Thailand) Exhibit Building, Louisiana Purchase Exposition, St. Louis, Missouri' Library of Congress, http://www.loc.gov/pictures/item/95518081/ [accessed 15 July 2013].

The juxtaposition between the West and the 'other' was reiterated at the Esposizione Internationale in Turin of 1911, celebrating the 50th anniversary of the unification of Italy, where a Siamese pavilion stood elegantly on the right bank of the River Po. This Siamese pavilion, adopting the gigantic proportion and *Prasat* elements from Phrathinang Dusit Mahaprasat, the throne hall erected in 1806 in the Royal Palace, combined with a symmetrically Beaux-Arts plan, served as the only edifice representing the so-called Far East, as China and Japan only participated with exhibitions in the Applied Art Pavilion provided by the host.[1]

This Siamese pavilion was again designed in Bangkok by Mario Tamagno's team in the Department of Public Works. Even though the contractor was a local Italian, Mr. Previgliano, Annibale Rigotti, who had returned to Italy, served as Technical Director for the construction site. The Siamese government made sure that the construction was finely executed. It attracted visitors greatly due to its exotic appearance from the mysterious oriental kingdom.[2] It was therefore unsurprising that the Siamese government, from now on, did not care any longer whether the pavilion demonstrated the newest version of Thai art, not to mention the current stage of the country. Instead, they must have become convinced that a Siamese Pavilion, designed as a combination of traditional elements with modern planning, would be successful, given that it had a striking grandeur and exoticness, a proper location, and convenient timing (in this case, no other 'Oriental' pavilion to compete).

[1] See Cristina Della Coletta, *World's Fairs, Italian-Style: The Great Exhibitions in Turin and Their Narratives, 1860–1915* (Toronto; London: University of Toronto Press, 2006).
[2] 'Architectural Structure: Pavilion of Siam, Italy World's Fairs Database', http://www.italyworldsfairs.org/wf_database/features/public/93?layout=brief

Figure 5.3.6: Drawing of the Siamese Pavilion by Mario Tamagno for International Turin Exhibition 1911[1]

[1] Photos of the drawings taken from the exhibition The Siamese Pavilion at Turin Expo 1911, Bangkok Art and Culture Center, 18 October –18 November 2011.

Figure 5.3.7: A perspective drawing and the Beaux-arts-based plan of the Siamese pavilion at International Turin Exhibition 1911[1]

[1] G. E. Gerini, *Siam and Its Productions, Arts and Manufactures: A Descriptive Catalogue of the Siamese Section at the International Exhibition of Industry and Labour Held in Turin, April 29-November 19, 1911* (Hertford: Stephen Austin, 1912), p. inner front cover.

Figure 5.3.8: Postcards depicting Siamese and Serbian Pavilions at International Turin Exhibition 1911[1]

[1] 'Architectural Structure: Pavilion of Siam, Italy World's Fairs Database'.

It should be noted that, apart from the pavilions of independent countries in international expositions, pavilions of colonies had been included in many expositions since the mid-nineteenth century, if not organised in separated expositions especially devoted to them. The notions of progress and modernity were also aimed to be exhibited in the pavilions of colonies. These were associated with both the metropoles and the colonies, but were considered to be impossible without the benevolence of the former in civilising the latter.[1] But despite the exhibition of modern progress in the society and industry of the colonies, their pavilions always included elements from their traditional architecture. This demonstrated that the colonisers had helped the colonised to revive their heritage, which would otherwise be left in the hands of the ignorant indigenous.[2] But on the other hand this practice did associate the colonies' pavilions with exoticism and mystery — the so-called pre-modern side. An example was the miniature of Angkor Wat built by the French at the Colonial Exposition at Marseilles in 1922. Despite being praised by the western press for its archaeological marvel, it was also seen as nostalgic, by which the future development of the colony might be considered irrelevant and be undermined.[3] The representations of identity by non-western independent countries and by colonies did not seem to differ much in this respect. Some issues related to this situation continued to engage with Siam/Thailand's participation in international expositions after the 1932-revolution.

[1] Robert W. Rydell, 'Colonial Moderne', in *World of Fairs: The Century-of-Progress Expositions* (Chicago; London: University of Chicago Press, 1993), pp. 61– 91.
[2] Winichakul, 'Keynote Speech'.
[3] Howard Robertson, 'Angkor Vat at Marseiles', *Architetural Review*, 52 (1922), 147–49.

Figure 5.3.9: A miniature Angkor Wat at Colonial Exposition at Marseilles in 1922[1]

Figure 5.3.10: A postcard showing the Burmese Pavilion at the British Empire Exhibition 1924[2]

[1] Howard Robertson, 'Angkor Vat at Marseiles', *Architetural Review*, 52 (1922), 147–49 (149).
[2] Courtesy of Peter Blundell Jones

Post-1932-Siamese/Thai Pavilions in international expositions

For expositions in Siam/Thailand, the largest ones between 1932 and 1958 were annual Constitutional Fairs. Pavilions in these fairs before World War II were predominantly designed in modern styles. The government claimed that new designs were built every year to 'demonstrate the progress of architectural knowledge in the country'.[1] Prakitnonthakan argued that, like permanent buildings built by the People's Party in modern styles, all the pavilions except for the Thai pavilion sheltering the constitution tray, were built in modern styles because they symbolically aimed to avoid traditional architecture representative of absolute monarchy.[2] But, putting aside the aim to differentiate the era under the old regime from that under the new one posited by Prakitnonthakan, the fact that pre-war knowledge about Thai architecture and the number of experts in the field was limited (see chapters 4.2, 4.3, and 5.3) must have allowed such style to be built in a lesser extent even though the government did have a policy to mix the national character with the modern style.[3]

And considering that the objectives of the Constitutional Fairs were organised to promote the significance of the constitutional regime (*Raborb Ratthathammanun*), to 'exhibit the progress of the nation under the constitutional regime, to promote the administrative system under the constitutional regime, and to let the Thais have fun and enjoy the constitutional regime'[4], the adoption of the modern style from the West, as with the design of new public buildings, must have been fully justified. It must have been aimed to create an atmosphere of modernity — the on-going quest for *Siwilai* carried over from the old to the new elite.

[1] See Bangkok, National Archives of Thailand, S Th 0701.23.2/26 (Constitutional Fair)
[2] Prakitnonthakan, *Sinlapa Sathapattayakam Khana Ratsadon: Sanyalak Thang Kanmueng Nai Choeng Udomkan (The Peopl's Party's Art and Architecture: Ideological and Political Symbolism)*, p. 179.
[3] National Archives of Thailand, S Th 0701.1.1/1
[4] Manit Nuanlao, *Kanmueng Thai Yuk Sanyalak (Thai Politics in the Era of Symbolism)* (Bangkok: Rungrueng Printing, 1997), p. 72.

Figure 5.3.11: Pavilions in pre-war-Constitutional Fairs in Bangkok were predominantly modern in design. The biggest photo here was taken in 1938, showing the modern pavilion of the Department of Fine Arts, a Greek statue, a boy and a group of young women without shoes, a well-dressed man in a white suit, and a motor car.[1]

[1] All photos from the National Archives of Thailand

Figure 5.3.12: Some pavilions in pre-war-Constitutional Fairs in Bangkok adopted Thai or 'modern Thai' elements, such as roofs and sculptures.[1]

[1] National Archives of Thailand

As regards international exhibitions, the instability of the new government's financial status led it to reject many invitations from international expositions until 1935.[1] The fact that the expositions were normally categorised as trade fairs set them under the responsibility of the Ministry of Commerce (*Krasuang Setthakan*). However, the newly established Department of Fine Arts was from this time on responsible for the design and construction (in Siam) of Siamese Pavilions.

Returning to Phra Phromphichit's claim about the government's policy to incorporate Thai character in important buildings in order to exhibit the nation's character and competence and as recognised evidence of its continuous development, he started to implement it by designing a Siamese pavilion for Yokohama Exhibition of 1935, in which natural and artistic goods were sent to be exhibited.[2] Parts of the building were executed in Bangkok and sent to be assembled in Japan under the supervision of the Department of Fine Arts's craftsmen.[3] Phromphichit supported the government policy and the decision to invest 5,000 baht on this matter, as he was confident that Thai art could be proudly exhibited on international stages, and that foreigners who came to travel in Siam wanted to see such art — all of this would help assure them that 'Siam was not a barbaric country'.[4] In supporting his statement, he quoted an article published in England's *Sunday Dispatch* on 28 October 1934:

> Siam possesses one of the best arts in the world. Its architecture, carving, music, and dance differ from those of other Indochinese countries. Siam is the most charming country in the East as if it is a heaven on earth.[5]

Phromphichit further stated that, as far as he had known, Siam had never been appraised in any other respect as highly as for its arts. This was, he suggested, because the nation's art had been well preserved, otherwise the country would not have provoked such admiration. Taking his claim that 'Siam had never been appraised in any other respect as highly as for its arts', Phromphichit was certainly proud of the arts of his country, the country that had been just changed its

[1] See rejections to Belgium (1933), Washington (1933), Chicago (1933), and Convention of International Exposition (1934) in Bangkok, National Archives of Thailand, S R 0201.38 (International Expositions)
[2] S R 0201.38/10 (Yokohama Exposition)
[3] Phromphichit, '*Pranit Sinlapakam Khong Thai* (The Thai Fine Arts)'.
[4] Ibid.
[5] Ibid.

administrative system to constitutional monarchy — an accepted political form internationally; but also the country that had still been struggling with economic difficulty, and the country that had no heavy industry to stimulate wealth.

Even though its value was well recognised by the government, the costly expression of the national character was not always easy to implement due to economic constraints. Also in 1935, the government initially rejected the invitation to participate in the Pan Pacific Peace Exhibition of 1937 in Nagoya, stating that the main export products, i.e. rice, tin, timber, had found markets, while other produces such as pepper, leather, and horns were not of controllable quality. This reiterates the circumstance of Siam that export depended on a limited number of products due to the lack of advanced technology and funding to develop other products to an adequate standard. Considering this alongside the on-going, yet far from smooth, development in fields such as industry, healthcare, education, and the army, the age-old national arts were no doubt something Siamese scholars and elite, no matter whether under the old or the new regime, should be proud of and promote, as they were something hardly to be found in any other comparable country.

On the other hand, Japan, which had become an imperial power and was at the height of its nationalist expansionism, was advanced and prosperous enough to hold international exhibitions. Despite its gigantic size, the Pan Pacific Peace Exhibition 1937 in Nagoya was actually an event organised by a municipality, if with the support of the state. Siam initially rejected the opportunity, but the Japanese determination to gain its participation resulted in a full subsidy for transportation of goods and the construction of a Siamese Pavilion. It happened to be an imaginative design by Katsutaro Kato, the Siamese consul in Tokyo, and was built by Japanese carpenters.[1] The Siamese government took advantage of the opportunity. The Chamber of Commerce could not gather enough good quality goods to be exhibited and therefore needed to borrow some from the Department of Commerce's goods exhibition.[2] The report indicated that there were 50,000 to 100,000 visitors over the 76 day-period, successfully advertising Siam and Siamese goods in Japan.[3]

[1] Bangkok, National Archives of Thailand, S R 0201.38 Box 2/17 (Pan Pacific Peace Exhibition, Nagoya)
[2] Ibid., p. 61.
[3] Ibid.

Figure 5.3.13: Drawings of the Siamese pavilion by Phra Phromphichit for Yokohama Exhibition, 1935[1]

Figure 5.3.14: Siamese Pavilion at the Nagoya Pan Pacific Peace Exhibition 1937 built by Japanese carpenters[2]

[1] *Sala Sadaeng Phiphitthapansinkha Thai Nai Prathet Yipun (The Thai Pa*vilion for the Trade Museum in Japan)', *Chotmaihet Samakhom Sathapanik Siam (The Journal of the Association of Siamese Architects)*, 5 (1935), 6–7.
[2] National Archives of Thailand

The invitation in 1935 to participate in the Exposition Internationale des Arts et Techniques dans la Vie Moderne in Paris of 1937 was again initially rejected by the Ministry of Commerce, due to continuing economic difficulties.[1] However, the Ministry of Foreign Affairs petitioned the decision stating that:

> In France this time, the exhibition is held by the state and every big country in the world will participate. From the East there will be Japan and China. Therefore, if we do not participate at all, I am afraid that there will be a loss.[2]

For Siam's dignity as an independent Asian state to be undermined by absence from this exposition must have been the possible 'loss' feared by the Ministry of Foreign Affairs. As a result of the appeal, the government decided to participate, and commissioned a Siamese pavilion to be built in Siam, then dismantled and rebuilt at the site in Paris' Trocadero. The site was 'among those of important countries and believed to be one of the most prominent locations'.[3]

In considering the prestige of the site, it should be noted that pavilions of foreign countries were located in only three places; Trocadero, Champ de Mars, and along the embankment of the Seine. The Siamese pavilion was situated among relatively humble countries like Monaco, Luxembourg and Austria, whose glorious past under the Austro-Hungarian Empire was over, whereas most powerful countries occupied the south embankment of the river. The description of this part of the exposition in the event's official book stated:

> The pavilions of Monaco and Siam stand alongside that of Luxembourg, which is a nice modern design with large horizontal planes, and that of Austria. They exhibit their precious architecture with a variety of arts and attractions of their regions, famous for tourism — a harmonious group of pavilions in the charm of foliage and gardens.[4]

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[1] Bangkok, National Archives of Thailand, S R 0201.38 Box 1/11 (Exposition Internationale de Paris 1937 Arts et Technique dans La Vie Moderne)
[2] S R 0201.38 Box 2/11
[3] Ibid.
[4] Kulthida Songkittiphakdi's translation from French. See *Exposition Internationale des Arts et des Techniques Applique la Vie Moderne, Paris, 1937. Album Officiel* (Paris: Exposition internationale des arts et techniques, 1937), p. 44.

Figure 5.3.15: The map of Paris Exposition 1937 shows the location of Siamese Pavilion (red circle). The Siamese government claimed that it was 'among those of important countries and believed to be one of the most prominent locations'.[1]

[1] *Exposition Internationale des Arts et des Techniques Applique la Vie Moderne, Paris, 1937. Album Officiel* (Paris: Exposition internationale des arts et techniques, 1937), p. 45.

The theme of the exposition in Paris this year was 'Arts and Techniques in Modern Life'.[1] It was mentioned in the last chapter that Sarot Sukkhayang, the Head of Architecture Division in the Fine Arts Department, visited the exhibition, and later published an article in *Silpakorn*. This was made possible because a French ocean liner company, Messageries Maritime, offered five free-return-tickets for the Siamese Government to send delegates to visit the exposition.[2] The government, in turn, allocated Sukkhayang for it, wanting him to 'study *Sathapattayakam Baeb Maimai* (new styles of architecture) to benefit the government's work'.[3] Even though he wrote about quite a few pavilions of European countries designed in various degrees of Modernism[4], he failed to mention the Japanese pavilion designed by Junzo Sakakura, who had worked in Le Corbusier's office. Sukkhayang evidently dismissed the Japanese modern design that had received the Grand Prix prize alongside Jose Louis Sert's Spanish Pavilion and Alvar Aalto's Finnish Pavilion.

The Japanese pavilion was the first execution from a so-called oriental country that broke away from the usual expression of tradition in architecture. Like Siam, Japan had since 1873 constructed pavilions following traditional models. These included the wooden house in Chicago 1893 that cost $100,000 and impressed Frank Lloyd Wright. Like Siam too, before 1937, Japan had been basically concerned about what the international audience might have expected to see, while in Paris 1937, when Japanese architects became confident with their country's modernity and power, it finally started to propose what it wanted the audience to see. Its architect responded explicitly to the theme of 'modern life', using Le Corbusier's five points of modern architecture for its design principle. Ironically, some features were perceived by the western audience to be of Japanese character.[5]

[1] See James D. Herbert, *Paris 1937: Worlds on Exhibition* (Ithaca; London: Cornell University Press, 1998).
[2] Bangkok, National Archives of Thailand, S R 0201.38/11 (Messageries Maritime offered Tickets)
[3] Ibid.
[4] Sarot Rattananimman, '*Kan Sadaeng Phiphitthaphan Sakon Thi Krung Paris Po So 2480* (The International Exposition in Paris 1937)'.
[5] Reyner Banham, 'The Japonization of World Architecture' in *Contemporary Architecture of Japan 1958–1984*, ed. by Hiroyuki Suzuki (New York: Rizzoli, 1985), pp. 16–27 (17).

Figure 5.3.16: Japanese Pavilion by Junzo Sakakura at Paris Exposition 1937[1]

[1] Reyner Banham, 'The Japonization of World Architecture' in *Contemporary Architecture of Japan 1958–1984*, ed. by Hiroyuki Suzuki (New York: Rizzoli, 1985), pp. 16–27 (17).

It should, however, be noted that the original winner of the design competition for the Japanese pavilion was the design of Kunio Maekawa that was even criticised as being too Modernist and lacking in Japanese identity.[1]

Despite being criticised by architects and critics, Maeda Kenjiro's traditionalist design was therefore selected by the government to be built. But when the French government indicated that French materials and labour were to be used in the construction of all pavilions, the traditional design, which required Japanese carpenters to construct, became less viable. Sakakura, who had just returned from France, was then appointed to go back, adapting the design and supervising the construction on site. Unexpected site conditions finally led to the change to his Modernist design with only minor control from the Japanese government. The experiment, in many respects derived from unpredictable factors, was well received by the international audience who no doubt further supported Japan's confidence in expressing its modern image and not sticking with the past. Despite initial resistance from conservative elements, Japanese architects' confidence marked Japan's position in the international modern architecture field.

On the other hand, under the same exposition's overall theme of 'modern life', the Siamese pavilion was originally designed by Phrom Phromphichit to have a main *Sala* (Thai pavilion) at the centre, modeled after Aisawan Thipphaya-at royal pavilion at Bang Pa-in Palace[2], and two *Param* (a traditional form of pavilion with flat roof) at four corners. The spaces inside exhibited niello ware, lacquer ware, mother of pearl ware, gems, photographs, paintings, music instruments, *Khon* masks, cast and sculpted Buddha images, as well as rice, lace, tin, etc.[3] The design was to be reassembled on site under the supervision of M. C. Samaichaloem Kridakorn.

[1] Akiko Takenaka, 'The Construction of a War-Time National Identity: The Japanese Pavilion at New York's World's Fair, 1939/40', (unpublished doctoral thesis, Massachusetts Institute of Technology, 1997).
[2] National Archives of Thailand, S R 0201.38 Box 1/11, pp. 48-49.
[3] Ibid.

Figure 5.3.17: The original Siamese Pavilion to be transported to Paris in pieces and to be re-erected at the exposition (1937).[1]

[1] National Archives of Thailand

Like Sakakura for the Japanese pavilion, M. C. Samaichaloem arrived in Paris to supervise the reassembly by French workers only to find that the original design was not suitable for the site.[1] But unlike Sakakura, who sought a consultation with his ex-boss, Le Corbusier and redesigned the pavilion in a Modernist way, M. C. Samaichaloem revised the design as a *Sala* sitting on a high base, in which the exhibition was held. In this way, the government of Siam also received more financial support from the French government (raised from 154,500 to 495,825 francs which was equal to 50,000 baht, whereas Siam's own budget had been only 30,000 baht). The French also paid an extra 15,204 francs each to a collaborating French architect, R. Rotter, and M. C. Samaichaloem to supervise the construction.

The exhibition space of the revised design was in the base of the pavilion. It had a main hall in the middle. In the hall, the plain structure was lined with friezes seemingly inspired by a Siamese pattern. The capitals could have been perceived as a western element. These designs could have been seen as an interpretation of Thai architecture and art to suit modern function, building type, and technology, itself a hybrid product of progress and Thai identity. But a more-critically hybrid feature lay in the middle of the hall. There was located a podium with the head of a Buddha's image on top. It was not even a bust, but a head. Another similar head of the Buddha image was also exhibited in another room among other stuff, such as herbs, play masks, and a portrait of the Queen.

Exhibiting a head of Buddha was unusual in Buddhist monasteries in Siam, but perhaps not uncommon in museums of advanced countries. The use of the Buddha's head here was definitely in the latter sense. It served no purpose of worship but of exhibition. The image was considered as an artefact, an archaeological object exhibiting Siam's character and competence in the artistic field that insured the country's continuous development right from the past.

[1] National Archives of Thailand, S R 0201.38 Box 2/11, p. 140.

Figure 5.3.18: The revised design of the Siamese Pavilion (1937) intending to place the original pavilion on a base, housing the exhibition[1]

Figure 5.3.19: Siamese Pavilion as built at Paris Exposition of 1937[2]

[1] *Exposition Internationale des Arts et des Techniques Applique la Vie Moderne, Paris, 1937. Album Officiel*, p. 55.
[2] National Archives of Thailand

Figure 5.3.20: The exhibition of the Siamese Pavilion including the head of a Buddha in the centre of the main hall[1]

Figure 5.3.21: Another head of a Buddha exhibited in another room of the Siamese pavilion among herbs, play masks, and a portrait of the Queen[2]

[1] National Archives of Thailand
[2] Ibid.

Physically, it seemed that the main theme of the exposition, the 'Arts and Techniques in Modern Life', was expressed in the Siamese pavilion by a merger between Thai architectural elements and western principles as well as modern technology. But beyond that, more actions represented an intrinsically modern Siamese life that engaged with arts and techniques. A pavilion in a royal palace was imitated to serve a new purpose — an international exhibition. All symbolic elements representing the Siamese royals' divine status, which constituted the original pavilion, gave way to their new meaning — the representation of the civilised image of the nation. By being decapitated, the sacred meaning of Buddha images too was transformed into an art work.

Siam's modern authority stuck with their belief in exhibiting what they perceived to be tradition, rather than modernising aspects that had yet to achieve an admirable standard. At the same time, the attitude towards their tradition itself, and the way the Siamese elite and authority treated it, was transformed by their quest to be recognised as a developed country.

In the twenty-first century, when heads of Buddha are widely used in Thai restaurants worldwide and hotels in Thailand, both mostly owned by Thais, in order to create an exotic atmosphere that is believed to impress customers and tourists, criticism sometimes emerge from the public and government offices, such as the Ministry of Culture, regarding its appropriateness. The main hall of the Siamese pavilion in Paris in 1937 ironically shows the origin of this practice encouraged by the Siamese authority itself.

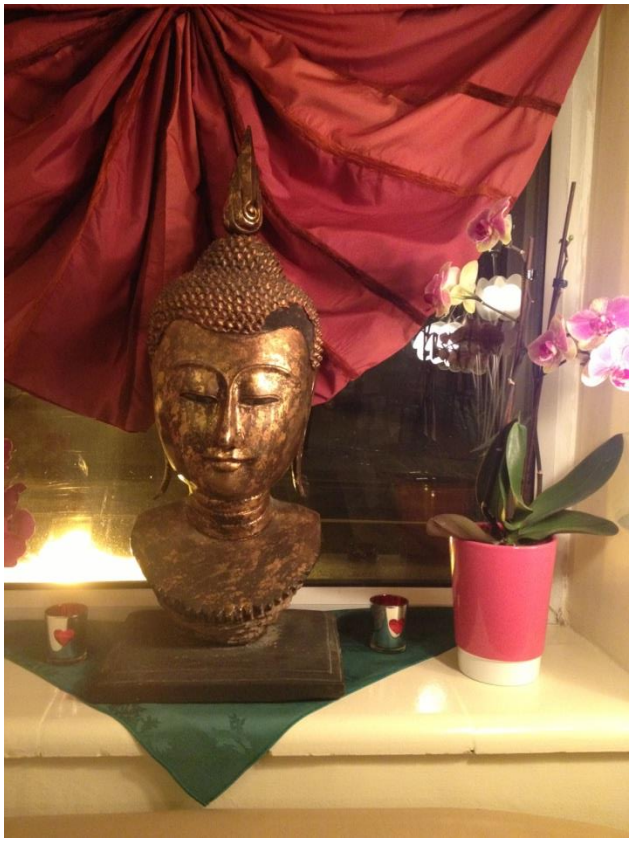

Figure 5.3.22: The head of a Buddha as a decoration at Thai at the Travellers, a Thai restaurant in Sheffield[1]

[1] Photo by Nisa Patikarnmonthon

Despite the fact that the Siamese pavilion was less well received by the international public than the Japanese pavilion, the Gold Medal and certificate (Diplome d' Honneur) for aesthetics awarded to it was perhaps enough to convince the Siamese authority that what it had done was in an appropriate direction.[1] At the end of the exposition, while the Siamese Minister of Commerce worried about the disassembly and return transportation costs[2], the French government invited participating countries to maintain their pavilions for another year. The Siamese government was happy to do so, as it would be good for advertising the country, but it asked the French government to support the expenditure, just as other countries had done.[3]

After this experience in Paris, the government accepted the invitation from the New York World's Fair 1939 as it had by now became fully assured of the good opportunity to promote tourism and commerce.[4] The government also deemed it inappropriate to reject the US's invitation after its cooperation with France and Japan.[5] Amidst the encroaching World War II in Europe, the theme of the exposition was 'Building the world of tomorrow'.[6] Like the participations in previous expositions, the Minister of Foreign Affairs as a member of the committee responsible for the Thai pavilion (the country was renamed as Thailand during the exhibition) stated the necessity of exhibiting both saleable products and artworks.

The report of the exhibition in New York reported that the Thai pavilion was well received and attracted approximately 10,000 visitors per day. As expected, a 'reasonable number' (i.e. not a great number) of products such as toys, clothing, and gifts were sold. The report concluded that the major aim of the exhibitions abroad was not to sell the products exhibited, as they were not the main export goods, but to promote Thailand and to draw tourists to the country.[7]

[1] Chofa, '*Kanbamrung Raksa Akhan Baeb Thai* (The Maintenance of Thai-style Buildings)', *ASA*, 3 (1948), 15–17.
[2] S R 0201.38 Box 2/11, p. 141.
[3] Ibid.
[4] S R 0201.38 Box 2/20 (New York World's Fair)
[5] Ibid.
[6] Richard Wurts and Stanley Appelbaum, *The New York World's Fair, 1939-1940: In 155 Photographs* (New York; London: Dover Publications; Constable, 1977), p. 3.
[7] S R 0201.38 Box 2/20, p. 114.

Accordingly, this reiterates their view on Thai artworks as non-saleable but still to be exhibited in order to ensure the image of the country as a civilised nation, open to foreigners to come to know it, and to guarantee its status on the world's stage.

The situation was a flashback of what an Italian journalist had reported six decades earlier about Siamese crafts exhibited in Philadelphia Exposition in 1876, where the Queen's ancient jewellery had been exhibited with a note telling that Siamese had worn western jewellery nowadays, that 'enamelled silver cups and lamps, show a simple but original style, different from our taste yet beautiful'.[1] It would be not surprising if visitors who shared the ideas of the journalist admired the goods but did not buy them, as they were beautiful but different from their own taste.

One year after the exhibition in New York, the article '*Rao Pen Phu Charoen Rue Mai* (Are We Civilised People?)' published in the journal of Chulalongkorn University in 1940 emphasised the importance of the national culture by highlighting that even though small countries could not compete with more advanced ones in terms of their wealth, commerce, and strength of army, their national culture would reassure their civilised position among others.[2] Amidst the rise of nationalism and militarilism prior to the outbreak of the Pacific War, it was ambiguous as to whether the author considered Thailand at the time as a 'small' or an 'advanced' country. The army had been strengthened rapidly in the last few years. Industry had been initiated, but was still far from a success. But in any case, the national culture was immensely more important.

The Thai authority expected Thai arts to be admired but not necessarily to sell. And as their expectations had been responded to satisfactorily from the beginning, no attempt was made to change direction. Agricultural produce for export remained the same, while industrial and consumption goods remained almost all imported. Those that could be produced domestically were aimed to substitute for imports but hardly expected to be equal in quality — not to mention of better quality. The so-called traditional arts became a static heritage, not much needed, if

[1] 'Le Coppe Del Re Del Siam' in *L'esposizione universale di Filadelfia del 1876* (Milano: Sonzogno, 1876), p. 338. Quoted in Peleggi, *Lords of Things: The Fashioning of the Siamese Monarchy's Modern Image*, p. 152.
[2] Pui Rotchanaburanon, '*Rao Pen Phu Charoen Rue Mai* (Are we civilised people?)'.

at all, to be developed to get along with the changing society, for the locals craved mainly for things imported. As a result, some heritage items were transported to be exhibited abroad to draw tourists to the country to appreciate the rest of the heritage, presented as exotic objects irrelevant to their modern society. The static heritage only sat there to convince Thai society that they were catching up with the West without losing their own identity, despite the fact that they had been catching up for some time, yet were hardly successful, and that their view of what they now perceived as heritage had been transformed by their own actions.

Ironically, the idea that the government should not aim to sell Thai art was strongly challenged in 1958, when Thailand participated in the Universal Exposition in Brussels. The Thai pavilion designed by M. R. Mittrarun Kasemsri, a graduate from Chulalongkorn University's Department of Architecture who worked at the Department of Fine Arts from 1943 to 1965, was conceived on the same principle as that in Paris of 1937. Located on a high base, in which the exhibition was accommodated, the architect placed a pavilion based on Phrathinang Aphonphimok Prasat, one of the most beautiful parts of the Royal Palace.[1] He also designed it to be dismantled and reassembled on site. Professor Lucien Coppé, the Belgian architect who previously taught at the Department of Architecture, supervised local builders for the reassembly in Brussels. It was successful, winning a first prize, praised by newspapers, and was finally bought by an American millionaire who relocated it in Arizona.[2] This gave even more credibility to the persisting attitude of the Thai authority about how Thai pavilions for international expositions should be designed.

The use of artworks and traditional architecture as tools to demonstrate Siam/Thailand's civilised status and later to draw tourists to the country has been depicted through the fact that all the pavilions from 1862 to 1958 were in the Thai style. Under the democratic regime after 1932, almost all were carefully and cooperatively designed by both master builders and architects from the Department of Fine Arts and constructed with traditional craftsmanship and modern technology.

[1] Naengnoi Suksri and Wathanyu Thephatthi, *Chang Luang: Phonngan Sathapattayakam Thai Khong Mom Ratchawong Mittrarun Kasemsri (the Royal Builder: Works of M. R. Mittarun Kasemsri)* (Bangkok: The Association of Siamese Architects, 1996), p. 387.
[2] Tiptus, Tiptus, *Sathapanik Siam: Puen Than Bot Bat Pon Ngan Lae Naew Kid (Po So 2475–2537) [Siamese Architects: Foundation, Roles, Works, and Concepts (AD 1932–1990),* p. 422.

The only exceptions were the ones in Nagoya and Paris in 1937 when particular economic circumstances and France's domestic politics caused the designs to be constructed by Japanese carpenters and French labour. The success of the pavilions on the international stage may have precluded discussion about whether Thai pavilions should have been designed in styles other than traditional.

This circumstance must have affected their decision of keep exhibiting traditional arts and architecture in international expositions, where foreigners welcomed such works as exotic artefacts, instead of trying to design modern pavilions following the idea they were applying in the pavilions for Constitution Fairs in their own country, because they perceived it as unsuitable to represent Siam/Thailand on the world stage, given that the modern style representing modernity was originally from the West, and had not even been fully achieved by Siam/Thailand.

In sum, amidst the on-going quest for a recognised position in the world stage through progressive projects, the expression of national character in architecture in the international expositions was still deemed necessary in Siam/Thailand under the new regime. The idea of national architecture, in itself a modern concept, not only imposed a new meaning on traditional Thai buildings but also transformed the way Siamese/Thai treated and used it. Architecture of sacredness and rituals was turned into an artefact and commercial advertisement to promote the nation's civilised status and draw tourists. At the same time, these ideas and practices, under the circumstance of an on-going and awkward attempt towards progress and recognised status, deterred exploration of new ideas in modern architecture because the national character was seen as a definite answer for the expression of the country's identity on the world's stage. Accordingly, it is time to look beyond temporary pavilions for international expositions — to look back at architecture with the national character within the country in order to examine its role and meaning domestically.

Figure 5.3.23: Thai Pavilion at the Brussels Exposition, 1958[1]

[1] Photo by Wouter Hagens

5.4 National character in architecture: Chulalongkorn University Auditorium, 1937–39

The on-going quest of the Thai elite for a recognised position on the world stage by exhibiting national architecture in international expositions has been examined. Back in Thailand, modern architecture, adopted domestically for its meaning of 'up-to-date', was predominantly built but perceived by the Thai elite, architects, and western peers as originally imported and non-Thai. Therefore, there were attempts, under both old and new regimes, to incorporate Thai art in some of the otherwise modern architecture.

Chulalongkorn University auditorium was one of the most important projects of this kind erected by the People's Party before World War II. Physically, it could have been considered as a product of the same nationalist idea in architecture as had been followed since the reign of King Vajiravudh. But the patron had already changed, and so did the design team. Sarot Sukkhayang was the lead architect for the project as he now assumed the position of Director of Architecture Division at the Fine Arts Department, responsible for every prestigious project of the state. Chuea Patthamachinda, who had cooperated with Sukkhayang designing Thai-style buildings under the last reign of the absolute monarchy, had been transferred to become headmaster of the Uthain Thawai Construction School from 1933 to 1935 and was now retired. The master builder who took charge and cooperated with Sukkhayang for this project was Phra Phromphichit (Phrom Phromphichit).

As Thai-style buildings, designed or co-designed by Phromphichit for the People's Party's government from 1932 to 1947 had particular characters, i.e. adopting reinforced concrete in main structures and a more masculine style of elements also made of concrete, Prakitnonthakan has argued that this was aimed, like the predominantly use of up-to-date architecture, to differentiate the new era from that under the bygone absolute monarchy, whose traditional buildings had elaborated with delicate wood-carving elements.[1]

[1] Prakitnonthakan, *Kanmueng Lae Sangkhom Nai Sinlapa Sathapattayakam: Sayamsamai Thaiprayuk Chatniyom (Politics and Society in Architecture: Siam Era, Transforming Thai, and Nationalism)*, pp. 360–86.

Figure 5.4.1: Buildings from the People's Party's 'nation building' era.[1] The collection consisted of both 'up-to-date' architecture and the Thai-style architecture, the *Chedi* of Wat Mahathat and the auditorium of Chulalongkorn University, that employed a new style of Thai elements made with concrete. The Thai-style ones were put at the top to show the importance of buildings with national character.

[1] *Pluk Ban Phid Kid Chon Ban Thalai (Building a House Wrongly, the Owner Will Be Upset until It Collapse)*, unnumbered p. 1.

This chapter will look at Chulalongkorn University auditorium, a building that was deliberately aimed to exhibit the national character by the new style of Thai art, in order to reassess Prakitnonthakan's argument and further assess complex relations of other factors that created this work. Before that, an account about buildings of pre-1932-revolution-Chulalongkorn University will be given first.

From antiquity to modern: Enduring art and monarchy

Chulalongkorn University was originally established as the Civil Service Training School in 1899 and changed to the Pages School on 1 April 1902.[1] In the reign of King Vajiravudh, it became the Civil Service School of King Chulalongkorn on 1 January 1911 to provide higher education for prospective civil servants. The King agreed to build on the 1309-rai plot and used the sum of money left from the construction cost of the equestrian statue of King Chulalongkorn to support the budget for the administrative building of the school.

King Vajiravudh actually consulted Chao Phraya Thammasakmontri (Sanan Devahastin Na Ayuthaya), the Minister of Public Instruction over whether they could establish the school as a university, so that people who did not want to work for the government would also be able to enroll. The Minister suggested that if they took Oxford or Cambridge as the standard, the government was not ready to establish a university, as they did not have enough budget or human resources. But he also suggested that a university like the new ones that had already been established in provincial cities in England, and those in Japan, India, and Hong Kong, might be possible. The Ministry concluded his suggestion by supporting the King:

> One might say that our demand has not reached the point to establish a university yet, but a country like us that has just started to catch up with others cannot wait until the demand reaches the point and then provide supply. We need to use a short-cut, to provide a supply to increase demand.[2]

[1] In 1899, the Siamese Government requested to the British Foreign Affairs for a loan of a British official for two years to reorganise the educational system in the country. J. G. D. Campbell was sent to be an inspector of schools and later Educational advisor. See Campbell, *Siam in the Twentieth Century: Being the Experiences and Impressions of a British Official*, p. vii.

[2] Chao Phraya Thammasakmontri, '*Chulalongkorn Mahawitthayalai - Prawat* (The History of Chulalongkorn University)', *Mahawitthayalai*, 5 (1938), 893–95 (894).

By prioritising the supply, Chao Phraya Thammasakmontri, director of the School of Civil Service in 1914, further supported the King's wish by writing an article in *Rom Rua* Newspaper supporting the promotion of the school to become a university claiming that:

> A university is the attire for a developed and prosperous metropolis. A famous and well recognised university definitely glorifies the dignity of the metropolis in which it is located. It also makes the reputation of the metropolis well known in all regions.[1]

The rationale behind the campaign to establish the university is clear. It was indeed not only necessity (which was not actually reached yet), but also the image of Siam. The 'catching up' mentioned by the Minister was a catching up not only of knowledge but also in dignity. And even though the King and the elite seemed to prefer a university of an ancient type like Oxford and Cambridge that would definitely secure their prestigious image and dignity[2], the reality of lacking in budget and human resources, and even the lacking demand, prevented them to achieve it. Therefore, they could only establish a day-university. But their ambition in terms of a building to house such university entailed another unique situation.

The first design for the administrative building of the proposed university was designed by Karl Döhring, then the architect of the Royal Railways Authority. The drawing of a European style building is headed 'New Royal Civil Service School', dated 1913. However, as the school committee, headed by Prince Damrong, wanted the building to be gigantically and beautifully built in the Thai style, the first design was dropped and a competition was held.[3] The competition was held between Karl Döhring and Edward Healey, an English architect of the Ministry of Public Instruction. Both of them were sent to Sukhothai and Sawankhalok to observe ancient Thai architecture. The former was recognised by contemporary

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[1] Phraya Thammasakmontri, '*Rongrian Kharatchakan Phonraruen Khong Phrabatsomdet Phra Chulachomklao Chaoyuhua* (The School of Civil Services of King Chulalongkorn), *Rom Rua*, 1 (1914), 20–24 (23).

[2] See their interest in the ancient universities in M. L. Manit Jumsai, '*Khwampenpai Nai Mahawitthayalai Kaembrid* (Accounts About Cambridge University)', *Mahawitthayalai*, 5 (1938), 1001–03; Khlum Watcharobon, '*Nakrian Mai* (A New Student)', *Mahawitthayalai*, 1 (1938), 106–08.

[3] From the article of Prince Rangsit published in *San Siriraj*, (Bangkok: Siriraj Hospital, 1949). Quoted in Rangsit, *Koed Wang Mai (Born in the Wooden Palace)*, p. 76.

scholars, including Prince Damrong, as the first capital of the Thai Kingdom established in the fourteenth century. The latter was another important city of the same kingdom. The ancient cities were, therefore, considered the best place to study the supreme originality of Thai art as perceived by the Thai elite at the time. They must have been considered a very original kind of Thai art, even more than Ayutthaya, which had been more prosperous but was newer in age. The Thai art to be incorporated in the university building was intended to be juxtaposed with the most modern progress in education. Together they would span the glorious history of the Thai nation from antiquity to modernity. The image and prestige of the kingdom would be secured by this Thai-style building.

King Vajiravudh himself had been to Sukhothai and had written *Tieo Mueng Phraruang* (Travel in Phra Ruang's town) in 1907 when he had been the crown prince. He stated that:

> Apart from the story of historic sites for archaeological enthusiasts, I wish this book would contribute to other aspects; for example, it might make Thais know that the Thai nation is not a new nation and not the nation of jungle people or what is called in English "uncivilised". The Thai nation has been much *Charoen Rungrueng* (developed and prosperous). […] Regarding the Thai craftsmanship that has now much deteriorated, if they [the Thais] see images of places and their decoration, which this book has tried to include, they might realise that the Thai craftsmanship was good from the earliest time. It was because they themselves neglected it that it has deteriorated. This resulted in people thinking that Thai craftsmanship is bad, and therefore preferring western one. The truth is that both skills and ideas are good but in different ways.[1]

For the King, to build the prestigious university in the Thai style would demonstrate that Siam possessed both qualities — modernity and tradition. Not unlike the way Siam exhibited itself in international expositions, it wanted to tell the world that it was not just following the West in being modern.

[1] Phrabatsomdet Phra Mongkutklao Chaoyuhua, *Tiew Muang Phra Ruang, Phim Pen Anuson Nai Ngan Phra Ratchathanploengsop Phra Sutthi Atthanaruemontri (Travel in Phra Ruang's Town, , Printed as a Memorial for the Funeral of Phra Sutthi Atthanaruemontri)* (Bangkok: Rongphim Thai Khasaem, 1978), p. *Kho*.

After the trip, Döhring came up with a design described by Prince Rangsit, the assistant secretary-general of the Ministry of Public Instruction, as 'strictly ancient Sukhothai', whereas Healey produced what the Prince called 'an old Thai style that is lighter and more airy'.[1] It then happened that Healey won because the estimate for the design was cheaper. The design is an H-shape building comprising an auditorium in the middle, and administrative departments and classrooms at both ends. The structure was a combination of reinforced concrete and load-bearing walls.

An important thing worth pointing out was that all decorative ornaments were also prefabricated in cement. Moulds for these ornaments were sculpted by Rodolfo Nolli, an Italian sculptor, a nephew and assistant of the sculptor Vittorio Novi who had done marble work for Phra Thinang Anantasamakhom. No wooden ornaments were used in the building. One possible reason for this was that Healey must have seen only ruins of stupas in Sukhothai and Sawankhalok. This was because this building type had been built in masonry with stucco ornaments, while habitable structures like ordination halls had been built with wood and all destroyed. This happened to correlate with the idea that prestigious projects in Siam now should be built permanently with durable materials to last for ages. In this sense, a modern material like cement perfectly responded to this point. However, because of the limited budget, only the south wing of the building was to be built as the administrative department first. Knowing this plan and the concern that the school had not reached a standard to be established as a university, Prince Rangsit commented that the money should be spent instead on urgently needed laboratories of the Medical School and Engineering School that needed to be accommodated in purpose-built buildings, unlike subjects consisting only of lectures that could be given anywhere in the meantime.[2] He also put it that the laboratories did not need beautiful buildings but ones that met functional and necessary purposes.[3]

[1] From the article of Prince Rangsit published in *San Siriraj*. Quoted in Rangsit, *Koed Wang Mai (Born in the Wooden Palace)*, p. 83.
[2] Rangsit, *Koed Wang Mai (Born in the Wooden Palace)*, p. 84.
[3] Ibid.

Figure 5.4.2: A European design for the Civil Service School found in Karl Döhring's archive dated 1913 (unbuilt)[1]

[1] Daroonthanom, *Das architektonische werk des Deutschen architekten Karl Döhring in Thailand*, unnumbered p.3.

Figure 5.4.3: A drawing of 'University of Siam' dated 1914 kept in Chulalongkorn University Archives, accounted by existing research to be Döhring's scheme. But my inspection of the signature at the lower-right corner has revealed that it was signed by 'Prof. Arch Mario Ceradini, Torino'.[1]

Figure 5.4.4: Edward Healey's original design of the administrative building of Chulalongkorn University (Only the south wing was built)[2]

[1] Chulalongkorn University Archives
[2] Ibid.

Figure 5.4.5: The south wing of Healey's original design of the administrative building of Chulalongkorn University was built during 1916 and 1918[1]

[1] Chungsiriarak, *Sathapattayakam Baeb Tawantok Nai Siam Samai Ratchakanti 4 Tueng Po So 2480 (Western Architecture in Siam: Rama IV's Reign to 1937)*, p. 367.

The committee finally went for the south wing of the gigantic and beautiful landmark first, leaving the first building accommodating laboratories to be built in 1929 with support from the Rockefeller Foundation. The design of the north wing was later adapted by Bunyong Nikhrothranon and built as the Central Library in 1953.[1] Prince Rangsit claimed that the committee 'cared more about monument, beauty, and emotion, whereas I cared more about necessity and benefit'.[2]

Ko Phraroek Ceremony was carried out by the King in a Buddhist and Brahmin ceremony on 3 January 1916 for an auspicious commencement of the construction.[3] The contractor was G. Cluzer and Co.[4] King Vajiravudh's statement regarding the construction of the Thai-style building reads:

> It is necessary that the establishment of the first university of Siam preserve Thai architectural art and leave it as an inheritance to our next generation. In doing so, there is no better way to let the students always see and know it than by building an example. Once they have become familiar with it, they will appreciate it.[5]

Prince Rangsit's criticism about 'monument' and King Vajiravudh's intention to 'leave it as an inheritance to our next generation' reiterate the necessity of constructing this building only with durable materials. By incorporating Thai art into durable and modern buildings, the King wanted not only to claim the civilised identity of the Thai race since antiquity and to hand it down to the next generation, but also to remind the next generation to retain their tradition alongside progress. Politically, this was deemed necessary for the Siamese absolute monarch, whose reign coincided with the fall of monarchies worldwide. For the King, the higher education of the students should be aimed to benefit an absolute monarchical Siam that was modern — certainly one considered as having deep-rooted tradition by the King, not a modern Siam without monarchy.

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[1] '*Khao Khong Samachik Nuai Chulalongkorn Mahawitthayalai* (News About the Members from Chulalongkorn University)', *ASA*, 2 (1953), 3.
[2] Rangsit, *Koed Wang Mai (Born in the Wooden Palace)*, p. 84.
[3] 'University of Siam', *The Singapore Free Press and Mercantile Advertiser*, 14 January 1916, p. 5.
[4] Ibid.
[5] Chamuen Amon Darunarak (Cham Sundaravej), *Phraratchakoraniyakit Samkhan Nai Phrabatsomdet Phra Mongkutklao Chaoyuhua Lem 7 Rueng Kansuksa Khong Chat (Important Activities of King Vajiravudh, Volume 7: The Education of the Nation)* (Bangkok: Ongkan Kankha Khurusapha, 1970), p. 84.

Figure 5.4.6: A photo of the south wing of the administrative building of Chulalongkorn University during construction shows a combination of load-bearing walls and reinforced concrete structure, as well as prefabricated concrete elements.[1]

Figure 5.4.7: Moulds for prefabricated cement decoration on gables of the administrative building of Chulalongkorn University, and their sculptor, Rodolfo Nolli[2]

[1] National Archives of Thailand
[2] Lazara, Piazzardi, and Cassio, *Italiani alla corte del Siam (Italians at the Court of Siam)*.

Figure 5.4.8: The south wing of the administrative building of Chulalongkorn University (1916–18)[1]

[1] Chulalongkorn University Archives

King Vajiravudh finally promoted the school to becoming Chulalongkorn University on 26 March 1917 amidst ongoing criticism from senior royals that it was not yet necessary and already resulting in a poor standard.[1] Despite such criticism of the university's standard and the necessity of building the imposing structure first, as against building urgently needed laboratories, the building's elegant appearance with a traditional twist and its spatial quality was positively received by the public and in users' perceptions of the building.

Erik Seidenfaden described the design in his Bangkok guide book as 'Sukhodai-Swankaloke style' that 'represents an acquisition of real art to the growing city'.[2] Wicha Setthabut, a student in 1930, recalled that it was 'a beautiful and elegant building suitable for the country's institution of higher-education'.[3] Wichian Chirawong recalled that people who walked passed the area of the university and saw the gigantic main building made *Wai* (showing respect in a Thai way by placing two hands on the chest and bowing) to the building, the gesture people usually made when they walked past a Buddhist temple.[4] Rawi Phawilai, an alumnus, also recalled that he took the entrance examination to Triam Udom Suksa School in a room of the main building of the university, and when he looked at the cement decoration on the ceiling, he felt as if he was taking the exam in a temple.[5]

These accounts mean that the building, as perceived by Siamese students and the public was not much art for art sake for the city dweller to appreciate, as posited by a foreigner like Seidenfaden, but an art that upheld the institution and the nation's dignity, even an edifice possessing a sacred quality resembling that of temples.

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[1] For the account about criticism see Prince Thani's comment in Thanaprasitpatthana, '*Naew Phraratchadamri Khong Phrabatsomdet Phrapokklao Chaoyuhua Kiew Kab Sangkhom Thai Po So 2468–2475* (King Rama VII's Thoughts About Thai Society 1925–1932)', p. 21.
[2] Seidenfaden, *Guide to Bangkok. With Notes on Siam*, p. 81.
[3] Wicha Setthabut, '*Si Pi Nai Chula* (Four Years in Chulalongkorn University)' in *70 Pi Chulalongkorn Mahawitthayalai Lamruek Adit (70th Anniversary of Chulalongkorn University)* (Bangkok: Chulalongkorn University 1997), pp. 38–42.
[4] Wichian Chirawong, '*Lae Lang* (Looking in Retrospect)', in *70 Pi Chulalongkorn Mahawitthayalai Lamruek Adit (70th Anniversary of Chulalongkorn University)* (Bangkok: Chulalongkorn University, 1997), pp. 71–75.
[5] Rawi Phawilai, '*Banthuek Hetkan Lae Khwamsongcham* (Recording Events and Memory)', in *70 Pi Chulalongkorn Mahawitthayalai Lamruek Adit (70th Anniversary of Chulalongkorn University)* (Bangkok: Chulalongkorn University, 1997), pp. 71–75.

Another account by Khunying Winita Dithiyon, a student in the 1960s, pushes these notions even further.[1] The building had assumed the nickname, *Devalai*, the residence of angels, at some point, and Dithiyon recalled that she, as well as her classmates, were delighted that they studied in this building as it made them feel as if they were angels.

Being an arts student, she further described how she used the building and how it influenced her in a poetic way:

> Our main classrooms were large and airy rooms with many doors opening to the surrounding corridors. Wind could flow, so it was not stuffy. By the last semester of the fourth year, the ancient and solemn atmosphere had been absorbed into our flesh and bones. It was a meticulous combination of material and mind, difficult to explain. […] While I was studying Thai literature in the large room, gazing out to the *Naga*[2] that had been sculpted into the eave supports, yellowy fading under the shade of afternoon sun and the clear sky that had no other buildings to block it, the *Naga* seemed to be alive, stretching itself out from the literature.[3]

All these comments and memories indicate that the standard of the courses which had been the concern of many parties from the first place was not a problem. What is clear here is that the building did create an image of prestige not only for the university itself but also, more importantly, for its students. This was strengthened by the students' unique uniform and graduation grown. It was this university that young Siamese must have aimed to attend in order to secure their privileged status in modern Siam. And this must have been what Chao Phraya Thammasakmontri proposed as 'creating supply to stimulate demand'.

However, it is evident that the prestigious image of the university and students gained from the building's sacred image and atmosphere overshadowed the actual appreciation of Thai art, shown here only in a foreigner's account. This raises the question of how much the King's aim to use the building to make students

[1] Winita Dithiyon, '*Nai Chasu Chongkho Ban Lan Akson (Nothing* Can Compare with Blossoming Chongkho at the Faculty of Arts)' in *60 Run Aksonsat Bandit (60 Years of the Faculty of Arts Graduates)* (Bangkok: Faculty of Arts, Chulalongkorn University, 1996), pp. 213–16 (p. 214.).
[2] *Naga* is a mythical creature.
[3] Winita Dithiyon, '*Nai Chasu Chongkho Ban Lan Akson* (Nothing Can Compare with Blossoming Chongkho at the Faculty of Arts)', p. 214.

particularly appreciate Thai art was successful. Beyond the issue of the appreciation of the Thai art, did the Thai-style building support the status quo of the absolute monarchy? These issues will be further examined in relation to the new buildings of the university built in the reign of the last absolute monarch.

Buildings of Chulalongkorn University in the last reign of the absolute monarchy

After the administrative building of Chulalongkorn University, where King Vajiravudh had implanted the idea of applying Thai art to modern buildings in order to demonstrate the Siamese nation's dual commitment on pursuing progress and reviving tradition, and, above all, to remind the next generation to retain their tradition — monarchy included — alongside progress, more buildings of the university were built in the reign of King Prajadhipok (1925–34), the last absolute monarch, in the Thai style.

The design of these buildings was cooperation between Sarot Sukkhayang, Director of the Architecture Department, and Luang Visansilpakam (Chuea Patthamachinda), the master builder of the Design Division at the Ministry of Public Instruction. Two new buildings of the university were the Science Building (1928–29) and the Student Club (1932), both of which located next to the main lawn of the university, where the grand administrative building already stood.

Considering the Science Building, which was built with the funding from the Rockefeller Foundation, its plan was rationally designed following the Beaux Arts's rational principle. A lecture theatre, laboratories, offices, and the professor's office were accommodated in a symmetrical plan. Like Niphanopphadon Building at Debsirin School (chapter 3.2), the symmetrical mass had gables at both ends that faced north; but the entrance was placed in the centre and the corridor was double loaded. It was built to endure, while other buildings of the faculty were still timber buildings, where classes had been located at *Tai Thun* (the ground floor under an elevated main floor like that of traditional Thai houses).[1] These temporary structures were later replaced by permanent ones.

[1] Charoen Thammapanit, '*Witthayasat Nai Adit Po So 2471–2478* (Science in the Past AD1928–1925)', in *70 Pi Chulalongkorn Mahawitthayalai Ramluek Adit (The 70th Anniversary of Chulalongkorn University: A Retrospect)* (Bangkok: Chulalongkorn University, 1987), pp. 74–77 (p. 75).

Considering the Student Club, it was built with the funding from Prince Chula Chakrabongse after the Prince had criticised the previous club, a wooden structure, as 'not durable and strong, unsuitable for the [university's] prestige'.[1] The Prince had, therefore, granted 20,000 baht to build a new club as a *Tuek Thawon* (durable masonry building).[2] The old club was adapted and relocated at the back of the new building.

In terms of how it should be built, the Prince stated that the Minister could ask M. C. Ratchadaphisek Sonakun, the rector, as the Prince trusted his judgement.[3] We do not know the rector's reply as no evidence has yet been found, but the new building was finally built in a Thai style.

Like that of the administrative building, the accounts of both new buildings show the priority of durability and dignity to be achieved by this masonry building as opposed to the wooden ones, which were located or relocated at the 'back'. As the modern principle of durability was continued to be prioritised, but the designers had changed, how the Siamese architect and master builders designed their Thai-style buildings that were durable is worth examining.

Both the Thai-style buildings had reinforced concrete structures. The main structures of reinforced concrete were cast to achieve a slight curve at the lower part of the gables, as if they had been constructed with bending timber rafters. The adapted Thai elements were minimal and made with cement.

It should be noted that at another corner of the city, Vajiramongkut Building (1932) of Vajiravudh College, a boys' school, was also designed by Sukkhayang and Patthamachinda in a Thai style at the school that was also keen to have entirely Thai-style buildings. The Beaux-Arts-planned building also had a reinforced concrete structure including roofs in the same manner as those that belonged to the new buildings at Chulalongkorn University. Relatively more elaborate cement elements were used instead of wooden ones. The exception was *Chofah* (the element on top of gables originally reserved only for religious and royal buildings) that remained wooden.

[1] Bangkok, Chulalongkorn University Archives, Ch 18.1, Box 1, Folder 3 *Kan Triamkan Poed Tuek Chakrabongse* (The Preparation for the Opening on Chakrabongse Building), pp. 45–46.
[2] Ibid.
[3] Ibid.

Figure 5.4.9: Science Building, Chulalongkorn University (1927–29)[1]

Figure 5.4.10: Student Club, Chulalongkorn University (1932)[2]

[1] Chulalongkorn University Archives
[2] Ibid.

Figure 5.4.11: A drawing shows that the main structures of a roof of the Science Building, Chulalongkorn University, were made of reinforced concrete. [1] **Simple elements at the gable's ends were made of cement.**

Figure 5.4.12: A drawing shows that the main structures and the gable of a roof of the Student Club, Chulalongkorn University, were made of reinforced concrete.[2] **Simple elements at the gable's ends were made of cement.**

[1] National Archives of Thailand
[2] Ibid.

Figure 5.4.13: Vajiramongkut Building, Vajiravudh College (1932)[1]

Figure 5.4.14: A drawing shows that the main structures and the gable of a roof of the Vajiramongkut Building, Vajiravudh College, were made of reinforced concrete.[2] **Only purlins and *Chofa*, the elaborate elements at the tops of gables, were made of wood.**

[1] *Samutphap Sathapattayakam Krung Rattanakosin (The Architectural Pictures of Rattanakosin)*, p. 56.
[2] National Archives of Thailand

It has been demonstrated that the significance of building the university and college's new buildings in the Thai style related not only to the intention to balance modernity with tradition, but also to obtain an intended harmony with the existing buildings. No matter what subject and function the new buildings were associated with, and no matter if some of them adopted more functional designs, the Thai style, dominantly represented in the high gable roofs, was needed to constitute a unified grandeur for the prestigious institutions. They were built to impress. Visual impact must have affected users and visitors who entered the vicinity of the institutions. Beyond the stage set, less outstanding structures were allowed to serve their mere functions behind the scene.

But that the buildings had to be in the Thai style did not mean that they could be built in the traditional way. Durability became a practically and symbolically crucial issue and wooden elements traditionally used to ornate buildings were impractical. On the other hand, modern materials like cement and concrete not only represented modernity in their own rights but also helped to ensure that the heritage would be revived and handed down to next generation, thanks to their durability. Unfortunately, the absolute monarchy was not finally continued beyond 1932 like the cement ornaments. Now it is time to see how Sukkhayang and a new colleague, Phra Phromphichit, dealt with national character in architecture under the new regime.

Chulalongkorn University Auditorium (1937–39)

First and foremost, the reason why the auditorium had to be designed in the Thai style was much to do with its predecessors and the original master plan. One of the new drawings relating to the construction of the auditorium, a pond, a lawn, and a road surrounding in 1937, shows the newly designed auditorium by Sukkhayang and Phromphichit set in between two main buildings of the university; the first an existing one on the south and the other a future project, literally a reflection of the first. This drawing, together with a document in the construction contract shows the intention of the university and designers to place the auditorium at the centre of the axis, made by the new layout of the road.[1] It also shows the

[1] Chulalongkorn University Archives, Ch 22.5.2, Box 23, Folder 22 *Baebplan* (Drawing), p. 13.

intention to maintain the functional and stylistic connection between the auditorium and both buildings, as intended in Healey's original design of 1914.

However, in the drawing, the new auditorium was placed parallel with the existing and future buildings, not perpendicular to them, as intended by Healey. And it happened that the auditorium was finally built not in between the buildings as shown in the drawings, but in front of them. Despite the change of orientation and location, an alternative style of auditorium was out of the question. It had to be built in the Thai style to support the existing atmosphere, to strengthen the prestige of this modern institution, and to uphold the national art. It did not matter that the university had been established by the monarchy, and that the Thai-style auditorium might remind people of the old regime. As long as the new regime invested in its development, the Thai style, now not reminiscent of the absolute monarchy, but more generally of national art and character, was appropriate to secure the nation's own civilisation alongside its progress — a main purpose of the People's Party's nation building campaign — culturally similar to what had been championed by King Vajiravudh's royal nationalism. This was the same rationale as applied to the Siamese pavilions at international expositions, the difference being only that the Thai-style auditorium was not aimed to attract tourists but to ensure Thais' pride.

In terms of the Thai character, it is worth examining how the architects came up with the new design, and why they had not simply followed the styles employed in the existing buildings of the university.

According to his article about national art broadcast in 1935 and published in 1937, the construction method Phra Phromphichit sought to include was a new form of Thai character that responded to the contemporary society and technology.[1] Following this line, wooden structure and ornaments characterised by their delicate and elaborate craftsmanship, which were not durable enough for contemporary standard, were deemed appropriate only for temporary and transportable works, like the Thai pavilions Phromphichit had designed for international expositions. On the other hand, reinforced concrete structure and concrete elements that responded more to the prevailing idea of durability deemed necessary for 'architecture' were considered appropriate for permanent projects.

[1] Phromphichit, '*Pranit Sinlapakam Khong Thai* (The Thai Fine Arts)'.

Figure 5.4.15: The drawing of 1937 shows that Chulalongkorn University Auditorium was redesigned but remained in-between two wings of the administrative buildings connected with covered ways as Healey had intended.[1]

Figure 5.4.16: Chulalongkorn University Auditorium was finally built in front of the administrative building.[2]

[1] National Archives of Thailand
[2] *9 Thotsawat Patthanakan Thang Kaiyaphap Chulalongkorn Mahawitthayalai (9 Decades of the Physical Development of Chulalongkorn University)*, p. 45.

In this sense, Phromphichit's idea could have resulted in cement ornaments similar to what Patthamachinda or Healey and Nolli had done in the existing buildings of the university. But Phromphichit's concrete elements, despite following a traditional principle of pattern design, had a more masculine character and were less elaborate the wooden ornaments, responding more to the limits of concrete. Phromphichit insisted that in the design of ornament 'each pattern could not be directly copied from its source without adaptations to suit the construction materials'.[1]

The patterns and ornaments were called '*Lai Thai Ti Cement Baeb Sam Miti* [3-dimensional Thai patterns cast with cement]', and were made with concrete with a higher proportion of cement than normal concrete.[2] The concrete was poured in moulds and whipped until it was sticky so that bubbles were eliminated. Once the concrete had set, the moulds were disassembled and the ornaments were ready to be installed. In the construction contract for the building, the installation of the ornaments on gables was the second last process of the construction.[3] The contract also indicates that the contractor had to hire the Fine Arts School to produce the moulds for casting the ornaments.[4]

When we consider that Phromphichit's apprenticeship had been under Prince Naris who had sought modern forms and principles of Thai art, and had already experimented with modern materials including concrete and planning on a grid system, it even makes more sense that Phromphichit designs possessed a unique style different from those of Patthamachinda or Healey and Nolli. As has been pointed out regarding his mode of knowledge transfer through teaching and apprenticeship (chapter 3.2, 4.3), Phromphichit's ideas and actions in the design process generally operated under the traditional practice of *Tham Yang Khru* (following teacher), in that he conceptualised each new work following a work by his teacher, Prince Naris. In the case of Chulalongkorn University Auditorium, the overall form and elements were designed following the ordination hall of Wat Rachathiwat, designed by Prince Naris in 1916.

[1] Phromphichit, '*Pranit Sinlapakam Khong Thai* (The Thai Fine Arts)'.
[2] Sippa Duangphueng, '*Kansueksa Sathapattayakam Khrongsang Khonkrit Khong Phra Phromphichit* (A Study of Concrete Thai Architecture of Phra Phrombhichitr)' (unpublished master's thesis, Silpakorn University, 2005), p. 204.
[3] Bangkok, Chulalongkorn University Archives, Ch 22.5.2, Box 23, Folder 21 *Baebplan* (Drawing), p. 10.
[4] Ibid., p. 15.

Figure 5.4.17: Chulalongkorn University Auditorium (1937–39) by Sarot Sukkhayang and Phra Phromphichit[1]

Figure 5.4.18: Concrete ornaments of Chulalongkorn University Auditorium[2]

[1] National Archives of Thailand
[2] Photos by Chomchon Fusinpaiboon

Figure 5.4.19: Wat Rachathiwat (1909–12) by Prince Naris[1]

[1] Lazara, Piazzardi, and Cassio, *Italiani alla corte del Siam (Italians at the Court of Siam)*, p. 67.

Phromphichit still adopted the same principle of 'following teacher' in his later work at Wat Phrasri Mahathat, the temple modelled on Prince Naris' Wat Benchamabophit. The principle was not a mere copy, but a traditional type of creative process by which styles and practice had been carried on and gradually transformed under a principle that was compromising enough to allow 'transformation'.[1] In this sense, what Phromphichit did with the auditorium, as well as the way he taught students in the architecture school, was traditional even though pursuing new materials and technology under the ideology of the new regime.

Phromphichit's creation of the new Thai-style elements following Prince Naris' principles was, however, not without challenge. In 1935, when Phromphichit's lecture about national character in architecture was broadcast, Sarot Sukkhayang published an article about concrete, discussing the advantages.[2] Three years later, the enormous reinforced concrete truss Sukkhayang designed to span across Chulalongkorn University Auditorium to support the roof, together with the 9-storey building on Yaowarat Road that he had previously designed, convinced him to have achieved his 'ambition' as an architect, given that the auditorium was the largest room, and the tower the tallest building, in the country.[3] Reinforced concrete for Sukkhayang was a material of the present and of progress, enabling him to do what traditional materials could never have done.

However, Sukkhayang also pointed out possible disadvantages of using concrete, including substituting it for conventional materials in designs that had followed other principles and masters.[4] He claimed that one should not use it merely to reduce cost and maintenance, but one needed to be careful about its beauty following its principles. His argument was supported by his actions. The buildings he had designed with Chua Patthamachinda, previously discussed, carefully applied concrete ornaments to particular parts, and retained the use of wooden ornaments elsewhere or just made the design simpler so that less ornaments had to be produced. Sukkhayang's statements reveal two contemporary issues. First, they expose his scepticism towards Phromphichit's idea of creating new patterns suitable for the

[1] The idea was discussed in the exhibition '*Chak Saen Khru Su Sit* (From teachers' lines to students')' at the Faculty of Architecture, Silpakorn University, 3 – 14 December 2012
[2] Sarot Rattananimman, '*Khonkrit* (Concrete)'.
[3] Ladawan, '*Phra Sarot Rattananimman* (Sarot R. Sukkhayang)'
[4] Sarot Rattananimman, '*Khonkrit* (Concrete)'.

modern material. Second, they signify that Sukkhayang, an architect who graduated from abroad, did not have a radical attitude towards traditional art, but rather respected its principles and virtue, seemingly even more than the master builder trained through the traditional apprenticeship. Either way, the pair finally cooperated with each other in the auditorium project. The process of their cooperation will be examined next.

Design process: Form follows teacher. Function follows form

The cooperation between Sukkhayang and Phromphichit in the design of Chulalongkorn University Auditorium will be examined in detail to see how their ideas regarding modern function and materials interacted with those about traditional principles and forms. Saengarun Rattakasikorn, an alumnus of Frank Lloyd Wright's Taliesin and a prominent critic in the 1970s of Thailand's modern architecture, criticised Chulalongkorn University Auditorium for being 'designed from outside to inside', prioritising its national appearance over its function, resulting in its stuffy interior space and lack of acoustic quality and flexibility.[1]

This criticism by a prominent Modernist protagonist, written after Modernist principles had started to take hold of architectural education in Thailand thirty years after the completion of the auditorium, raised the issue of how the building had been designed, i.e. was it designed from outside in, prioritising the Thai form over the modern planning?

An examination of the architectural drawings might give a clue. In the drawing of the ground floor plan, the heading is 'Division of Architecture', signed by a staff member named Aphai Nakhachit as sketcher, draftsman, and copier, and also signed by Sarot Sukkhayang, the director of the division, as 'inspector'.[2] Another set of drawings, consisting of sections showing huge concrete trusses in the roof and Thai ornaments at the edge of the roof, has no headings and signatures, but is written with the same lettering and drafting style as the plans.

[1] Saengarun Rattakasikon, '*Sathapattayakam Lang Saothong* (The Architecture Behind the Flag Post)', in *Saeng Arun 2*, ed. by Lada Rattakasikon (Bangkok: Amarin Printing, 1981), pp. 45–49.
[2] Drawings of the auditorium are kept in the National Archives of Thailand

Figure 5.4.20: Ground floor plan of Chulalongkorn University Auditorium[1]

Figure 5.4.21: Longitudinal section of Chulalongkorn University Auditorium[2]

Figure 5.4.22: South elevation of Chulalongkorn University Auditorium[3]

[1] National Archives of Thailand
[2] Ibid.
[3] Ibid.

On the other hand, another set of drawings consisting of a ceiling plan that includes Thai ornaments, is headed '*Kong Pranit Sinlapakam* (Division of Fine Arts)', and signed by Phra Phromphichit, as sketcher. Furthermore, the 1:100-drawings consisting front, back, and side elevations, including Thai ornaments, with the heading Division of Fine Arts, were signed by Phromphichit as sketcher, Prung Premroj as draftsman and copier, and Sukkhayang as inspector. Last but not least, the 1:200-drawing, consisting of the front elevation of the auditorium set in between two main buildings of the university, the one at the south being an existing building, the other at the north to be built to the same design later on, were signed by Phromphichit as sketcher and Thongyu Riangpet as draftsman (*Long Sen*) under the heading of Architecture Division.

The mixed names of architects, draughtmen, master builders, and craftsmen, and their positions, as well as the headings in the drawings, shows the back-and-forth working process indicated in the code of conduct of the Divisions of Architecture and the Division of Fine Arts.[1] The former department designed the building's planning and structure, while the latter designed its Thai features which included both the form and ornaments. This meant that the architect, equipped with a modern architectural training in Europe, was responsible for the plan of the modern building, while the craftsmen and master builder were responsible for the Thai forms and ornaments. After that, the architect worked on the structure, especially the reinforced concrete trusses supporting the huge Thai roof form, and other construction details. As a result, the architects and master builders came to work hand in hand, exploiting each other's expertise in creating a modern architecture with national character.

But we are left with the question of whether the form or the plans came first. In theory, Phromphichit's principle about designing Thai architecture prioritised the design of space, form, and ornament respectively.[2] Accordingly, it was likely that he normally worked on the plan before the form. But most of his previous work had been traditional buildings such as temples and pyres for royal funerals, whose plans tend to be fixed by traditional principles and do not involve functional complexity.

[1] National Archives of Thailand, S Th 0701.1.1/1
[2] Phromphichit, '*Pranit Sinlapakam Khong Thai* (The Thai Fine Arts)'.

Figure 5.4.23: West and east elevations of Chulalongkorn University Auditorium[1]

[1] National Archives of Thailand

Figure 24: Ceiling plan of Chulalongkorn University Auditorium[1]

Figure 26: Cross sections show reinforced concrete trusses of the roof of Chulalongkorn University Auditorium[2]

[1] National Archives of Thailand
[2] Ibid.

So when it came to the project of the auditorium, he may have designed the form after the Architecture Division, which was capable of laying out the auditorium's modern planning, had completed its preliminary design and handed it to him.

The account regarding the earliest stage of this project, however, proves the opposite. Plaek Phibunsongkhram, the rector of Chulalongkorn University who would become the nationalist Prime Minister in the following year, commissioned Sarot Sukkhayang to design the auditorium in November 1937. Sukkhayang, as the director of Architecture Division, Department of Fine Arts, promptly responded the commission by submitting 'a tracing paper drawing, depicting a sketch of the elevation' in December.[1] This sketch must have been a Thai-style elevation provided by Phromphichit, who was head of the Fine Arts Division in the Department of Fine Arts. The rector was satisfied by the sketch and let the architect continue with the detailed design, without any record of a meeting or presentation in-person. When the university reminded Sukkhayang in February 1938 about the detailed design, he commanded a member of staff in his office that:

> We should hurry to do ground floor and first floor plans and propose them to the rector first. For other drawings, let us tell Khun Phraphrom [Phromphichit] to [tell his staff to] draw them. Then we will call for bids in the way that we did with the [national] stadium. The contractors will calculate for themselves.[2]

These accounts show the real working process in designing the project. The design of the Thai-style building started with form-making, then planning was provided by architects and all other elements from craftsmen. It was indeed designed from outside in. The real design process contradicted Phromphichit's principle that prioritised space over form, and resulted from the nature of the administration headed by the rector Phibunsongkhram who prioritised nationalist form over modern function.

[1] Bangkok, Chulalongkorn University Archives), Ch 18, Box 1, Folder 72 *Thidin Sabsin Kosang Somsaem* (Land, Property, Construction, Maintenance).
[2] Ibid., p. 35.

The tender was finally called in June 1938. According to the government's practice, the successful tenderer should be one who had worked with the department before and submitted the cheapest cost. Sagna Wannadit won the tender against another three tenderers.[1] Wannadit submitted the second cheapest price (332,000 baht) but he had already executed major works for the Ministry of Public Instruction to the amount of 166,000. The other two tenderers were Eiw Nguanliangtai and Uthaen Thawai Construction School, who submitted the most expensive prices, and their previous works for the Ministry had cost much less than Wannadit. The last tenderer, who submitted the cheapest price, was the Impressitor Company, but it had not worked with the Ministry before.

Amidst the nationalist campaign supporting Thai business and encouraging Thais to take over foreigners' jobs, the contract stated that 50% of the labour should be by Thai nationals.[2] This aimed at Thai labour replacing the predominant Chinese labour. It also stated that any defect during the first five years after completion that was a result of the contractor's bad execution should be fixed at the contractor's expense.[3] And this happened in July 1941 when there were leaks in the roof and in the basement. The contractor claimed that the origin of the problem was ceramic tiles had been produced domestically and the sizes were not uniform.[4] The tiles had been initially expected to be imported from China, but instead had to be acquired domestically because of the political turmoil in that country.[5] Apart from the tiles, all sanitary ware were indicated to be imported from Europe.[6] Chairs in the auditorium too, were to be made with teak of the highest grade executed by Shanghai carpenters, who were dominant in the high-quality furniture industry in Siam, and pile wood of a good grade had to be imported also from Europe.[7] These accounts reflect the difficulty and irony of the government's nationalist campaign because many products, especially those of good quality, could not be acquired domestically in practice. And the indication that 50% of the labour should be by Thai nationals

[1] Bangkok, Chulalongkorn University Archives), Ch 18, Box 1, Folder 72 *Thidin Sabsin Kosang Somsaem* (Land, Property, Construction, Maintenance), p. 41.
[2] Ibid.
[3] Ibid., p. 42.
[4] Ibid., p. 39.
[5] Bangkok, Chulalongkorn University Archives, Ch 22.5.2, Box 23, Folder 21 *Baebplan* (Drawing), p. 18.
[6] Ibid.
[7] Ibid., p. 27.

was supposed to be the highest percentage possible as many high-quality works still required foreign labour.

Conclusion

The auditorium, like the buildings of the university previously designed in cooperation between architect and master builder under the absolute monarchy, responded to and strengthened the overall image of the institutions which they housed. The patrons from both old and new regimes tried to revive what they believed to be national art and character, i.e. identity, to be incorporated along with modern progress that was perceived to be an import. In this way, they could claim that the Thai nation had been civilised from the ancient time, and only needed strengthening by modern means. It was not to be deprived by lack of identity, i.e. by merely following the West. In order to achieve this goal, the architect, by now at a mature stage of career, was capable of designing a large modern building, but still needed a master builder responsible for Thai forms and ornaments, as text books about Thai architecture were still unavailable. The master builder, himself an agent of tradition, demonstrated that the tradition could be adapted to suit the present time by experimenting with a new material and new patterns, responding to the prioritised idea of durability.

While the outcome of this process constituted the nation's civilised image, itself a modern idea, its distinctive status strengthened by the national character in architecture, the traditional practices, represented by the monopoly of one master builder in transferring knowledge, and the practice of 'following teacher', asserted themselves at the top of the process, dictating the overall form of the building, restricting the design of the plan and acoustics by its proportions, and utilising the new reinforced concrete technology to support a roof form evocative of tradition.

It is no exaggeration to state that this situation was supported by the power of the rector, whose appreciation of architecture leaned towards representation of prestige rather than sophisticated consideration balancing utility and art. But once he was involved more in details at a later stage of the design process, a conflict between modern function and 'Thai style' emerged. Phra Charoen Witsawakam (Charoen Chenakun) wrote a letter (He, as an engineer, and Sukkhayang were members of the project supervision committee) to the rector regarding his command

for amendments to the design.[1] The first recommended a change from straight rows of seats to curved ones at first floor level. The second was the addition of two fire exits from the first floor that entailed two exterior stairs. Chenakun replied that:

> It is a good idea for safety but external stairs are rare for the Thai-style masonry building. So this might not be nice. Interior stairs should be a better choice in this case […] in order to achieve safety and artistic correctness. […] But if you [the rector] insist to have exterior stairs, an opaque balustrade like that of the ground floor should be more appropriate than the transparent one submitted before.

The rector who had initially imposed the Thai form over the modern function concerned about modern functional and safety issues while the engineer expressed his opinions about Thai art, possibly or possibly not advised by the architect who was supposed to know more about the subject. The communication between the practitioners and the patron became even more complex.

The negotiation between the national style and modern function continued. And it continued when more modern technology arrived. In 1957, an air-conditioning system was installed. Doors and windows were changed to increase coolness.[2] Walls and ceilings were also improved to enhance the sound quality of the interior.[3] It happened that the system was not suitable for the building as the running fan coil units made the walls vibrate.[4] The decision was then made to reintroduce natural ventilation.[5] M. C. Vodhyakara Varavarn designed new walls using perforated cement blocks.[6] Loggias were added at both sides of the building in order to protect against rain, if not noise.[7]

[1] Bangkok, Chulalongkorn University Archives, Ch 22.5.2, Box 23, Folder 21 *Baebplan* (Drawing), p. 2.
[2] Bangkok, National Archives of Thailand, (3) S R 0201.5.4/10 (Setting an Air-conditioning Machine at Chulalongkorn University)
[3] Ibid.
[4] Interview with M. R. Naengnoi Saksri by Chomchon Fusinpaiboon. 30 December 2011.
[5] Ibid.
[6] Ibid.
[7] Ibid.

Figure 27: A ceremony in Chulalongkorn University Auditorium in 1966. Note the renovation of walls by M. C. Vodhyakara Varavarn.[1]

[1] *Piyamaharachanuson (Anniversay of the Great King)* (Bangkok: Chulalongkorn University Club, 1966), p. 25.

National character in architecture after Chulalongkorn University Auditorium

The design process and its rationale of the auditorium at Chulalongkorn University marked a starting point for more serious concern over the national character of modern architecture in Thailand. The rector, Plaek Phibunsongkhram, became nationalist Prime Minister in December 1938. Amidst international tensions worldwide in the second half of the 1930s that were building up to World War II, Phibunsongkhram's government ran nationalist policies promoting the greatness of the nation. The idea of architecture as a tool to support the development and pride of the nation was increasingly encouraged, yet orientated towards propaganda rather than scholastic discourse. This continued throughout the war years.

However, as regards architecture with national character, the fact that no one seemed to be comparable to Phromphichit in design skill, and that the government was facing economic difficulty, prevented a large number of important buildings being designed in this manner, for it would have needed more designers and a greater budget.

Prime Minister Plaek Phibunsongkhram's idea of maintaining national culture in architecture became more crucial after Thailand allied itself with Japan during World War II in 1941, resulting in an exaggerated confidence (chapter 4.1). In this brief period, the Prime Minister perhaps believed it was more appropriate than before to incorporate the national character into the country's modern architecture. This idea was based on his belief that as long as the culture was in good condition (*Yang Yu Di*) the nation would be also in good condition.[1] Furthermore, letting Thais see good products of the nation would make them love the nation.[2] But above all, in this situation of high confidence, the explicit exhibition of national culture in architecture would strengthen the idea that the Thai nation had been powerful from the past until now, at a time when it no longer had to fear the western countries, whose progress was associated with modern buildings earlier adopted by Thailand.

[1] Bangkok, M. C. Vodhyakara Varavarn's Archive, Letter from Field Marshal Plaek Phibunsongkhram to M. C. Vodhyakara Varavarn Regarding Vernacular Cottages (1943), p. 2.
[2] Ibid.

The Prime Minister's command to maintain national culture in architecture became formally evident in his note dated June 12th 1943 to the Minister of the Interior stating that a principle directing Thais' houses to maintain the national culture by keeping 'in some sort of Thai style' (*Hai Mi Baeb Pen Thai Lue Wai Bang*) was to be issued, along with advice not to copy foreign styles as with the exhibition hall at Sanam Suapa that had copied Japan's Diet Parliament directly.[1] The Ministry, presumably through the contribution of Lom Burakamkowit who was its *Nai Chang Yai* (chief engineer/architect), then issued the 'Principle of building offices, commercial, and residential buildings', and passed it to the National Assembly of Culture, which would implement it further.[2] The principle for offices and commercial buildings stated:

> 1. [Buildings] must have roofs as they are suitable for the climate. 2. Must have Thai characteristics. Examples are buildings at the four corners of the Constitution Monument intersection and the proposed Bangkok Municipality which in their main structures are not Thai but in their important elements such as capitals, frieze [*Bua*] and cornice [*Lai Khad Yod Kampaeng*] are Thai.[3]

The principle for houses stated:

> Planning could be done in foreign ways but eaves, roofs, doors, and windows must follow Thai style. Roof ridges can be lower down, doors and windows are opened to outside, and the general character must be Thai.[4]

However, the authority foresaw difficulty in the case of houses, as the owners had their own tastes. It hoped that a house design competition organised by the Office of Artistic Culture (*Samnak Watthanatham Thang Sinlapakam*), the National Assembly of Culture in the National Day Exhibition 1943 would help provide a good example. Therefore the implementation of a rigid principle on houses was held back at this stage.[5]

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[1] Bangkok, National Archives of Thailand , (2) S R 0201.5/29 (House Construction of the Thais)
[2] Ibid., p. 18.
[3] Ibid.
[4] Ibid.
[5] Ibid.

After the war, the principles about national character in architecture initiated during the war were still found relevant by the authorities, and they were finally and extensively adopted in government buildings. In 1950, M. C. Samaichaloem Kridakorn wrote:

> If the government wants the Department of Fine Arts to build a building in a western manner but with Thai decoration, I need to supervise *Phanaek Baeb Plan* [plan designing section] to design a building in the western manner and ask *Phanaek Hatthasin* [handicrafts section] to design the decoration. After that the architects need to consider both designs and thoroughly combine and adapt them together.[1]

This shows the persisting principle in the working process within the Department of Fine Arts carried on since the pre-war time. It also reflects the persisting idea of the authority of national character for important buildings. What was probably not debated yet was the awkwardness and problems related to the design process and the use of Chulalongkorn University resulted in an adoption of such principle.

By the way, is it really Thai?

Returning to the auditorium of Chulalongkorn University, it could have been seen as a good example of modern architecture with national character or of Thai character by the authority in both pre- and post-war years. This was reiterated even by an important opponent, Saengarun who criticised its design for following the national character while forcing the modern function. But beyond the question of how the national character should be incorporated, and how its meaning was changed in the process of the incorporation, there is a crucial question that was not asked at the time. It is whether the Thai art, character, and style that the architects and master builders tried to incorporate in modern architecture were really Thai. As for the administrative building of Chulalongkorn University, the elder sister building occupying the site before the auditorium, Srisomphop Prakkamakun, a student enrolled in 1950, recalled his memory as a ten year old boy in 1938 that:

[1] *Ngan Sathapattayakam Khong Mom Chao Samaichaloem (Architecture of Mom Chao Samaichaloem),* 1–9.

> I had played in small canals near the university and had been thrilled and impressed by the administrative building with ancient Khmer style-*Naga* on the stairs and the ancient decoration on gables.[1]

So was it actually Thai or Khmer (ancient Cambodian)?[2] An answer lay partly in the argument that the auditorium was designed to match the administrative building, and it was designed *Tam Yang Khru* (following the teacher's work) in the form of the ordination hall at Wat Rachathiwat, which was also categorised by Nat Phothiprasat as Khmer style.[3] The administrative building was designed following models from Sukhothai and Sawankhalok, and had Khmer elements since the style of art in that era was mixed with those from Angkor. They were by no means pure Thai. Whether King Vajiravudh knew this is not clear, but he deliberately promoted the idea that it was Thai. Prince Damrong, an archeological connoisseur, must have known about it, but we have no record of his opinion on Healey's design when it was first completed. Two decades later, when Phothiprasat wrote the book *Architecture in Thailand*, he deliberately declared that they were Khmer rather than Thai.[4] It was not only modern architecture and the architecture aimed to exhibit Thai character that was hybridised, but the Thai character itself was hybridised from ancient time. It was only particular groups of the elite at particular times that claimed the hybridised stuff, both architecture and culture, to be genuine, in order to suit their own socio-political purposes.

All case studies examined so far have mainly covered the issue of modernity, tradition, and national character. They were buildings by and for the authorities, and can be regarded as the architecture built under 'officially mainstream' principles and ideas. The next chapter, also the last, responds to two points. First, it includes dwelling projects in which the ideology of the authority and the elite clashed with the everyday life of the people. Second, it deals with a particular type of construction method that entailed a particular type of buildings and architecture to address the issue of modernity, tradition, and national character in an alternative way. The last chapter looks at all the issues already discussed in order to reassess the arguments that have been made.

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[1] Srisomphop Prakkamakun, '*Aksonsat Thirak* (Beloved Faculty of Arts)' in *Chula 50 Pi (50th Anniversary Chulalongkorn University)* (Bangkok: Chulalongkorn University, 1967), p. 119.
[2] For an account about how Khmer architecture helped developing Siamese architecture from the fourteenth century onward see chapter 2.1
[3] Phothiprasat, *Sathapattayakam Nai Prathet Thai (Architecture in Thailand)*, p. 340.
[4] Ibid., p. 352.

5.5 Alternative modernity: Half-timbered buildings and architecture, 1929–53

All case studies examined so far have covered the quest for modernity, the persistence of tradition, and the construction of national character, in the production of and habitation in buildings and architecture. The buildings and architecture examined were built by the authorities under 'mainstream' principles, ideas, and methods. This last chapter of case studies deals with two main aspects. First, it includes dwelling projects where the ideology of the authority and the elite really clashed with the everyday life of the people. Second, it deals with a particular type of construction method introduced by M. C. Vodhyakara Varavarn at the end of the 1920s that entailed more projects, which still addressed the issues of modernity and national character in a particular way, and which still engaged with persisting traditions. While considering these works, this last chapter looks again at issues already discussed in order to reassess the arguments made so far, to re-examine the transplantation of the concept of architecture from Europe to Thailand — the modernisation of building culture in the country — with a particular type of construction.

Pre-war houses in Bangkok

To begin the first case study, M. C. Vodhyakara Varavarn's own house completed in 1929, and to give a background for other case studies of dwelling types built afterwards, an overall picture of houses in this period will be given first. By the end of the 1920s, houses of well-to-do urban middle or upper classes were generally built in masonry in much the same way as those built a decade earlier (chapter 2.2) but with less ornaments, smaller size, and more modernised construction such as reinforced concrete structure. Less-well-to-do middle classes might build their modern houses with timber. Even though fire was more of a threat to the latter type than the former, the practice of separating kitchen and servants' quarters from the main residence, commonly applied with traditional dwellings, was

still the norm for both of them.[1] Housing servants, who normally cooked for the boss, under the same roof was unusual.

Toilets using septic tanks became more popular from the end of the 1920s even though the government was suspicious about their hygienic quality.[2] This situation affected the business of On Weng Company which had collected excretion from houses in Bangkok for decades.[3]

The situation in rural areas was very different from that of the urban areas. Apart from a well-to-do minority, who normally lived in traditional houses constructed with hardwood, the houses of the majority must have been seen by Bangkok's educated elite as savage. Prince Sakol, General-Secretary of the Department of Public Health, described a tour in rural areas in 1927 for the audience of the 18th Rotary Dinner in Bangkok as follows:

> As they moved away from Bangkok they would observe the flimsy tumble-down, outwardly picturesque and inwardly narrow and close, wooden and bamboo and attap structures, both fluvial and terrestrial. They would observe people living against cattle and pigs, drawing water from sources they must themselves contaminate, and reflect that all this squalor must mean sickness and mortality.[4]

Carle C. Zimmerman reiterated this in his economic survey in Siam between 1930 and 1931, the first of its kind in the country. He described the dwelling of farmers in Rangsit field, the area north of Bangkok developed for a massive production of rice for export:

> Farmers were brought in haphazardly from all sections of Siam and settled on large farms, averaging about 100 Rai in many communes, without any village development. At present their houses are built along the banks of the canals, of the most flimsy materials and according to the crudest patterns.[5]

[1] Even though the Act of building construction control BE 2479 (1936) prohibited purely wooden houses to have a kitchen within the same roof, while allowing houses that were built with fire-proof materials to do so, the pre-war-masonry houses still widely separated kitchens from them.
[2] Bangkok, National Archives of Thailand, S R 0201.23/7 (Problems of Septic Tanks)
[3] Ibid.
[4] 'Our Bangkok Letter', *The Singapore Free Press and Mercantile Advertiser*, 25 June 1927, p. 8.
[5] Carle C. Zimmerman, *Siam Rural Economic Survey 1930–31* (Bangkok: White Lotus Press, 1999), p. 110.

He also noted the way cooking was normally conducted in Siam's rural dwellings:

> Another common defect of housing, from the health point of view, is the attention paid to smoke prevention. Cooking is done over the open fire in most cases. In spite of the fact that cooking is done out of doors during much of the dry season, it may be said that no country home is uncoated with smoke deposits if more than a year old. In spite of the minor attention paid to this matter, it is still believed that it is important. [For] the peasants of the southern United States [,] […] their houses are constructed about chimneys. […] They have a much less number of eye defects than those of Siam who live with a great deal of smoke in the room.[1]

After the establishment of the Siamese architectural profession and education in 1934, Siamese architects tried to engage in house design as part of their early projects to make their profession recognised by the public. In 1941, at the height of the nationalist movement under the nation-building campaign, M. C. Vodhyakara cited two old proverbs to highlight the duty of architects to design houses according to theory in order to deliver proper and comfortable houses for the Thai people in order to ensure the nation's progress.[2] The first one, which he saw as out-of-date, was 'to grow [build] a house is to follow the inhabitants' wish'. He argued that if the inhabitants had a 'simple' (*Ngai Ngai*) life, the houses that reflected the lifestyle would degenerate the nation's culture.

The second one, which he appreciated, was 'to grow [build] a house wrongly, he/she [the owner] would worry until it collapsed'.[3] In order to achieve the goal and prevent the flaw, architects tried to persuade the public that they should be hired to design and supervise the construction of their houses. However, it was unsurprising that the only people who would hire architects to design their houses were well-to-do people, while normal middle classes depended on builders who built designs from catalogues. House designs were also published in popular magazines, such as *Chiwit Thai (Thai Life)*, under the heading of '*Baeb Ban Thansamai* [Up-to-date house designs]'.[4]

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[1] Ibid.
[2] *Pluk Ban Phid Kid Chon Ban Thalai (Building a House Wrongly, the Owner Will Be Upset until It Collapse).*
[3] Ibid.
[4] For example, see Wutthikon, '*Baeb Ban Thansamai* (Up-to-Date House Designs)', *Chiwit Thai*, 4 (1941), 15.

Figure 5.5.1: Examples of houses designed by architects and constructed properly in the 'nation building' era as published in the memorial book for the funeral of Unchit Wasuwat, an architectural student, in 1941[1]

[1] *Pluk Ban Phid Kid Chon Ban Thalai (Building a House Wrongly, the Owner Will Be Upset until It Collapse).*

Figure 5.5.2: A design of a 'modern (up-to-date)' house published in a popular magazine *Chiwit Thai (Thai Life) in 1941*[1]

[1] Wutthikon, '*Baeb Ban Thansamai* (Up-to-Date House Designs)'.

However, the process and ritual of engaging with the design and inhabitation of the houses, no matter whether they were designed by architects or belonging to lower, middle, or upper class, and whether located in rural or urban locations, still involved indigenous practices. Accordingly, inhabitants' perception of their houses and how they should be built and inhabited is also worth examining. There is a description of a construction process of a house owned by a young military official at the first half of the 1930s. Colonel Saeng Chulacharit wrote a tribute for General Charun Rattanakun Seriroengrit in the memorial book for his funeral, describing how the general's wife had supported his family to build their first house.

> I married in BE 2477 [1934–35]. [...] Khunying [Madam] Oeb showed her benevolence to officers under her husband's command by selling them plots of land to be paid by instalments. [...] The lands were levelled and fenced, houses to be built later on. [...] She bought a piece of land and built *Soi* [a small road] through it and named it Soi Santisewi. She divided the land into plots, each plot was 1 Rai. [...] After filling my plot by a reasonable-priced contractor she let us choose a house from a catalogue and then hired a draughtsman to draw the construction drawing, specifying dimensions of timber to be used for the structure of the 10m x 8m two-storey-house and kitchen. [...] She managed to get an auspicious day for erecting *Sao Ek* [the main column] and came over to the site that day to accurately direct the ceremony for us. [...] For asbestos cement sheets for roofing she asked my wife to choose the colour she wanted. My wife chose green. Then Madam said green was good as it symbolised peacefulness and she would pay for it. [...] Once the house was completed, she asked my wife whether she preferred furniture for reception or a Buddhist altar room, my wife chose the altar, as so far we had put our Buddhist images on the top of cupboard containing medicines and stuffs. She gave us an altar and asked us to locate the Buddha images properly in a room upstairs suitable for being a Buddhist altar room in which the main Buddha image could face east. [...] Bosses at that period tended to give 'high stuff' to subordinates such as roofs for protecting them

from heat, coldness, dampness, and wet, symbolysing peacefulness, and they gave the altar.[1]

Domestic rituals to ensure auspiciousness were also still practised. H. G. Quaritch Wales observed that *Ngan Khuen Ban Mai* (Cerebrating the new house) in the second half of the 1920s was normally held after marriage. It was also held in the royal palace after the coronation of King Prajadhipok where it was known as *Chalong Phra Monthian* (Celebrating the royal hall). The popular ceremony was purely Buddhist. But there were Brahmanic ceremonies for the palace as follows:

> At 6pm. On 25 Febuary the Brahmans also performed a *Viandian* rite, as a protection to the Chief Residence. All this having been accomplished, the King and Queen made their way to the State Bedchamber in the Cakrabartibiman section, attended by young ladies of the Royal Family bearing the following articles of personal and domestic use, and presumably the relics of former magical rites: - the cat (signifying domesticity), the grinding stone (Firmness), the gherkin (cool, therefore Happiness), and grains, peas, and sesamum (Prosperity and Fertility); and an image of Buddha was first carried into the residence, signifying the household religion. The Queen Aunts, Savang Vadhana, and Sukhumal, as senior relatives of the King, handed him a whisk of white elephant's tail, and a golden brunch of Areca flowers, and then a senior Dame of the palace handed a golden key to the king, symbolic of the fact that he was now entrusted with the Royal Residence and the private treasure therein. Finally the king lay down formally on the royal couch and received a blessing from the two Queen Aunts.[2]

It could be seen that indigenous perception and practices relating to dwelling still lingered within new forms of houses and the way they were designed, built, and inhabited. In many cases these explicitly affected the physical features of the houses while in other cases they did not. Indeed, the degrees of their effects varied case by case, and the way to justify them will be examined later in case studies.

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[1] *Anuson Ngan Phra Ratchatan Ploengsop Phonek Charun Rattaakun Seriroengrit (Memorial for the Funeral of General Charoon Rattanakun Seriroengrit)* (Bangkok: Adison Press Products, 1983), pp. 11–14.

[2] Wales, *Siamese State Ceremonies: Their History and Function*, p. 119.

Pre-war housing development

Apart from private houses, housing developments existed but were far from a common choice for middle-income people by the 1950s. Initially, as early as the end of 1920s, they were built by large organisations such as State Railways, for their staff from high rank to low rank. As regards how differences between houses of urban and rural people were described, it is interesting that the standard designs of Chitlada Estate, designed by M. C. Vodhyakara for the State Railways Authority, demonstrated different lifestyles for staff from different ranks and different social classes in the way they inhabited domestic space. While high ranking staff lived in larger houses with separate rooms similar to western style houses, low ranking staff, mostly workers, lived in smaller houses normally comprising one room for a family and *Rabiang* (gallery), and *Tai Thun* (space below the elevated main floor), an organisation similar to that of the traditional house.[1] This affected the spatial practice of the inhabitants, who continued the indigenous way of dwelling in multipurpose spaces. Once the families expanded, they enclosed some spaces in order to make more rooms. The houses still grew, just as traditional houses had done. But the ways they grew had changed. Instead of adding new rooms connecting with the existing ones by a deck or a gallery, the existing deck or the space underneath was enclosed. This was because there was not enough space to expand the house and living on the ground floor was not considered inauspicious anymore.

The houses were arranged by modern planning, grouped within a grid of pedestrianised streets. Water taps were provided at the intersections of streets among the houses for limited consumption, while bathing took place in a nearby canal.[2] In addition, there were two separate toilets for each two units on the ground floor in front of the houses, from which the Chinese staff of a waste management company took out the faeces everyday. The arrangement of the houses conformed to the practical guidelines defined by the zoning, the grid of streets, and the facility management, i.e. water supply and toilets, rather than the traditional orientation that

[1] Thawon Bunyakiat, '*Ngan Sathapattayakam Thi Kiewkab Rotfai* (Railway Architecture)' in *60 Pi Kanrotfai Haeng Prathet Thai 2439–2500 (60th Anniversary of State Railway of Thailand 1897–1957)* (Bangkok: State Railway of Thailand, 1957), pp. 84–86.

[2] Mari Tanaka, Yukiyo Kikuchi, and Shuji Funo, 'Transition of Row Houses at Chitlada State Railway of Thailand Housing Site in Bangkok Multipurpose Space Such as Taithun (Underneath) and Chan (Terrace)', *Journal of Asian Architecture and Building Engineering*, 1 (2002), 271–279 (p.274).

had conformed to auspiciousness and taboos. For example, there were a number of stairs placed in the east-west direction. This would have been unacceptable in traditional practice.

Last but not least, the construction materials and method used in these houses were modern, not traditional. The architect employed hipped roofs not steep gabled roofs, cement tiles not terracotta or Nipa leaves, walls built by wooden planks on wooden frames not *Fah Pakon* (traditional type of wall built by assembling small wood panels in wood frames) or bamboo wall, reinforced concrete ground-floor columns not wooden columns. This implied much about the idea of durability, which had not been a main concern for the traditional dwelling culture.

In sum, this workmen's housing showed the integration of the traditional spatial articulation with scientific modern site-planning, construction and material use. Here, the traditional spaces of each unit were sheltered by a modern skin, built by a modern construction method and materials, and arranged in a modern pattern.

On 31 May 1939, the Ministry of the Interior created the National Housing Committee, following the League of Nations' aim at exchanging knowledge and cooperation among countries regarding housing construction, house hygiene, urban zoning, and building standards.[1] The ministry saw it as necessary and appropriate as the country was progressing but was still very backward in construction, urban planning, and hygiene.[2] The committee included representatives from the Department of Public Health, Municipality Works, Commerce, Public Instruction, Defense, including Phra Sarot Rattananimman (Sarot Sukkhayang, as the Head of Architecture Division, Fine Arts Department) and Luang Burakamkowit (as urban planning expert from Bangkok Municipality).[3]

A low-cost housing act had been issued in 1942, but the war prevented its realisation until 1948. Projects for low to middle-income people reached a peak from 1953 to 1954, resulting in housing developments in the outskirts of Bangkok.[4]

[1] National Archives of Thailand, (2) S R 0201.21/42, p. 3.
[2] Ibid.
[3] Ibid., 11.
[4] Kobkua Suwannathat-Pian, *Thailand's Durable Premier: Phibun through Three Decades, 1932–1957*, p. 150. For housing developments; Phibunwet, Phibunprachasan, and Phibunwatthana, see

Figure 5.5.3: Master plan of Chitlada Estate, dated 1936[1]

Anan Phibunsongkhram, *Chomphon Po Phibunsongkhram (Field Marshall P. Phibunsongkhram)* (Bangkok: Sunkanphim, 1976), p. 3.

[1] State Railway of Thailand

A Tudor house in Bangkok: 42 Soi Tonson (1929)[1]

The first case study of half-timbered buildings is M. C. Vodhyakara Varavarn's own house. On returning to Siam, M. C. Vodhyakara Varavarn worked as an architect in the Royal Railway Department, which took him to many provinces to supervise the department's construction sites. It also provided him with an opportunity to observe what he considered as the hardship of rural life, especially, from his point of view, its impermanent and unhygienic domestic buildings resulting from the rural people's lack of access to modern materials and technology.[2] As a result, he spent his free time doing an experiment with common local materials intended to benefit the economy and advance permanent construction.[3]

It was on this occasion that he found an advantageous relation between a construction method — half-timbered construction — he had learnt from Britain, and local conditions in Siam. Therefore, he undertook the first experiment in half-timbered construction for his own house. The house was initially leased to foreigners and subsequently used by his family. It should be noted here that M. C. Vodhyakara was married in 1937 to Miss Chittra Panyarachun, daughter of Phraya Prichanusat (Soen Panyarachun), the previous under-secretary at the Ministry of Education and later a prominent newspaper businessman. M. C. Vodhyakara later designed a number of residences for his relatives, including one for his father-in-law that provides a later case study in this chapter.

The experimental house was built in 1929 and located at 42 Soi Tonson, then a Bangkok suburb. It was called by the architect 'Tudor style'. M. C. Vodhyakara had been impressed not only by its cosy character and compact function, but also by the fact that it allowed him to experiment with a construction method involving local materials, which, he thought, was necessary for contemporary Siamese dwelling. However, it not only confirmed the ideas and knowledge he had gained from Britain but also revealed a local rationale behind the building of a western-style house.

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[1] This case study has been edited from Chomchon Fusinpaiboon, 'A Tudor House in Bangkok: HSH Prince Vodhyakara Varavarn's House at 42 Soi Tonson', *Nakhara: Journal of Environmental Design and Planning*, 7 (2011), 73–88.
[2] *Works of Mom Chao Vodhyakara Varavarn 1900–1981*, p. 7.
[3] Ibid.

Figure 5.5.4: House at 42 Soi Tonson, Bangkok. Date taken unknown, possibly in its early years[1]

[1] M . C. Vodhyakara Varavarn's Archive

In his lecture note, *Ban (House)*, submitted to the Department of Advertisement as an announcement for his lecture broadcast in the state radio in 1942, he used this house as an example of a Tudor house, describing its origin as influenced by the Gothic church. He concluded the introduction of his lecture with a section on the origin of house forms — both English and Thai, claiming that each had been adapted from religious building forms.[1] M. C. Vodhyakara adopted the Puginian rationale describing that the use of such adapted forms not only reminded inhabitants of the moral quality of religion, but also proved their functional and objective suitability for domestic building. He then put forward an argument that this rationale emphasised the role of religions in conveying logical, ethical, traditional, as well as artistic and scientific aspects to domestic life. After that, he pointed out the composition of contemporary domestic architecture that comprised function, safety, and aesthetics within livable space and sound construction, reasonable cost compared to its value, sufficient appliances and furniture — suitable for the owners' status, adequate to the size of the plot, and the civilised inhabitants.[2] Putting all these components together, he argued that architects needed no experimentation but rather could adapt forms of architecture from the past which had been widely accepted.[3]

Adapting old architecture, he clarified, did not mean a mere copy, but an improvement to suit contemporary materials and construction. This argument seems to be highlighted well by his house design at 42 Soi Tonson. The house, by the definition of the architect, is therefore not a mere copy of Tudor house, but an adaptation of the architecture of the past to suit contemporary conditions.

The location of the house was on Soi Tonson, a small road off the main road, Thanon Ploenchit, that had been built for the extension of Bangkok to the east decades earlier. The quiet road, lined on one side with pine trees and a small canal, was in a suburban neighborhood occupied by Bangkok's elite.

[1] Bangkok, M. C. Vodhyakara Varavarn's Archive, *Ban* (House): A Note Submitted to Department of Advertisement as a Proceeding of M. C. VodhyakaraVaravarn's Lecture Broadcast in the State Radio on 1 December 1942 (1942), p. 1.
[2] Ibid., p. 2.
[3] Ibid., p. 3.

Figure 5.5.5. M. C. Vodhyakara's sketches depicting the forms of Thai domestic architecture and how they derived from Thai religious architecture, also the similarity between a Tudor house and a Thai house in terms of their forms and structures, and the rationale behind them.[1]

[1] Bangkok, M. C. Vodhyakara Varavarn's Archive, *Ban* (House): A Note Submitted to Department of Advertisement as a Proceeding of M. C. VodhyakaraVaravarn's Lecture Broadcast in the State Radio on 1 December 1942 (1942), p. 3.

The Tudor or half-timbered house discussed here was the second one on the plot — subsequently also occupied by two other houses. It was built at the northeast corner of the plot, entered by a drive from the entrance gate to the east, the front of the house being equipped with a porch facing south into the garden. The garage had a separate gate at the rear, also in the east, connected directly to the road and service area.

Despite its western appearance, there is a feature carefully placed in the layout that shows persistence of traditional practice. It lies at the east side of the garden and consists of a traditional spirit house. The Thai spirit house is a miniature house devoted to the 'spirit of the property' on which the house is located. By routinely praying and making offerings to the spirit, the household is ensured of auspiciousness while living on the premises. The location chosen and the time of erecting the spirit house have to be carefully conducted according to traditional principles. Despite the fact that M. C. Vodhyakara described this practice as one of 'superstitious' practices in architecture that was a small additional burden in design and construction, he saw that such a belief might be an advantage and that it was actually not harmful.[1] He evidently took this practice seriously for his house by choosing the spirit-house location at the east, where the house's shadow was not cast, and by hiring royal astrologers to calculate the auspicious time of erection and execution.[2]

The house has two main storeys with level changes in the floor levels, and a basement. There was a porch, foyer, living room, dining room, and pantry on the ground floor, with a garage, kitchen, and maid's quarters at the rear. On the upper floors, there was a study room, master bedroom, small bedroom, bathroom, and balcony. The basement had voids for ventilation so it was once used for incubating eggs.[3]

[1] Bangkok, M. C. Vodhyakara Varavarn's Archive, *Chok Lang Tang Sathapattayakam* (Architectural Superstition), Part of *Kwam Mai Khong Watsadu Lae Kan Okbaeb Sathapattayakam* (Meanings of Materials and Architectural Design) (1964)
[2] Interview with M. R. Chanvudhi Varavarn by Chomchon Fusinpaiboon, 5 January 2011.
[3] Ibid.

Figure 5.5.6: The house at 42 Soi Tonson, the view from its garden.[1] The house faces south.

Figure 5.5.7: The spirit-house at the southeast corner of the garden of 42 Soi Tonson[2]

[1] Saowalak Pongsatha Posayananda and Wasu Posyananda, *174 Moradok Sathapattayakam Na Iprathet Thai: 20 Pi Rangwan Anurak Di Den 2525–2545 (174 Architectural Heritage in Thailand: 20 Years of Architectural Conservation Award 1982–2002)* ed. by Pongkhwan Sukkhawatthana Lasus (Bangkok: The Association of Siamese Architects, 2004).
[2] Photo by Chomchon Fusinpaiboon

Figure 5.5.8: M. C. Vodhyakara's satirical sketch in the chapter 'The Architectural Superstition' in the draft of Meanings of materials and architectural design[1]

[1] Bangkok, M. C. Vodhyakara Varavarn's Archive, *Chok Lang Tang Sathapattayakam* (Architectural Superstition), Part of *Kwam Mai Khong Watsadu Lae Kan Okbaeb Sathapattayakam* (Meanings of Materials and Architectural Design) (1964)

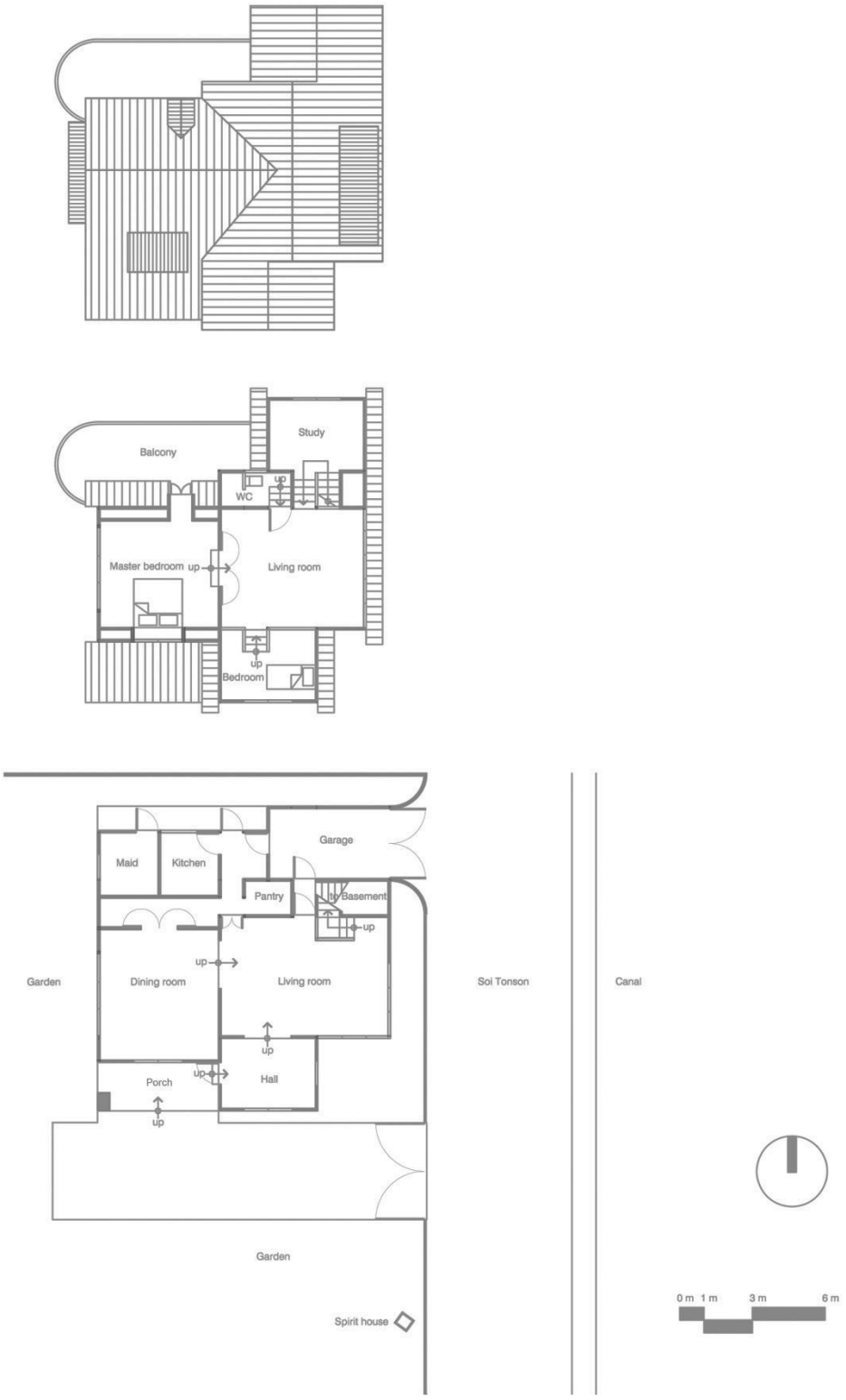

Figure 5.5.9. Reconstructed plans of 42 Soi Tonson in its original design from a survey and an interview with M. R. Chanvudhi Varavarn[1]

[1] Drawing by Chomchon Fusinpaiboon

By analysing the house's plans, the interaction between modern planning and traditional principles is further revealed. In the living quarters of the ground floor, there are no doors between foyer, living room, and dining room. They are connected by large openings in the walls and, at the same time, separated by steps of level, mostly of one step each, as with traditional Thai houses where they are hierarchically significant.

The rooms' sizes, dimensions, and proportions are defined by the 1-metre module, creating uniformity of fenestration and in walls' and ceilings' assembly patterns. The entrance was through the porch, where the first threshold of the house — the steps — led one through the door into the hall. When the owner used this house, the hall was the place for business discussions and unfamiliar guests. Without doors as mentioned, one steps over the next threshold, a 12.5-centimetre change of floor level, to arrive in the living area. The 12.5-centimetre change shows an effective use of the processed timber. The processed timber in Siam and Thailand has had its section measured in inches. The living room here was finished by 1"x4" hard timber flooring, therefore the step change from the foyer to the living room was defined by the dimension of two wood planks — one vertically erected to form the change of the step from the foyer, another horizontally placed on the erected one and continuing the same level as the floor of the living room. Hence, the step change is 4"+1"= 5" = 12.5 centimetres. The living room is the largest and the most airy room in the house with the highest ceiling. Towards the west, one steps through a further threshold, this time a 12.5cm step down, to the dining room. All these rooms have windows on two sides, where daylight could come in, and summer breeze could flow through in a southwest to northeast direction, winter breeze the other way round.

The stairs leading to the upper floors go through a void in the living room wall. They are hidden behind partitions. At the first landing of the stairs, the position of the void, there is a wooden rolling door which can be rolled down to shut the void at night for more security. Continuing up the stairs, one reaches the next level. It can be perceived as either a large landing or a small room. It was here that M. C. Vodhyakara located his study room. From this space, one turns around to the left, continues up another flight of the stairs, and reaches the upper family room.

Figure 5.5.10: A present view toward the living room of 42 Soi Tonson with the descending hall on the right and the stairs to the upper floors behind the partition on the left.[1]

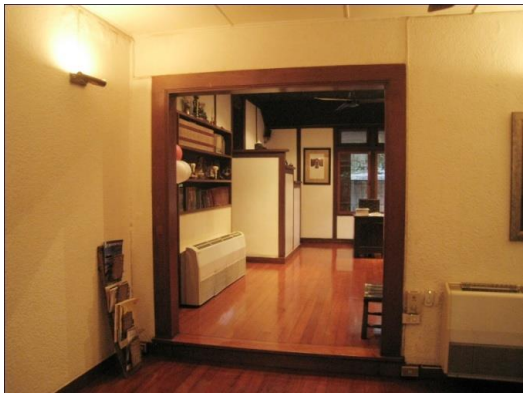

Figure 5.5.11 (left): The present view from the dining room of 42 Soi Tonson towards the living room through the void with one-step change[2]

Figure 5.5.12 (right): The present view from the living room of 42 Soi Tonson towards the dining room[3]

[1] Photo by Chomchon Fusinpaiboon
[2] Ibid.
[3] Ibid.

Before discussing the rooms upstairs, it is worth mentioning another aspect of the architect's recognition of, and response to, traditional practices in dwelling. This can be found in the design of the many flights of stairs mentioned. It should be noted that those stairs have both odd and even numbered steps and a left-turn at one flight. These designs matter, opposing the Thai traditional practice that indicates the preference of 'odd numbered steps' and the right-turn. Odd numbered steps are believed to be suitable for humans whereas even numbered steps are for ghosts. It is apparent that M. C. Vodhyakara recognised these practices but, unlike the practice of erecting a spirit house, he did not follow them. He disdained these practices by substituting rational assumptions. First, he pointed out that the principle of having 'odd-numbered steps' was not clear as it depended on whether one counted risers or treads.[1] Second, he suggested that the principle of having right-turn flights was because normal people were right-handed so it was more practical to use their right hand to control their movement up the stairs. His argument about the stairs, therefore, shows an aspect of his design philosophy that did not conform to traditional practice.

Going back to the rooms upstairs, their positions are literally above the rooms downstairs, therefore the proportions are approximately the same as those downstairs. However, the fact that rooms upstairs are covered by the steep roof, with parts opening to the outside with dormer windows, makes them relatively more compact and cosy than the rooms underneath. Built-in furniture, such as cabinets and shelves, was fitted in under-roof-spaces at the edges of rooms, thus no spaces were left wasted.

To start with the upper family room, it was not only the most private communal area in this house but also the hall connecting two bedrooms. The first one was the small bedroom for his son, Mom Ratchawong Chanvudhi Varavarn. This was not actually an enclosed room, but a space descending from the family room by steps through an opening. Its location was above the foyer downstairs. The fact that it was set lower than the family room level makes the foyer's ceiling lower. The ceiling of this bedroom is gabled, also lower than the flat ceiling of the

[1] Bangkok, M. C. Vodhyakara Varavarn's Archive, *Chok Lang Tang Sathapattayakam* (Architectural Superstition), Part of *Kwam Mai Khong Watsadu Lae Kan Okbaeb Sathapattayakam* (Meanings of Materials and Architectural Design) (1964)

family room. The heights of the ceilings also reflect the sizes and heights of the external gable roofs.

The master bedroom is at the West side of the house. Its level descends from the family room's at its wooden double-hinged doors, with an added plank to increase height. The master bedroom lies under a big roof. It has windows at the west, in the gable, and a dormer to the south. There is a door leading to the balcony on the north side. In explaining the bedrooms, it is worth pointing out another response of M. C. Vodhyakara's design to traditional practice. He recognised the taboo against positioning one's head towards the west in bedrooms, regarding it as the direction of the dead. In his house's bedrooms, there was no bed with its head toward the west wall. However, he chose to explain scientifically the reason why one should not put one's head toward the west wall, claiming it was because the wall was heated by the strong afternoon sun, therefore it was better to put the head towards another wall.[1] Therefore, on this point, M. C. Vodhyakara did not reject traditional practice, but appropriated it with a scientific explanation.

The analysis of the planning already shows several aspects of the architect's responses to modern and traditional practice in his design. Now the use of materials and the construction method will be analysed.

Judging from its characteristics, the house seems to have been built to a timber-frame construction generally used in English vernacular houses. Even though there is no explicit evidence to confirm that M. C. Vodhyakara was equipped with practical knowledge of this construction from Cambridge, one can assume that he must have learnt about its history and theory in lectures, and must have been familiar with this kind of building in Cambridge and other places in Britain, and also possibly learnt its construction method from contemporary texts. However, judging this western-styled building's construction method only by assumptions from its appearance might lead one to a faulty understanding of modern architecture in this non-western country.

[1] Ibid.

Figure 5.5.13 (left): The present view from the study room toward the upper-living room of 42 Soi Tonson [1]

Figure 5.5.14 (right): The present view of the bedroom of 42 Soi Tonson. The direction of the head points toward south[2]

[1] Posayananda and Posyananda, *174 Moradok Sathapattayakam Na Iprathet Thai: 20 Pi Rangwan Anurak Di Den 2525–2545 (174 Architectural Heritage in Thailand: 20 Years of Architectural Conservation Award 1982–2002)*, p. 75.
[2] Ibid.

The construction method is by no means timber-frame. On contrary, the main structure is more like a wooden post and lintel system — the contemporary method generally applied to both timber and reinforced concrete structures for contemporary houses in Siam. It is also like the system used in the traditional Thai house, despite different style (see M. C. Vodhyakara's comparison between the Thai house and Tudor house again in Figure 5.5.5). It is different from timber-frame in the ways it distributes loads from the roof and upper floors to the foundations. In timber-frame buildings, the structure is the frames formed by the posts, studs, and/or girts of the walls. In other words, the frames are load-bearing walls.[1] They could be assembled by either building each one on the ground then erecting them, or by building the main posts first then inserting the frames.[2]

On the other hand, building by post and lintel system required an erection of the main posts and beams before building the non-load bearing walls. This house is the latter case; its main structure is large members of wooden posts and beams, whereas smaller members of wooden stud and girt form the non-load bearing wall structure. This is obviously different from what would have happened if the house was built by the timber-frame technique used in English vernacular houses, whose studs and girts' sections were generally as large as that of the posts. Here, the studs and girts' section is smaller than that of the main posts.

Nevertheless, a similarity between the construction method of this house and that of the English vernacular and the Arts and Crafts is found in the infill of the walls. The solid walls were built by filling the voids in-between the frames with bamboo laths and plaster.[3] This method, M. C. Vodhyakara claimed, makes the house cooler than building with wood.[4] Furthermore, it was cheaper than building the house with reinforced concrete structure and brick walls; the main point was that the latter required steel which was more expensive than wood in Siam. However, the character of the house, for contemporary Siamese, looked as if built in masonry and obviously not in wood. This was a significant feature that portrayed the

[1] R. W. Brunskill, *Vernacular Architecture: An Illustrated Handbook*, 4th edn (London: Faber, 2000), p. 55.
[2] Ibid., 54; Trudy West, *The Timber-Frame House in England* (Architectural Book Publising: David & Charles, 1971), p. 60.
[3] Bangkok, M. C. Vodhyakara Varavarn's Archive, *Prawat Lae Singkhonkhwa Doi Yo* (Profile and Research in Brief, p. 6.
[4] Ibid., p. 2.

owner's social and economic status in contemporary Siam — at a time when the Siamese saw modern masonry building as superior to that built by bamboo and timber.[1]

As a result, M. C. Vodhyakara later promoted this construction method as a proper means for building a house which was durable, cost-saving, and able to respond to the owner's aspiration of having a masonry house, in order to show his or her social status. Another custom-made feature of the house was roof tiles. The architect produced his own house's roof tiles on site, using cement mixed with sand — both of them basic materials easily acquired locally.[2]

In conclusion, his own house at 42 Soi Tonson portrays M. C. Vodhyakara's exploitation of the knowledge freshly gained from the West, that he found relevant to the local situation and his own requirements. He selected, applied, and reinterpreted western style, spatial organisation, and construction to the local context, but within this process underlay a complex mediation between modernity and tradition.

M. C. Vodhyakara tried to appropriate the traditional belief through a scientific explanation that he found relevant. In other words, he still practised it but also tried to clarify it with a scientific rationale. However, he still conducted some traditional practices that were not possible to explain scientifically, yet were not a burden to his modern design. Therefore, M. C. Vodhyakara's different responses to the traditional beliefs from the spirit house to the stairs went beyond what Lefebvre calls 'the law of the transformation of the irrational' in that, despite their persistence, traditional practices which had coexisted intensely with human life were explained in terms of rationalism, but otherwise were not taken seriously, in the modern age.[3]

The design process and the house at 42 Soi Tonson were therefore the outcome of the 'selection' and 'application' of western ideas and practices and the 'reinterpretation' of them to the local and traditional context, and vice versa. And once M. C. Vodhyakara had succeeded in his experimentation, he wanted to distribute this method to the public.

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[1] *Works of Mom Chao Vodhyakara Varavarn 1900–1981*, p. 45.
[2] Tiptus, Tiptus, *Sathapanik Siam: Puen Than Bot Bat Pon Ngan Lae Naew Kid (Po So 2475–2537) [Siamese Architects: Foundation, Roles, Works, and Concepts (AD 1932–1990)*, p. 730.
[3] Henri Lefebvre, *Critique of Everyday Life* (London: Verso, 1991), pp. 117, 23.

Native Cottages at the National Day Exhibition 1943

M. C. Vodhyakara Varavarn did exploit several construction methods including reinforced concrete and timber construction, both of which had been popular in contemporary Siam, in his public and dwelling projects in the first fifteen years of his career. But it was his experiment with half-timbered construction that was relatively new and therefore considered inventive in the country. Before World War II, he only experimented with it in the construction of his own house at 42 Soi Tonson, discussed in the last section of this chapter, and some of his friends' projects. This section will discuss the exhibition *Krathom Puenmueng* or 'Native Cottages' in the National Day Exhibition in 1943, an event that allowed M. C. Vodhyakara to exhibit his experiment publicly for the first time. Given that it was held during World War II, when Thailand was experiencing the height of nationalism and economic hardship, this discussion will demonstrate how the exhibition was timely and how far half-timbered construction could go beyond the original English vernacular or Arts and Crafts version that the architect had learnt in Europe.

The timeliness of the introduction of half-timbered construction by M. C. Vodhyakara Varavarn to the public in 1943 was much related to the use of steel, mainly in the form of bars for concrete reinforcement, in contemporary construction. It is worth pointing out that for the construction of prestigious projects, promoted by the state's nationalist campaign, examined in previous chapters, all steel was imported and expensive. As for the importation, the construction of the Court and Ministry of Justice, recorded in the book, *The 100th Anniversary of the Ministry of Justice*, implies a particular design and construction process related to the importation of steel that was a time consuming affair.[1] According to the record, the immediate next step following the design was a bid for purchasing steel made on 21 September 1939. The architects then finished the construction drawings and cost estimates of the first phase on 2 January 1940. This shows that the steel needed to be purchased even before the completion of the construction drawings. As for the high cost, the further description of the project in the book regarding the overall cost of construction clarifies that the steel cost was 71,828.46 baht out of an overall construction cost of 221,679.43 baht, while other items cost 8,906.60 baht.

[1] *100 Pi Krasuang Yuttitham (100th Anniversary of Ministry of Justice)* (Bangkok: Ministry of Justice, 1992), pp. 24–35.

Therefore, the steel cost almost one-third of the overall cost and was entered separately in the categorisation of costs.

The redevelopment of Ratchadamnoen Boulevard, previously discussed, also involved great expense in purchasing steel. The project was completed and opened on the National Day 1941 at a total cost of 2,396,000 baht, of which 550,000 baht was for imported steel bars, almost a fifth.[1]

For residential projects, more and more Thais, either by their own consent or by the command of the government, sought to live in a decent home, but this aspiration was obstructed by the malfunctioning economy due to the war, and the high cost of importing steel.

Accordingly, M. C. Vodhyakara's Native Cottages not only supported the regime's nationalist campaign and the local people's aspirations, but also responded to the difficult economic situation. To elaborate, the exhibition will be examined from two perspectives — its relation to local people's aspiration to have decent houses, which was echoed in the government's nationalist campaign, and its planning and construction in relation to the difficult economic situation.

Firstly, the local people's aspiration of having decent homes will be discussed. This aspiration falls into two categories — the one imposed by the government on the majority, especially the underprivileged who were seen by the elite as living in poverty; and the other involving the people's own consent, especially that of the middle class. For the first category, the thinking that brought M. C. Vodhyakara's experiment with half-timbered construction to the fore was first and foremost the shared attitude of his and other Thai elites. It was the perception that most of the population lacked the opportunity to live in durable and hygienic houses. Especially for the nationalist government, led by Plaek Phibunsongkhram, it was necessary that the population should give up living in bamboo houses, which he saw as unhygienic and not durable, in order to elevate their quality of life.

[1] National Archives of Thailand, (2) S R 0201.69/30, p. 46.

Figure 5.5.15: A perspective drawing of a Native cottage by M. C. Vodhyakara Varavarn for the National Day Exhibition 1943[1]

[1] M. C. Vodhyakara Varavarn's Archive

The government's campaign started in 1939, when it encouraged provincial mayors to help citizens to build hardwood houses. By doing this it both encouraged the re-introduction of the traditional practice of *Ao Raeng* — cooperation within communities to help the house owners build such houses without hiring builders — and set up provincial carpenters' schools to support those who wished to hire the graduates. The government also amended the restriction on cutting hardwood from forests, intending that its citizens could exploit them more easily.[1] A year later, it seemed satisfied by the overall response to the campaign.[2] Hardwood houses were being built throughout the country. In the three provinces where the greatest number of such houses were erected there were over eight thousand.

However, the slowdown in the economy, especially the import of steel, during World War II affected not only reinforced concrete construction of the post and lintel system in general buildings, but also wooden house construction, in which nails and steel were needed for the walls, and reinforced concrete for the foundations. As a result, M. C. Vodhyakara championed construction methods in which steel was avoided, such as masonry through arches and stepped footings; and half-timbering — stating that it was timely for the country to consider them.[3] So he found in half-timbered construction a solution for dwelling projects, which could helped the development campaign to continue. Apart from the massive reduction in the use of steel, he recommended this construction method also for reducing the use of oil paint for wood, the amount of wood itself, and also the labour costs, all of which would increase in purely wooden construction.

As regards the local people's aspiration for decent homes, M. C. Vodhyakara's half-timbered construction was also seen as a good alternative. For well-to-do Thai families, living in houses built in masonry dignified their status more than living in hardwood houses. This idea, as described in previous chapters, had originated decades earlier, when the western style house had become popular. An example of the persistence of this idea even after the period under scrutiny can be

[1] '*Anuyat Hai Ratsadon Tad Mai Prapet Huang Ham Ma Chai Nai Kan Pluksang Banruen Doi Mai Tong Sia Khaphakluang Dai Saduak Khun* (The Permission to Use Restricted Hardwoods for Citizen's House Building)', *Khao Khosanakan* , 10 (1939), 119–20.
[2] '*Chomchuei Kan Pluk Sang Banruen Fakradan* (The Commendation for Hardwood House Building)', *Khao Khosanakan*, 5 (1941), 1312.
[3] Bangkok, M. C. Vodhyakara Varavarn's Archive, *Kan Sang Mai Chai Lhek* (Construction without Steel)

seen in the memoir of Puay Ungpakorn, the honest governor of the Bank of Thailand at the beginning of the 1960s. Knowing that Ungpakorn had been living in a small *Ruen Mai* (wooden house), the Prime Minister of the time, Field Marshal Sarit Thanarat, the corrupt dictator who promoted industrial and economic development in Thailand based on the American model and support, offered to reward his intelligent service with a proper *Ban Tuek* (masonry house), disdaining his existing house as 'uncomfortable'.[1] Ungpakorn, who had been perfectly happy in his hygienic wooden house, refused the offer, with the excuse that his wife was accustomed to living in a wooden house and could not live in a masonry one.

Despite the fact that they were not built with masonry, half-timbered houses responded to the well-to-do Thai's fondness for masonry houses very effectively. As M. C. Vodhyakara proposed, they looked more like *Tuek* (masonry buildings) rather than *Ruen Mai* (wooden houses). Moreover, he claimed that they did not merely look like masonry buildings but seemed more pleasurable because of the visible frames on their walls, making them therefore more suitable for residential projects.

The relation of half-timbered construction, exhibited in the Native Cottages, to local people's aspiration to have decent houses has been discussed. Now its planning and construction in relation to the difficult economic situation will be examined. Firstly, the planning of the cottages responded to the demands of the situation by its compactness and spatial articulation. Furthermore, it also showed M. C. Vodhyakara's integration of modern and traditional practice in planning, as discussed earlier in the case of his own house.

The planning of both cottages was the same. They were one-storey cottages sitting on a 60-centimetre-raised platform in order to escape the wet. The living quarters were separated from the service quarters by a spacious gallery. This is the first feature reminiscent of the spatial articulation in traditional Thai houses, in which the two quarters would be separated by an outdoor deck with step changes between them. Here, there was a minor step change (and doors) between the gallery and the living quarters but none to the service areas. The living quarters consisted

[1] Prasan Maruekkhaphithak, *Rueng Didi Khong Khon Didi (Good Stories of Good People)* (Bangkok: Amarin, 2005), 104–06.

of a reception area, two bedrooms at the ends, and one WC. The reception was actually a multifunctional space for living and dining. The 4 x 3 metre-space was not an open-plan space where both living room furniture and a dining table could have fitted in, but literally a space that both activities could have shared at different times. This seemed to be M. C. Vodhyakara's compromise on another modern (or indeed western) practice to have separated living and dining rooms. It was again more like the practice in traditional Thai houses where the two activities shared the same space at different times. Even though this aspect of the design could be seen as a response to the budget limitations of the exhibition, as stated in his description, it could also be seen as a functional solution aiming at compactness of dwelling space. Moreover, it also reflects M. C. Vodhyakara's understanding of the way domestic spaces could be used traditionally. As a result, it served the scenario that the cottages' plan could be adopted by either urban dwellers who wanted to reduce cost by using multi-functional space or a rural population whose spatial habits were still more or less traditional. In addition, as shown in the drawing, the plan was designed using a 50-centimetre-grid system that would help the builders to work more easily.

Also in the living quarters, two bedrooms could be accessed from the reception room. The larger one (2.5 x 4 sq. metre) had a bay window and a door connected to the gallery. The smaller one (2.5 x 3 sq. metre) had the other door connected to the 1.5 x 2 sq. metre WC. These allowed anyone in either room to use the WC without walking through the reception area.[1] In sum, the compact living quarter's spatial articulation and proportions demonstrate both a functionalist idea and the integration of modern and traditional practices. The service quarters consisted of a 2 x 2.5 sq. metre kitchen, a maid's bedroom of the same dimensions, and the maid's WC.

Secondly, the construction method of the cottages responded to the difficult economic situation by its materials. Even though both the cottages exhibited had the same plan, the differences were in the materials used in their half-timbered construction, the aspect promoted in the exhibition. M. C. Vodhyakara varied these two cottages by the materials used for the construction of their walls and foundations, which he approached very practically and scientifically. In the cottages, there were

[1] Ibid.

many parts left unfinished in order to show the construction processes. The structures of the walls were timber frames, in which parts were assembled by dovetail joints; therefore, no nails were used.[1] The frames of the first cottage were filled with bricks and teak lath and plaster; the former was for the exterior walls whereas the latter was for the interior ones. The other cottage used a bamboo lath and plaster combination in order to reduce cost. The lath and plaster method was also applied in the construction of ceilings, where a thicker layer of straw might be mixed with the plaster. According to the different types of wall construction, the walls of the first cottage sat on a stepped footing foundation whereas the other sat on sleeper foundations. As regards these choices of materials, the levels of durability, as well as water, thermal and sound proofing, were also described in detail in the architect's draft report.

There is another material that needs to be discussed. The bay on the south side of the reception rooms where glazing was applied was a feature whose significance M. C. Vodhyakara stressed. It was designed to let the inhabitants view the beautiful landscape outside even when the windows were temporarily shut to prevent rain.[2] This feature was rare in contemporary dwellings in a country where natural ventilation had long been adopted; therefore, opaque or louvered windows were normally shut during the rain. The design promoted sensory comfort and pleasure as the users would not be wet by penetrating rain but could still enjoy the view through the closed but transparent window. However, the glazing was only applied to the windows in this particular side of the reception rooms because glass was expensive at the time.

The Native Cottages exhibition has already been examined according to its relation to local people's aspiration to have decent houses, which was echoed in the government's nationalist campaign, and its planning and construction in relation to the difficult economic situation. It is timely now to see what was achieved afterwards.

[1] This detail is taken from an article in an English Language-newspaper found in Bangkok, M. C. Vodhyakara Varavarn's Archive, 3 Model Houses Built of Brick, Sand, Cement, Wood to be Exhibited June 24 (1943)

[2] Bangkok, M. C. Vodhyakara Varavarn's Archive, *Kan Sadaeng Krathom Puenmueng Nai Ngan Wan Chat* (The Native Cottages in the National Day Exhibition) (1943)

Figure 5.5.16: Front elevation of a Native cottage by M. C. Vodhyakara Varavarn for the National Day Exhibition 1943[1]

Figure 5.5.17: Plan of a Native cottage by M. C. Vodhyakara Varavarn for the National Day Exhibition 1943[2]

[1] M. C. Vodhyakara Varavarn's Archive
[2] Ibid.

After the exhibition, M. C. Vodhyakara further pursued his experiment with half-timbered construction in his own projects. The first opportunity came in 1944, when he moved out of his Tudor house at Soi Tonson to Phra Khranong, a country place where he had a rice field, for the sake of safety in war time. He built a temporary cottage which he called 'Rotchana Cottage', with timber frames infilled with bamboo wattle and plaster, and roofed with nipa leaves. The construction method and material differentiated this 'temporary' house from his 'permanent' house at Soi Tonson, whose walls had been built with lath and plaster, and whose roof had been of cement shingle tiles. Its design correlated essentially with what he had promoted in the Native Cottages — the half-timbered construction could be applied to various requirements of use and respond to limits of budget and materials.

The construction was mostly done by himself, his family, and his servants.[1] It cost only 1,300 baht (before the war about equal to 118 GBP but during the war the currency exchange was chaotic, so it is difficult to estimate). The plan of the cottage was compact and simple. A sketch possibly made in 1971 by the architect shows the ground floor plan with dimensions of approximately 4.5 m. x 5.5 m. The whole space was specified in the plan in English as 'living room' but in the description in Thai, it was described as '*Hong thong* [hall]'. This implied that the space was actually used for the functions of living room and dining room. There was no furniture drawn on the plan; therefore it was unclear how the family used the space for these different purposes. However, it was more likely that, as a Thai upper-class family in the 1940s, they had some sort of furniture for specific uses rather than sitting on the floor and using the spaces interchangeably — the scenario for use of space in workers' houses at Chitlada Railway Estate designed by him before the war.

The first floor had only one bedroom. It occupied half the area above the ground floor, leaving the other half of the space at double-height. Bathroom and WC were attached to the side, but accessed from outside. The bathroom was a bathroom in the Thai sense, containing no bath tub but a large clay jar of water. The users had a small bowl to take water from the jar and pour it over their bodies. The kitchen was not shown in the sketch. It was supposed to be somewhere in the vicinity. The food was probably prepared by servants. After the completion of the cottage, it happened that a group of Japanese opened a garage business nearby and became a local mafia.[2] M. C. Vodhyakara then moved away to live with his relatives in the countryside of Saensaeb. There he built another temporary house with wood and bamboo wattle and plaster, again roofed with nipa leaves.

[1] Bangkok, M. C. Vodhyakara Varavarn's Archive, *Prawat Lae Singkhonkhwa Doi Yo* (Profile and Research in Brief, p. 4.
[2] Bangkok, M. C. Vodhyakara Varavarn's Archive, *Krathom Rotchana* (Rotchana Cottage)

The remoteness of M. C. Vodhyakara's countryside residence forced him to commute to work for three hours a day. Its surroundings provided no activities, and therefore brought boredom. As a result, he used his spare time to conduct an experiment with bamboo wattle and daub construction. He used local materials; mud and straw were gathered within the area, ashes acquired by his gardener from local kitchens. He experimented until he achieved a satisfactory outcome, as he later described with details about the process and material proportions in his report to the Royal Institute, the scholarly institution of which he was a member from 1942.

Parts of the report were included in the article on half-timbered construction that he published in the *Journal of the Royal Institute* in 1946. In the article, he continued championing this method as a suitable construction after the war.[1] He quoted Frank Lloyd Wright's statement claiming that architecture was being started and it would be restarted continuously as human behaviour kept changing. He stated three proposals he believed necessary for improving post-war construction in Thailand — improving domestic materials by selection and research, improving construction methods to suit the materials responding to economy, climate and geography, and improving building forms to perfectly satisfy objectives, avoiding unnecessary waste of space.

From the above discussions about the Native Cottages and subsequent projects, it is clear that M. C. Vodhyakara's approach to design was practical and functionalist. He was determined to improve the quality of life for the majority in the way he believed most appropriate. However, he admitted the difficulty of promoting the reform by himself. As he stated, the goal could be achieved only by the consent of the majority of the society as well as with the support and encouragement of all Thai architects.[2] At the end of the day, it did not seem that M. C. Vodhyakara's wishes ever came true. Seeing the Native Cottages exhibition, provincial officials showed an interest in bringing it to the provinces, but the government did not approve their request.[3] Therefore, the majority of people in rural areas never adopted the method. Almost no architect in Thailand except M. C. Vodhyakara himself and his few protégés ever tried it. However, he kept experimenting. He applied this method to some projects of the Royal Railway Authority where he was still in charge until 1949, as well as in approximately 200 residential projects, mostly in Bangkok, which he designed on a part-time basis.

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[1] M. C. Vodhyakara Varavarn, '*Krueng Mai Krung Tuek* (Half-Timber)', *Ratchabandit San*, 3, (1946), 51–71 (p. 52).
[2] Ibid.
[3] Bangkok, M. C. Vodhyakara Varavarn's Archive, *Prawat Lae Singkhonkhwa Doi Yo* (Profile and Research in Brief, p. 4.

Figure 5.5.18: Rotchana Cottage by M. C. Vodhyakara Varavarn[1]

Figure 5.5.19: Details of half-timbered construction by M. C. Vodhyakara Varavarn[2]

[1] Bangkok, M. C. Vodhyakara Varavarn's Archive, *Krathom Rotchana* (Rotchana Cottage)
[2] M. C. Vodhyakara Varavarn's Archive

The above analysis of the Native Cottages at the National Day Exhibition in 1943 has revealed how far half-timbered construction could go beyond the original English vernacular or Arts and Crafts version that the architect had learnt in Europe. It illustrated the independence of the knowledge and practice of this construction when it was transposed to Thailand. In Britain, where it had long been used, the construction method was associated with vernacular architecture or with its natural quality and craftsmanship as admired and adopted by the Arts and Crafts Movement. In 1943, Thailand was being modernised by its elite, yet facing economic problems. This construction method was relatively new, and associated with a different set of ideas.

Firstly, it was considered a method of building proper, hygienic, and durable houses, which responded to local aspirations both through government imposed policy and with local consent. Secondly, it could be built almost entirely with domestic materials, and was therefore suited to war time when imported goods were scarce. Thirdly, because of the above, it was considered 'native', as seen in the name of the exhibition — Native Cottages. Despite the British origin of its construction method, its quality as depicted in the exhibition certainly belonged to contemporary Thailand. The fact that it responded well to the local aspirations and economic situation, as well as the local climate and geography, made it unnecessary to associate it with its English background. To reiterate, M. C. Vodhyakara and the press never mentioned that its construction method originated outside Thailand. Speculation in one newspaper pushed the point even further by describing lath construction as being used in some rural houses, which was true although in traditional construction it was not used with timber frames.[1] Other newspaper articles even reported that it was a revival of a traditional Thai method, regarding laths and plaster.[2] For them, this construction method was developed from tradition. This could potentially support the quest for national character in modern architecture that was another important issue at the time. The examination of Chulalongkorn University auditorium has shown Sarot Sukkhayang and Phrom Phromphichit's response to this issue, but M. C. Vodhyakara also had his own view and experience.

[1] Nittaya, '*Krathom Puenmueng* (Native Cottages)', *Nikon*, June 1943, pp. 1,2,5. This news is found in a scrapbook kept in M. C. Vodhyakara Varavarn's Archive. The information about the date is incomplete.
[2] Tuan Pradiphak, '*Ruen Tuayang* (Prototype House)', *Prachamit*, 9 July 1943. This news is found in a scrapbook kept in M. C. Vodhyakara Varavarn's Archive. Page numbers unknown.

Thai half-timbered house: 23/1 Soi Chitlom (1946)

The house at 23/1 Soi Chitlom was designed by M. C. Vodhyakara Varavarn for his father-in-law Phraya Prichanusat (Soen Panyarachun) and completed in 1946, when the owner's family moved back to the city from a temporary stay in a countryside during World War II. The location, Soi Chitlom, was a road in an area full of Bangkok's elites and foreign expatriates' residences and embassies.

Given the fact that the architect also called it *Ban Laksana Thai* (The house with Thai Charcteristics), the house was aimed to have such a character when it was designed.[1] The house was also dubbed by the architect 'Thai half-timber' building. It was actually the architect's second attempt at designing 'Thai half-timbered' buildings, following Chiang Mai Railway Terminus in northern Thailand, which was also designed after the war but completed later than this house. The station will be examined after this house.

According to the political and cultural circumstances prior to and during the war, and the Native Cottages exhibition already discussed, it can be said that the attempt in designing this house as a 'Thai half-timbered' building stemmed from the ideas of at least three people — M. C. Vodhyakara Varavarn the architect, Plaek Phibunsonkhram the nationalist Prime Minister, and Soen Panyarachun the owner, among whom personal relationships played a crucial role. In M. C. Vodhyakara's summary report about the research and the exhibition of Native Cottages submitted to the National Institute, three schemes of the house were shown. The first was the cottage built for the exhibition. The second was a house described by him as *Ban Baeb Thai Samaimai* (Modern Thai-style house). The brief description was 'a style of Thai wooden house mixed with Half-timbered style' and 'the plan follows contemporary objectives'. The last was a house whose description was 'the shape follows an old style but the plan follows a contemporary objective'.

[1] Bangkok, M. C. Vodhyakara Varavarn's Archive, *Prawat Lae Singkhonkhwa Doi Yo* (Profile and Research in Brief, p. 6.

Figure 5.5.20: House with 'Thai characteristics' at 23/1 Soi Chitlom (1946) by M. C. Vodhyakara Varavarn[1]

Figure 5.5.21: 'Modern Thai-style house' by M. C. Vodhyakara Varavarn for the Native Cottages Exhibition at the National Day Exhibition 1943[2]

[1] *Works of Mom Chao Vodhyakara Varavarn 1900–1981*, p. 47.
[2] Bangkok, M. C. Vodhyakara Varavarn's Archive, *Kan Sadaeng Krathom Puenmueng Nai Ngan Wan Chat* (The Native Cottages in the National Day Exhibition) (1943)

The first floor plan for the second house in M. C. Vodhyakara's summary report was shown. The first floor, which was the main floor of the house, was split into two parts — living quarters at the front and service quarters at the back — both elevated yet separated with a rear *Chan* (elevated deck). At the front of the house one ascended to an enclosed front *Chan* by stairs through a gate. From the *Chan*, one entered *Hong Rab Khaek* (reception) which was connected to *Hong Ahan* (dining room) in the same space. At the end of the reception, one could take a stairs to the second floor, which was under a steep roof. The left side of the reception led to a hall connected with WC and two bedrooms. The right side of the reception led to a study room. Food to be served to the dining room was placed in a *Hong Pak Ahan* (pantry). It would be brought from *Hong Krua* (kitchen) in the service quarters, in which two maids' bedrooms, WC, and storage were also located, through the back *Chan* and *Chaliang* (gallery). The household's vegetable garden was also evident on the ground adjacent to the service quarters.

In a manuscript, probably written after his retirement in 1964, M. C. Vodhyakara recorded his brief profile and experiments, especially with half-timbered construction. He claimed that he had promoted design principles that responded more to functions. First, he had introduced a connection between living and service quarters; this was more functional, especially in rainy season. Second, he had abandoned the practice of elevating a house's main floor to the level of one metre, the old practice that had been used for decades in modern houses that retained damp, which made wooden floor deteriorate more quickly. It had also provided insects and amphibians a shelter, which could bring disease. The solution, he proposed, was either constructing wooden floors on reinforced concrete slabs set on elevated ground above flood level, or elevating the main floor on stilts above head level; the latter case would even provide more functional space. From this account, his intention of elevating the main floor came from a functional point of view rather than from consideration of style.

But this is not to say that M. C. Vodhyakara did not care about style, because he did deliberately use the term. Another manuscript of his demonstrated a clear view about this. A draft entitled '*Meaning of material and design in architecture'*, written around the time of his retirement, illustrated various ideas on architectural principles. In the chapter '*Samai Kab Baeb'* (translated by himself as 'fashion and

style'), he discussed the difference between the two terms, claiming that 'confusing interpretations had misled the understanding and use of them, which inevitably affected architectural design'.[1] Fashion, he claimed, was temporary, whereas style lasted forever. Elaborating on the term, he stated that 'style' meant 'building method', and he gave two examples from different periods. The first was 'Gothic style', which he described as 'a vaulting method'. The second was a building by Minoru Yamasaki at the 1962 Seattle World's Fair with a pre-stressed concrete structure. It was, he claimed, the same 'method' (therefore the same 'style') but built with a contemporary material and structure, which contributed to its lightness, serene elegance, and impressive quality; which were appropriate for the contemporary situation. This demonstrated his idea that 'style' and 'building method' was one and could not be separated. Therefore, style could not be applied if method was neglected. What then about the relationship between style and national character?

In the same article, he stated that style was sometimes associated with nationality, for example, French style or Italian style as people liked to call them. With such designations, they represented national character rather than a construction method. However, he insisted that style meant construction method, not nation. He, therefore accepted that national characters existed, but claimed they emerged from the *Kwam Chamkad* (limitations) of each nation. As a result, national characters appeared automatically in architectural features. In sum, even though M. C. Vodhyakara saw style as a necessary principle, his application of it came from a practical point of view.

Even though M. C. Vodhyakara's attitude toward style was oriented more towards practical aspects, the attitude of Prime Minister Plaek Phibunsongkhram, the para-military nationalist leader of Thailand, was also significantly involved in M. C. Vodhyakara's work and writing on the issue. The Premier's intervention was evident in the aforementioned Native Cottages Exhibition at the National Day Exhibition in 1943. Before the submission to the National Institute, M. C. Vodhyakara had submitted a draft report to Phibunsongkhram, and asked Mrs.

[1] Bangkok, M. C. Vodhyakara Varavarn's Archive, *Samai Kab Baeb* (Fashion & Style), Part of *Kwammai Khong Watsadu Lae Kan Okbaeb Thang Sathapattayakam* (Meaning of material and design in architecture) (1964)

Chiravat, the PM's daughter who was married to M. C. Vodhyakara's wife's brother, to deliver it: otherwise, as indicated in the cover letter, it would have not reached the Premier.[1] In the draft, concerning which the architect sought the Premier's comments, he only described in detail the way half-timbered construction could help the majority to build decent houses. For M. C. Vodhyakara that was enough, and it could define a progressive notion of the nation. However, Phibunsongkhram pointed out that the exhibition should suggest the way houses could look Thai, in order to express the national culture.[2] Phibunsongkhram proposed a steep-gable roof form as a symbolic notion of what was Thai in his opinion.

The Premier elaborated in detail various nation's roof forms, which he imagined represented each nation's identity. For example, the onion domes of *Khaek* (Muslim countries), overlapped roofs of China, Japan, and Burma, and dormer roofs of *Farang* (Western countries). Without advance architectural knowledge one could know that each of those countries did not have only one roof form. Therefore, this was solely his idea of national identity expressed by symbolism in architecture. He emphasised his argument with the analogy that 'a roof is like a crown', therefore very important.

Whether M. C. Vodhyakara totally agreed or not, he showed his agreement on the formal report subsequently submitted to the Royal institute. So Phibunsongkhram's idea about the expression of national culture was added to the report as an objective of the exhibition. M. C. Vodhyakara also included Phibunsongkhram's analogy that 'a roof is like a crown', stating that the Prime Minister's 'meaningful quote' emphasised the significance of roofs in marking out each nation's house. However, he did not forget to balance this nationalist statement with his architectural principles by elaborating that the expression of the national culture, i.e. Thai houses must look Thai, could be achieved through their shapes, their building method — equivalent to style in his translation, and their materials.

The report along with the nationalist statement appeared again in the published journal of the Royal Institute in 1946. By that time, Phibunsongkhram

[1] Bangkok, M. C. Vodhyakara Varavarn's Archive, Chittra Varavarn's Letter to Chiravat Panyarachun Regarding M. C. Vodhyakara Varavarn's Letter to Plaek Phibunsongkhram (1943)
[2] M. C. Vodhyakara Varavarn's Archive, Letter from Field Marshal Plaek Phibunsongkhram to M. C. Vodhyakara Varavarn Regarding Vernacular Cottages (1943)

was no longer the Prime Minister. He was even put on trial for War crime as a result of his decision to ally Thailand with Japan, but he was finally acquitted. Interestingly, the edited version of the report still included Phibunsongkhram's argument on roof form, including his analogy of 'roofs and crowns', but without reference to him. It now seemed as if it was M. C. Vodhyakara's own statement. This highlighted M. C. Vodhyakara's positive attitude toward the expression of the national culture in architecture, even though it tends to follow his rationale in the practicality of style rather than the nationalist perspective.

The last person whose idea about national character in architecture should be taken into account in discussing the house was the owner, Soen Panyarachun. Even though no explicit evidence regarding his attitude has yet to be found, there were factors that imply the possibility of him being positive about the idea.

Phraya Prichanusat (Soen Panyarachun) (1890–1974) was M. C. Vodhyakara's father-in-law. His father, Phraya Tepprachun, was undersecretary of defence. After his secondary education in Siam, he received King Chulalongkorn's scholarship to pursue his further education in England at Shrewsbury School and subsequently at Manchester University, in 1910. His professor, Chaim Weizmann, whom he highly admired, was a leader of the British Zionists and later the first president of Israel. At the time, Siam was still an unfamiliar name to the British in general. Like other contemporary Siamese, Panyarachun's identity in Shrewsbury and Manchester (and indeed in Britain) was likely to be someone from a remote and exotic kingdom. Some British might have known that Siamese princes and government students were sent thousand miles from their home to get advanced knowledge from Britain, which they perceived as one of the most advanced nations, in order to go back to participate in a development of Siam. During his visit to Manchester, Crown Prince Vajiravudh of Siam said that it would be good for both countries if the British would get to know Siam better and to recognise that Siam was not as bad as someone had tried to make it.[1]

Panyarachun himself also participated in an action in which he thought he should correct a misleading statement about his country made by a British

[1] 'The Crown Prince of Siam Visit to Manchester', *The Manchester Guardian*, 18 December 1901 1901, p. 10.

correspondent. In 1907 his letter which corrected a report on debt slavery in Siam was published in *The Manchester Guardian*.[1] The actions of the Siamese crown prince and the student could be seen as their attempts to defend their country from a backward image constituted by the western public. For them, as well as for other Siamese members of the elite, having a place on the international stage as a civilised country was recognised as a necessity in the changing world, where the West had positioned itself as the centre of civilisation, and colonisation had been prevalent.

After returning to Siam, he assumed various teaching posts and finally acted as headmaster of the Royal Pages School (Vajiravudh College), the school established by King Vajiravudh, during 1926 to 1933. He concluded his civil service by assuming the post of interim-permanent secretary at the Ministry of Education in 1933. He married to Pruek Jotikasatira, a lady from another noble family. Their monogamous marriage produced twelve children and one of them — Chitra, became M. C. Vodhyakara's wife.

Soon after the democratic revolution which changed the absolute monarchy to a constitutional monarchy in 1932, Panyarachun resigned from the civil service and became a prominent businessman in publishing. He, along with his colleagues, established Siam Commercial Company Limited, later Thai Commercial Company Limited (*Thai Panitchayakan*), which published Thai, English, and Chinese-language newspapers. He served as editor of *The Siam Chronicle*, the first English-language newspaper in Siam that was owned by a Thai. In 1941, together with his colleagues, he founded the Press Association of Thailand, of which he was the first president. In 1946, he resigned from his publishing business and started a new business in travel agency and insurance with his son.

[1] Sern Taprachun, 'Debt-Slavery in Siam: To the Editor of the Manchester Guardian' *The Manchester Guardian*, 11 Decembert 1907, p. 4.

Figure 5.5.22: A family photo of Soen Panyarachun in the 1920s. [1] **Panyarachun wore a uniform, while his wife was in a hybridised Siamese costume. One of their children was in a sailor suit, while another wore a blonde wig.**

Figure 5.5.23: Photos of Panyarachun with his students at the Royal Pages' School[2]

[1] *Thiraruek Nai Ngan Phraratchathan Ploeng Sop Phraya Prichanusat (Memorial for the Funeral of Phraya Prichanusat)*, p. 4.
[2] Ibid.

Soen Panyarachun was an example of the Thai elite who saw modernity as equally important to Thai identity. His nationalist ideas were probably influenced by his early mentor, Prof. Weizmann, as well as his King, Vajiravudh, whom he served in his early career. His positions as educator and editor allowed him to pass on ideas to younger generations as well as the public. Anand Panyarachun, the youngest son of Soen Panyarachun and later a Prime Minister of Thailand from 1991 to 1992, recalled his father as:

> A learned man and [...] he was one of the very few individuals who combined the best of the East and the West. He was not just a Western-educated man. He had his roots deep in his own culture.[1]

Some examples of this were reflected in both his private life and career. As a private citizen, he not only enjoyed opera, performing the music for his children, but also took pleasure in Thai music and performance; he used to perform *Khon*, a classical dance before King Vajiravudh. As regards his career, while being headmaster at Vajiravudh College, he not only imported a practice from Shrewsbury, where he had been educated, i.e. Thursday afternoon special lecture, in which history and current news of the world were addressed and to which Rabindranath Tagore, the Indian Nobel Prize laureate, was invited in 1929, but also introduced Thai practices, i.e. evening Buddhist prayer and a monthly lecture by Buddhist monks. He gave information and introduction for the Siamese court's Brahmanical ceremonies to H. G. Q. Wales' research on the topic.[2]

As regards to his profile and ideas, it would not be excessive to say that the features of his house dubbed by the architect as Thai half-timber could be designed partly following the consent of the owner.

Two further factors support this assumption. First, the fact that he served King Vajiravudh in his early career and subsequently served the institutions established by the King in the following reign, made him familiar with the King's nationalist ideas. Second and more importantly, the King had already implemented

[1] Cesar R. Bacani, 'Panyarachun, Anand: Biography', http://www.rmaf.org.ph/newrmaf/main/awardees/awardee/biography/174 [accessed date 4 August 2013].
[2] Wales, *Siamese State Ceremonies: Their History and Function*, p. viii.

his idea in architecture, especially through those institutions that not only Panyarachun but also M. C. Vodhyakara Varavarn were associated with. They were the Royal Pages School (Vajiravudh College), where Panyarachun was a headmaster for seven years and Varavarn was an alumnus, and Chulalongkorn University where both of them were staff members (chapter 2.3, 5.4). Buildings in those institutions, as examined in previous chapters, were designed following the King's initiative to incorporate Thai character along with modern functions, to remind students and staff of the balance between modernity and tradition. This applied especially to the auditorium at the Royal Pages School, in which the main hall was elevated above ground.

Now the house itself will be analysed. Panyarachun had lived in a traditional wooden house on New Road in his childhood.[1] When he was headmaster of The Royal Pages' School, he lived in a small wooden house with a pergola at the front.[2] He once asked King Prajadhipok for permission for his family to use the first-aid building of the school as their house, instead of the existing one which could no longer accommodate his big family of ten children. The fact that the building had previously been the residence of the King's mother and him in his childhood at Phraya Thai Palace, but had later been relocated to the school for other purposes, not only made him reject the request but also led him to express his irritation on the building's current function as accommodation for sick students.

Panyarachun then moved his family to another house with large rooms, as recalled by Anand Panyarachun, the twelfth son who was raised in this house. He reported that the children slept in pairs under mosquito nets and left the doors open as they needed cross-ventilation. Anand also recalled that the house's library was full of books; journals published by the palace of King Vajiravudh and H. G. Wells' *The Invisible Man* were among them. An old map surveyed in 1925 shows the house comprising a main wooden building with a porch at its centre facing north.

[1] *Thiraruek Nai Ngan Phraratchathan Ploeng Sop Phraya Prichanusat (Memorial for the Funeral of Phraya Prichanusat)*, p. 2.
[2] Prasan Maruekkhaphithak, *Anand Panyarachun: Chiwit Khwamkit Lae Kan Ngan Khong Nayok Ratthamontri Song Samai (Anand Panyarachun: Life, Thoughts, and Work of Two-Time-Prime Minister)* (Bangkok: Amarin Printing, 1998), p. 44.

Figure 5.5.24: Soen Panyarachun's house on Sathon Road is the rectangular plot in the lower-centre of the map with a round pond and shop houses on the edge.[1]

[1] *Phinit Phranakorn 2475–2545 (Observing the Capital 1932–2002)*, p. 69.

A drive leads from the entrance to a garage attached to the main building on its east side. A round pond with a pavilion is at the northeast corner of the plot. Service quarters are at the back of the house. A structure like wooden row houses lies along the eastern periphery of the house, presumably rented out to increase the household's income. Panyarachun's family probably left this house during the war.

They built a new house after the war. The whole site of the house at Soi Chitlom measured 52 x 117 metres. A small canal or drainage and a pond were dug at the northern edge and in the middle respectively. The pond divided the site into two parts. The house was therefore built on only the eastern half of the whole site, which was adjacent to Chitlom Road and separated by a public small canal.[1] This conformed to M. C. Vodhyakara's idea of building a house of suitable size in relation to the size of the plot, an idea he adopted since at least the war years.[2] This was fit for the post-war situation when the economy was yet to be recovered. By building the house on half of the large plot, the other half could be saved for the next building or development. This might be seen as similar to his previous house but the point is that it was still unusual regarding contemporary houses of wealthy businessmen — which instead put the house at the middle of the plot, facing the main road in order to stress their grandeur, and set servants' quarters and kitchen at the back, wasting the rest of the plot.

The subtle approach to the house also correlated with the massing. A private road was laid from the south-east corner of the site for access to the house and the inner plot. A smaller drive led one from the private road to the entrance of the house; the drive was angled in plan. Together with the location and the approach described, the house was composed of various interlocking masses, on all sides treated relatively equally with extruded masses that reflected the plan, therefore it was designed to be looked at from different angles. For example, the front of the house as stated in the original drawing was the side facing south, the direction toward the private road. However, the real front of the house, where the drop-off and entrance were located, faced east, where the house could be looked at from Soi

[1]The method of digging *Khu* and ponds in order to fill the adjacent land, on which buildings or roads would be built had been widely adopted in Siam, especially in the flood plain of Bangkok.
[2] Bangkok, M. C. Vodhyakara Varavarn's Archive, *Ban* (House): A Note Submitted to Department of Advertisement as a Proceeding of M. C. VodhyakaraVaravarn's Lecture Broadcast in the State Radio on 1 December 1942 (1942), p. 2.

Chitlom (the main road). Furthermore, the southeast elevation could be looked at from people in vehicles approaching the house by the angled drive. As a result, the house was not only fitted to the size of the plot as described before, but designed visually to respond to the location and the approach. This, again, made the house different from normal houses of nobles and businessmen in contemporary Thailand, which had exhibited their fronts with architectural thresholds, such as extruded masses, gables, galleries, main stairs, etc., toward the front gardens, entrances, and main roads respectively. Despite a lack of explicit evidence, M. C. Vodhyakara's brief mentioning about Frank Lloyd Wright in his article published in the *Journal of the Royal Institute*, described above, at the same year this house was completed implied possible influence from Prairie houses' plans and the way they were approached on the design of Panyarachun's house.

The house had two main parts connected to each other. The living quarters consisted of a drop-off covered by the upper floor, hall, dining room, and *Hong Lang Mue* (washing hand room) on the ground floor. The bedrooms, WCs, Buddha image room, and living room, were on the first floor. The living room, with its extended terrace, was elevated above a vacant space underneath.On the ground floor, the living quarters was placed at the front, facing south and west. Vehicles dropped passengers at the covered drop-off, and then would be driven to the garage in the service quarters. One entered the house through the 4x3 metre-hall with the stairs leading to the first floor. Through the door at the south side of the hall, one entered the 4x5 metre-dining room, which had large doors opening through the front garden at the other end of the room. Dining reception could have been organised both indoors and outdoors at the same time. Large receptions could simply be arranged in the garden as Robert L. Caro, a friend of Panyarachun, recalled:

> The occasion was one of the periodical dinners of Bangkok's Gourmet Club and, characteristically, he had opened his home to the members and their friends. There were probably two hundred people there, but as each arrived he greeted them with a smile and wished them "*Charoen Ah-harn* [Bon Appetit]". During the dinner, which was served under the trees in the garden, he went from table to table greeting friends and discussing the food and wine prepared in his kitchens. […] His tastes embraced the good things from Asia as well as Europe and he was equally at ease hosting one of his Italian luncheons at the top of the World Travel Service Building as he was in his own home enjoying a Thai meal.

Figure 5.5.25: South elevation and site plan of 23/1 Soi Chitlom (1946)[1]

Figure 5.5.26: A view of 23/1 Soi Chitlom from the south[2]

[1] *Works of Mom Chao Vodhyakara Varavarn 1900–1981*, p. 55.
[2] Ibid.

Figure 5.5.27: Ground floor plan of 23/1 Soi Chitlom [1]

[1] *Works of Mom Chao Vodhyakara Varavarn 1900–1981*, p. 56.

From the entrance hall, one could also enter the *Hong Lang Mue* (washing hand room). The 2 x 3.5 metre-room for hand-washing only did not include a toilet, and was placed adjacent to the dining room, emphasising the hygienic function related to dining. Lastly, one could also go out to the space underneath the living room and then to either front or back garden from the back door of the hall.

Also on the ground floor, the service quarters were located at the north end of the building — a direction away from the main prevailing wind, therefore avoiding unnecessary disturbance of smell and smoke to the living quarters. It consisted of *Hong Phak Ahan* (pantry, literally translated as 'the room where food is stopped'), maids' rooms, maid's WC, garage, u-turn space for cars, and household vegetable garden. It was, however, connected to the living quarters as the same building.

As discussed before, this was not usual in Thailand before World War II, when the servants' shelter and the kitchen of a nobleman's house were normally separated from the main house. Even though he had already put the servants' room and kitchen under the same roof of the main part in his house at 42 Soi Tonson and the Native Cottages exhibition, it was not until the post-war period that he discussed it explicitly. The old practice aimed, as M. C. Vodhyakara suggested, at preventing house owners from dirtiness and smell of the kitchen, as well as noise and untidiness of the servants' lifestyle.[1] However, he pointed out that the practice was not suitable any more for contemporary life. He suggested the two quarters should be connected to each other as it would be more convenient functionally, since the distance would be reduced and rain could not disrupt the service.

He also suggested that the experience of economic hardship during the war made people realise that placing a main building at the centre of the plot, which normally entailed a long drive from the gate, wasted space and labour, and was therefore not viable for the post-war situation. The new practice should be to place the main building as near as possible to the gate, and making the service quarters a part of it.

[1] M. C. Vodhyakara Varavarn's Archive, *Kan Plian Plaeng Rawang Samai* (The Transformation), Part of *Kwammai Khong Watsadu Lae Kan Okbaeb Thang Sathapattayakam* (Meaning of material and design in architecture) (1964), p. 1.

Figure 5.5.28: First floor plan and north elevation of 23/1 Soi Chitlom [1]

Figure 5.5.29: East and West elevation of 23/1 Soi Chitlom [2]

[1] *Works of Mom Chao Vodhyakara Varavarn 1900–1981*, p. 57.
[2] Ibid.

He also mentioned a social aspect: that democracy and education in recent years made people see each other's value more.[1] However, he did state that the previous practice of separating the two social groups had demonstrated a class divide but this had not caused social conflicts, as each had enjoyed their different lifestyle freely in the separated quarters. These passing mentions indeed reflect a significant effect of the nationalist campaign prior to and during the war years, in which not only widespread basic education but state edicts enforcing 'civilised' manners of citizens were to be learnt by all works of life, even by immigrants from rural areas who came to Bangkok to work as servants. Together with the economic necessity, the nation-building campaigns allowed servants to live nearer to their bosses.

Ascending to the living area upstairs, one reached a large 5.5 x 7 metre-living room. There was a 2.5 x 7 metre terrace adjacent to it at the south side looking toward the front garden, and one could descend from the terrace to the garden by stairs. The north side of the living room looked toward the back garden. The living room was therefore a bridge spanning across two gardens connected to other rooms at both ends. The rooms at the east end were a hall, two bedrooms, a bathroom, and a toilet. The toilet was separated from the bathroom. At the west end, one would ascend a 90 centimetre-stair to reach the rooms — the highest part of the house. They were a hall, a Buddha image room, the master bedroom, and a bathroom. All the rooms at this level belonged to the owners (father and mother of the household) and the Buddha images; therefore, they deserved the highest level. The 2.5 x 4 metre-Buddha image room was separated from the hall by a curtain, so they could be connected as one space when it was opened. This could be used when a ceremony with greater attendance took place. There was the last bedroom which could be accessed through the hall. It descended from the highest part of the house by 45 centimetres.

The fact that the main living area was elevated above ground was significant in itself. As discussed before, this feature can be considered as so-called Thai style. It could be a consequence of either the architect's functional justification of the design or the owner's aspiration to express the image of the national culture. Either way, it blurred the definition of *Tuek* (masonry house) and *Ruen Mai* (wooden house)

[1] Bangkok, M. C. Vodhyakara Varavarn's Archive, *Khwammai Khong Watsadu Lae Kan Okbeb Sathapattayakam* (Definition of Materials and Architectural Design) (1964)

in contemporary Thailand. In general, contemporary houses, in which all the main floors were elevated, were wooden houses belonging to middle-class or working-class people, whose economic status prevented them from building masonry houses. M. C. Vodhyakara himself also designed this kind of house for the workers of Royal State Railways at Chitlada Estate, discussed at the beginning of this chapter. However, the exceptions to this case were houses of a noble and a businessman, Phraya Pakdi Noraset and H. Abdullahim, whose houses were wooden houses of high quality erected off the ground. Apart from that, contemporary houses built on the ground in masonry were more popular among nobles and businessmen; their ground floors served the main functions. Accordingly, Panyarachun's half-timber house, with only minor functions and service quarters on the ground floor and all the private ones on the first floor, with the living room elevated on columns, was unusual. First, it was built in half-timber construction, which was neither *Tuek* (masonry house) nor *Ruen Mai* (wooden house), but was proposed by the architect to 'look like' a masonry house, in order to ensure the high status of the owner. It blurred the boundary between *Tuek* and *Ruen Mai* not only by its appearance but also in its organisation of spaces. It was a hybrid — another example of Bhabha's 'almost the same but not quite'.[1] The hybridisation might have been even more complex if M. C. Vodhyakara did include some ideas of Prairie houses' interlocking masses and plans.

Another feature worth discussing is the variety of fenestration used according to the functions served and the directions facing. On the ground floor, the dining room could be accessed through a door from the main hall. However, it opened directly to the front garden of the house at the other end through two double-doors. Adjacent to it was the hand wash room. Its fenestration was a pattern of cement blocks, which allowed ventilation as well as privacy. The presence of *Hong Pak Ahan* (pantry) implies that the meals of this noble household, no matter whether they were for everyday consumption or for parties, were supposed to be prepared by a number of maids, whose three bedrooms were located in the service quarter adjacent to this room. As a result, the food that was already prepared in the kitchen down the corridor would be transported here, the room where the food could be stopped, waiting until the owner and guests were ready in the dining room. The food should

[1] See Bhabha, *The Location of Culture*.

remain as hot as possible; therefore two small windows with small louvers could prevent excessive wind from cooling the food down. The kitchen at the end of the corridor had many double-windows, and was therefore suitable for Thai cooking, which can cause lots of smoke. The maids' bedroom had windows at only one side, so if they wanted cross-ventilation, they had to open the doors.

Windows with glazing were used sparingly for the Buddha image room, the stairs, and a shower room, all of them facing north. M. C. Vodhyakara used them to allow natural light to penetrate the spaces without overheating them. All the bedrooms had high windows, which were open from floor level. They were installed with 80-cm.-high railings for security and had double wooden panels which could be closed during a storm. The panels could be opened on ordinary nights in order to catch a cool breeze; the inhabitants were protected from mosquitoes by mosquito nets covering their beds. However, three out of four bedrooms also had smaller windows, which were not open down to floor level. The first two had such windows, which were located on the west side, where they could reduce the heat from the afternoon sun. However, the rooms still caught maximum breeze from windows at the other side, where they opened from floor level. The last room had windows not open from floor level at one side, where it was adjacent to an external stairs. If they had been open to floor level, anyone on the stairs could have looked in.

The background and the design of Panyarachun's house at 23/1 Soi Chitlom, Bangkok, shows how an interaction of complex forces socio-politically, economically, and technologically shaped a private house. The owner, as a member of the Thai elite, was a so-called modern yet seemed happy to differentiate himself and his dwelling from those of western peers. The architect, as another member of the Thai elite, learnt his architectural philosophy and practice from an advanced nation and had to adapt not only their practical but also their philosophical aspects to suit his local context back home. The nationalist Prime Minister, who possessed almost no knowledge of art and architecture, happened to influence the design through his dictatorship. The house, as a result of all these complex interactions, was in the end designed mainly to suit the inhabitants' life style and to provide them with a pleasing place that they should be able to call home. In this case, 'style' was ideologically involved in the background and pre-design process but it was only through its response to real use that made sense of it. Now it is time to examine a

public project in which M. C. Vodhyakara applied the ideas and principles of national character in half-timbered architecture.

Chiang Mai Railway Station (1947)

During World War II, Thailand's railway infrastructure including its buildings were significantly damaged by air-raids. After the war, the State Railway of Thailand (SRT) ran reconstruction projects amidst the post-war economic difficulty that still lingered. Later, the SRT managed to get a loan from World Bank in order to make the projects more viable. The process included the reform of the organisation that turned it into a state enterprise in 1951. Before that, during the difficult time from 1945 to 1949, M. C. Vodhyakara Varavarn as in-house architect was responsible for various projects, ranging from the administrative building and a battery workshop, to an electrical engineering office, two railway terminals, and stations. He exploited half-timbering as well as various construction methods.

Right after the war, he used bamboo wattle and daub in the construction of the railway authority's battery workshop at Makkasan, Bangkok.[1] He highlighted the fact that mud and straw, which were considered low quality materials, could be used to construct a building that lasted for decades. This shows the significance of durability perceived by the architect, and the achievement of a permanent building constructed of cheap materials sourced locally must have brought him pride. His pride must have been all the greater in a project with the status of architecture, especially one with national character. But the project of Chiang Mai Railway Station shows that it might not have been that simple.

[1] Bangkok, M. C. Vodhyakara Varavarn's Archive, *Prawat Lae Singkhonkhwa Doi Yo* (Profile and Research in Brief, p. 6.

Figure 5.5.30: A modern locomotive and Thai-style Chiang Mai Station (1947)[1]

[1] Bunsoem Sattraphai's Collection, Chiang Mai University

Chiang Mai is the largest city in northern Thailand, capital city of the Lanna Kingdom since 1296. This kingdom had enjoyed a closer relationship with Laos and Burma than Siam in terms of its culture. It had become a tributary state of Siam in 1774 after two centuries under Burmese power, and it had finally become a province of Siam called Monthon Phayap or Monthon Lao Chiang after the administrative reform of Siam in 1899; this reform was mainly in resistance to western imperialism. The Bangkok court and Siamese public had still perceived Lanna people as a Lao ethnic type for decades until the nationalist government of the 1940s encouraged people of all regions to perceive each other as Thai for the sake of national unity through propaganda aimed at the elimination of heterogeneity in Thai society.[1] So Lanna people had become 'northern Thai'. Chiang Mai Station played a part in the assimilation process decades before the design project by M. C. Vodhyakara. His design, however, was still involved with the ongoing process in the post-war period.

The railway had reached Chiang Mai for the first time in 1922, for it had terminated at Lampang, a smaller city in the north, since 1916. Before the arrival of the railway, which proved cheaper and more reliable, transportation and trade between the northern regions and Bangkok had been achieved mainly via waterways and bridleways through jungles and mountains.[2] The construction of the line to Chiang Mai through the difficult landscape had been mostly done by manual labour with minimum help of engines. Materials had been transported by horses and mules.[3]

Chiang Mai, formerly a remote region different in culture and difficult to reach from Bangkok, had changed culturally with the arrival of the railway. Lifestyles had gradually moved closer to those of Bangkok. Cinemas had been opened. The Miss Chiang Mai beauty pageant had been organised for the first time in 1933. The winner had gone on to participate in the Miss Thailand beauty pageant

[1] See '*Ratchakitchanubaeksa* (The Royal Thai Government Gazette)', vol 52 (1939), pp. 82.
[2] For the economy of Chiang Mai before the arrival of the railway, see Plai-Auw Chananont, '*Botbat Naithun Phokha Thimi to Kanko Lae Khayaitua Khong Thunniyom Phaknua Kong Prathet Thai 2464–2523* (The Roles of Merchant Capitalists in the Rise and Expansion of Capitalism in Northern Thailand, 1921–1980)', (unpublished master's thesis, Chulalongkorn University, 1986).
[3] Withun Liewrungrueng, '*Raingan Wichai Chabab Sombun Senthang Thongthiew Sathapattayakam Choeng Prawatsat* (The Report About Routes for Historical Architecture Tour)', (Bangkok: The Thailand Research Fund, 2004), p. 126.

in Bangkok. Once the nationalist government had come to power before World War II, its nationalist policies had been applied throughout the country. Civilised and cultured manners had been encouraged. The government in Bangkok, which is in the central region, had found it was relatively less problematic to homogenise the northern region compared to the far south. This was because the northern population had been mostly Buddhist but those in the far south had been Muslim.[1] The Prime Minister, Plaek Phibunsongkhram, had also perceived the Lao people as 'siblings' of the Thais who actually belonged to the same race. However, when it came to formal occasions, Lanna people and the Lanna royal family in the northern region had not hesitated to demonstrate their unique traditions before Thai guests from Bangkok. This had been seen in the reception for King Prajadhiphok's visit to Chiang Mai in 1926, where he had been welcomed by the members of the Lanna royal family and public with traditional ceremonies, following the same practices that the Crown Prince Vajiravudh had been offered in 1905.[2]

The map created in 1935 shows the original Chiang Mai Station located at the same position and with the same orientation as M. C. Vodhyakara's new design. It had a long platform lying in a north-south direction alongside the tracks. The station building had been placed perpendicular to the platform. There had been a plaza in front of the building where a minor road led passengers to a main road, which then brought them to the city centre. On the opposite side of the main road were located a branch of the Siam Kammajon Bank, the first Siamese Bank in Bangkok, and the Railway Terminus Hotel.

Chiang Mai Station was bombed by the Allies on 21 December 1943 (when Thailand was in an alliance with Japan). The restoration programme took place right after the war at the time when Thailand, as described by M. C. Vodhyakara, 'had gone bankrupt'.[3] In the draft recording his work, M. C. Vodhyakara described the new Chiang Mai station as one of his 'research works'. His research still centred on the issue of construction method, attempting to give decent, durable, and hygienic qualities to a building.

[1] Somsak Chiamthirasakun, '*Prathet Thai Maichai Ruam Rued Nuea Chatchuea Thai* (Thailand does not have only Thais)', *Matichon*, 24 June 2004, p. 7.
[2] See accounts about both royal visit in Bunsoem Sattraphai, *Sadet Lanna (Royal Visits in Lanna)*(Bangkok: Aksaraphiphat, 1989).
[3] Bangkok, M. C. Vodhyakara Varavarn's Archives, Part of My Research Work Adopted by the Royal State Railways

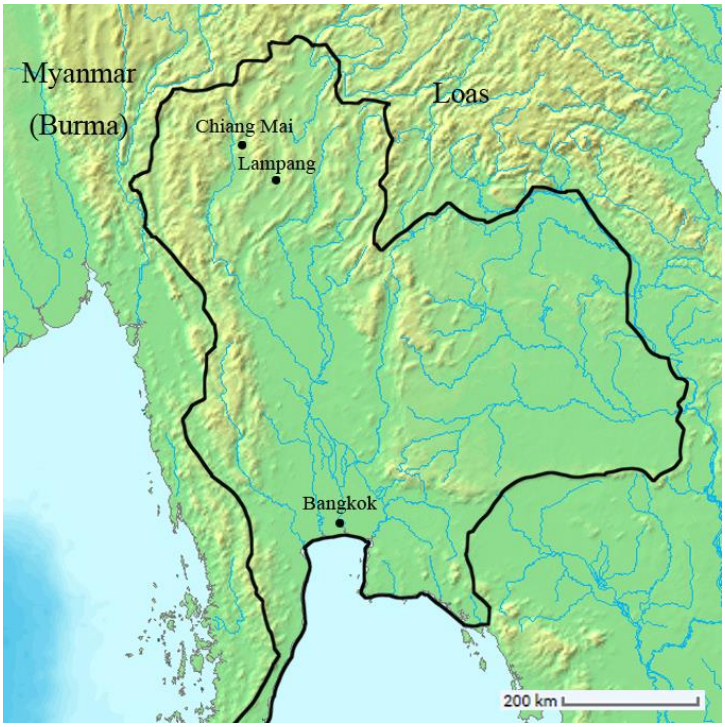

Figure 5.5.31: This map shows the distance between Bangkok and the mountainous-northern region of Thailand. The railway reached Lampang and Chiang Mai in 1916 and 1922 respectively.

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Figure 5.5.32: Old Chiang Mai Station in 1935[1]

[1] Map from the National Archives of Thailand. English texts are added by Chomchon Fusinpaiboon

Figure 5.5.33: The elephant parade at Chiang Mai Railway Terminus Hotel welcomed King Prajadhipok in his visit in 1926 after his coronation.[1]

Figure 5.5.34: A photograph taken from the water tank tower of Chiang Mai Station, looking toward the Railway Terminus Hotel and Siam Commercial Bank, at the time of the 1952 flood[2]

[1] Sattraphai, *Sadet Lanna (Royal Visits in Lanna)*, p. 60.
[2] Bunsoem Sattraphai's Collection, Chiang Mai University

M. C. Vodhyakara reapplied his previous experiments with houses to this public building. Instead of constructing the whole station with reinforced concrete structure and masonry walls, which would have cost more especially if using imported steel bars for concrete reinforcement, he applied half-timbered construction to various parts of the building. The timber frames of walls, ceilings, and partitions were then filled with bamboo wattle and plaster. Thawon Bunyakiat, M. C. Vodhyakara's assistant architect at the time, called it '*Baeb Thai Nua* (Northern Thai style)', which 'responded to the Northern region's geography and atmosphere'.[1] Another assistant, Nit Hinchiranan, recorded that 'when M. C. Vodhyakara designed the new Chiang Mai Station in place of the old one which had been the German style similar to Nakorn Lampang Station, he mentioned that it should be designed following the character of the local architecture both in its building and clock tower'.[2] These accounts raise an issue that is not the case in previous chapters. It is the issue of 'national' character in relation to 'regional' character and vice versa.

With reference to 'regional character', it is useful here to be reminded that the accounts about traditional buildings and practices in chapter 2.1 focuses on Bangkok, the capital city. Before the mid-nineteenth century, buildings in the central region of the kingdom shared most of building features and practices with those in Bangkok, while those in other regions shared a few features and practices, but had their own variations in choices of material, pitches of roof, orientation, interior lay-out and hierarchy in spaces, decoration, as well as in domestic rituals.[3] For example, like houses in the central region, houses in the northern region were able to be categorised into two types — *Ruen Mai Bua* and *Ruen Kalae*.[4] *Ruen Mai Bua* were built mainly with bamboo-like how *Ruen Krueng Phuk* was built in the central region.[5] But differences were evident in the fact that hardwood, not bamboo, was used for the beams and columns. This was made possible by the abundance of hardwood in the northern region. The leaves for roofing could be either vetiver grass, which was easily acquired in all regions, or those of gurjan trees, which was a local plant of the north. On the other hand, *Ruen Kalae* were built entirely with

[1] 'Chiang Mai Station', *Warasan Rotfai*, 12 (1968). See also *Warasan Rotfai*, 3 (1956); *Warasan Rotfai*, 6 (1957).
[2] Hinchiranan, '*Sthapattayakam Thai* (Thai Architecture)', p. 45.
[3] See Wanliphodom, *Ruen Thai Ban Thai (Thai Houses Thai Homes)*, p. 92.
[4] *Ruen Thai (Thai Houses)* (Bangkok: The Office of Prime Minister, 1993), p. 70.
[5] See how *Ruen Krueng Phuk* and *Ruen Krueng Sab* were built in the central region in pp. 64–72.

hardwood like *Ruen Krueng Sab* in the central region, but their overall character looks more rigid and masculine. This can be seen in the use of large and straight columns and rigidly triangular gables as opposed to smaller and leaning columns and curvy roofs of those in the central region. This is partly due to, again, the fact that larger trees were abundant. In addition, wood tiles, another local construction material of the region, were also widely used for the roofs of *Ruen Kalae*.

Considering orientation, houses in the northern region were laid perpendicularly to the east-west axis, conforming to the auspicious direction of the northern cities.[1] The fact that the climate of this region is cooler than others might have also influenced such orientation as the houses could receive more sunshine. Houses in this region also had *Tan Nam*, a small shelter in front of them providing water in terracotta jugs for passers-by. This was a local way of making merit.

As regards some unique elements, most of hardwood houses in the region commonly had *Kalae*, a carved feature at the top of the gables, and *Hamyon*, an auspicious carved feature above the door of the main bedroom. These features were not found in the central region. Like the houses of nobles and temples in Bangkok, specific features were reserved for nobles in the northern cities. While such buildings of the highest rank in Bangkok comprised *Cho Fah*, *Bai Raka*, and *Hang Hong* on their gables, those in the north, however, had the same *Cho Fah*, but no *Bai Raka*, and had a different style of *Hang Hong*. Despite the differences, these elements symbolised Garuda and Naga, both of which were mythical creatures associated with Brahmanic/Buddhist Kingship adopted by the royal families of both regions.

Once the characteristics of buildings in the northern region have been discussed, it is also useful to mention those in the northeastern region. Basically, as the culture of the northeastern population in Thailand was historically closer to those of the Lao people, its buildings shared several characteristics with those in Lao and northern Thailand.[2] However, there are certain characteristics that make the buildings in the northeastern region different from those in the north, and, definitely, those in the central region.

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[1] Ibid. p. 95.
[2] *Ruen Thai (Thai Houses)* (Bangkok: The Office of Prime Minister, 1993), p. 123.

To start with houses, it is also possible to divide them into two categories like those in other regions. For the first category which is the less durable type, it was called *Ruen Yao* in this region and was built with hardwood columns and other bamboo components. They can be further divded into three categories; each of them had a particular characteristic, as a result of different construction methods. *Tub To Lao* was the most basic one, constructed as an extension of a small granary. *Dang Tang Din* was similar to the first one but was built independently. Each house of this type had its king posts erected on the ground. This is the reason why it was called *Dang Tang Din*, literally 'king posts on the ground'. The last one was *Dang Tang Khan*, which were larger, slightly more durable, and had their king posts on crossbeams.

For the durable houses of the northeastern region, it can be said that their spatial articulations were almost the same as those in the northern and the central regions except for a particular partitioning of bedrooms. This was done within the main bedroom (most commoners had only one in their houses). In the main bedroom, it was most common to enclose a small room for the daughter. The sleeping space for the parents could also be enclosed in some houses, while that for the son was left opened, being part of the main bedroom.

Apart from the spatial articulation mentioned, the characteristic of houses in the northeastern region could be difined by their less steep roofs comparing with those of the houses in the central and the northern region because a quick drainage of rain water was less necessary in this dryer climate.

As regards monastic buildings, northeastern temples reserved particular ornaments that were not used in commoners' houses. Not unlike the houses, the characteristic of northeastern temples showed simplicity, solidity, modesty, and sincerity, all of which were also the characteristic of the culture of this region.[1] For example, plenty of the temples in the region had walls enclosing only three sides of the last bay where a Buddha image was located. The other sides of the buildings were left opened. Similar to the houses in the region, the roof of some temples were less steep than those in other regions. Furthermore, some had another set of low-

[1] Wiroj Srisuro, *Sim Isan (Isan Sim: Northeast Buddhist Holy Temples)* (Khonkhaen: Faculty of Architecture Khon Khaen University, 1993), p. 89

slope roofs extending from the main roof, creating galleries at all sides. Another unique characteristic of the temples in this region was a spire in the middle of the roof ridges called *Cho Fah*. Despite being referred to with the same name as those at the top of the gables of temples in the central region, northeastern *Cho Fah* did not simbolise Garuda but Mount Phra Sumen, the Brahman/Buddhist residence of gods.

In addition to the above discussion about buildings in the northern and northeastern region of Thailand, a brief mention about those of the southern region will provide a clearer background for a future discussion about 'regional character' in this chapter. In doing so, it is necessary to point out that the southern region of Thailand can be roughly divided into two parts. The upper part has been inhabited by the people whose cultures are similar to those in the central region. A crucial difference is evident in the far south where the majority of the population is Muslim. This fact and the monsoon contributed to the characteristic of traditional buildings in the far south. First of all, the *Chan* (decks) of the houses in the region were relatively smaller than those in other regions. This responds better in areas with significant rainfall. The columns of most houses would stand on rock foundations above the damp ground. The hip-and-gable roof form *Branor*, possibly derived from Indonesia, was also popular in this region.[1]

As regards particular articulations of spaces that fit for the values and rituals of the Muslim inhabitants, the stairs for men ascending to the main floor of a house were located at the front while those for women were at the back of the house. There were always jars of water for feet washing at the stairs. On the main floor, a prayer space was properly defined by a curtain and it should face west, the direction towards Mecca. As regards religious buildings, mosques were built with hardwood, like the houses of wealthy locals. Some of them had steeper roofs than those of the houses. Onion domes were started to be imported after the period in focus of this thesis.

[1] *Ruen Thai (Thai Houses)* (Bangkok: The Office of Prime Minister, 1993), p. 207.

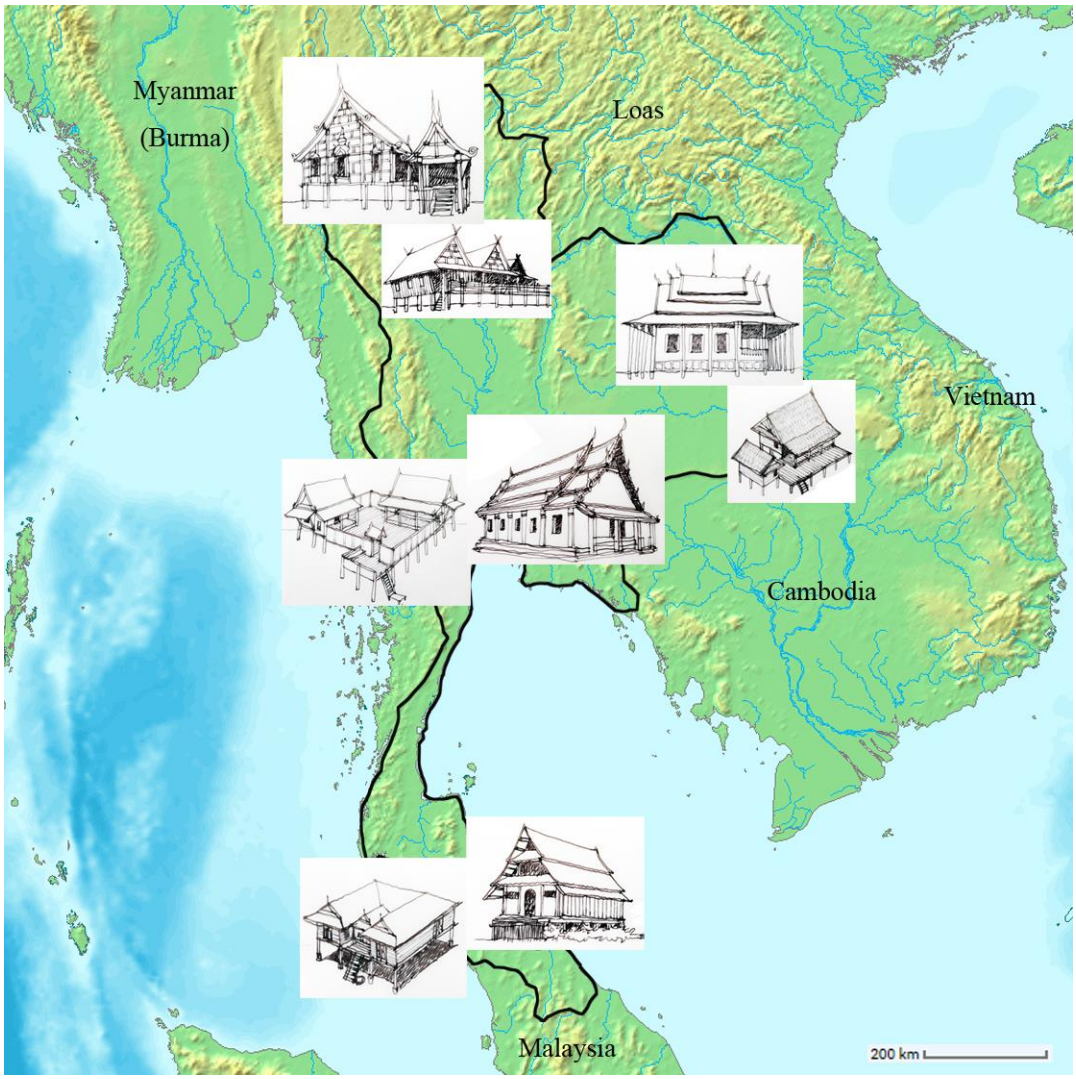

Figure 5.5.35: Characteristics of traditional buildings in the northern, northeastern, central, and southern regions of Thailand[1]

[1] Photos of the houses from '*Ruen Thai (Thai Houses)*' (Bangkok: The Office of Prime Minister, 1993), pp. 7, 69, 140, 225. Map from Google Maps.

Returning to Chiang Mai Railway Station, a draft by M. C. Vodhyakara's possibly for a monograph that has never been published shows the design of the station that was dubbed by the architect as 'Thai Gothic'.[1] He also indicated that this was his first attempt at 'Thai half timber'. He, however, pointed out with a bold phrase in Thai that the design is 'a bit too religionist [*Satsanha Niyom Chad Painoi*]'. This means that the design adopted too much of the style found in religious buildings. He explained in English that 'It's a matter of taste of the director general' (that had created this final design). And he made a final note that 'postcard reproductions [depicting the station] have shown enough public appreciation, ignorance & national prejudice!'. All these statements make the issue of 'national' versus 'regional' character even more complicated than the question of how this issue was related to a foreign style, Gothic, the director's taste, and the public. Looking at the evidence in all these accounts, the design of the station may reveal the political, cultural, and economic factors that influenced the architect and shaped the final design. It will reflect the ongoing process of modernisation and the maintenance of identity amidst the restricted circumstances of the post-war context, as well as the appropriation of nationalism in a regional place.

[1] Bangkok, M. C. Vodhyakara Varavarn's Archives, Part of My Research Work Adopted by the Royal State Railways

Figure 5.5.36: A sketch and description of Chiang Mai Station done by M. C. Vodhyakara Varavarn after his retirement[1]

[1] Bangkok, M. C. Vodhyakara Varavarn's Archives, Part of My Research Work Adopted by the Royal State Railways

Figure 5.5.37: Old postcards depicting Chiang Mai Station[1]

[1] '*Postcard Kao Sathani Chiang Mai* (Old Postcard, Chiang Mai Station)', http://www.pramool.com/cgi-bin/dispitem.cgi?7827248 [accessed 18 July 2013].

Figure 5.5.38: A perspective drawing of Chiang Mai Station in a provincial and northern Thai atmosphere by M. C. Vodhyakara Varavarn[1]

[1] '*Sathani Chiang Mai* (Chiang Mai Station)', *ASA*, 2 (1949), unnumbered p.1.

It should be remembered that post-war Thailand saw a more conservative nationalist policy on the part of the government. It demanded that government buildings should exhibit the national character, i.e. should look Thai. But if we take the accounts of Thawon Bunyakiat and Nit Hinchiranan, the assistants, it is evident that M. C. Vodhyakara also considered local character — not just Thai but northern Thai. But to what extent and how could northern Thai character be exhibited?

In the circumstance of immediate post-war Thailand that knowledge about Lanna or what M. C. Vodhyakara might have perceived as 'Northern Thai' was very limited[1], the architect avoided to express local character by an inclusion of Lanna forms and elements. Instead, he chosed toobtain it through forms in response to climate.[2] For the dominant form, he used high gable roofs. In response to climate, the building was oriented perpendicular to the prevailing wind directions, both summer and winter; therefore most of the spaces caught breezes for cross-ventilation. The deep eaves were applied to give protection from strong sunlight and heavy rain. Local materials were used, especially those for the construction of the half-timbered parts. But for the authority, all of this might have been inadequate to exhibit the national character, unless elements adapted from traditional architecture, especially belonging to traditionally high-ranked buildings, were included.

For M. C. Vodhyakara, the adoption and adaptations of elements from high-ranking buildings for ordinary buildings not only seemed inappropriate, but also diluted the merit of the ecclesiastical and royal architecture.[3] The problematic features in the final design that irritated M. C. Vodhyakara were probably the two elements at the main gable ends and the clock tower that were presumably added on the advice of the General Director of the railway authority in order to ensure that Thai character was achieved. Firstly, despite a simplified shape, the gable ends resembled the profile of *Hang Hong*, an element used in that position on high-ranking buildings. Secondly, the tiered roof form found on the clock tower was ambiguous. It was probably derived from an imaginative adaptation of central Thai *Prasat* and Burmese *Pyatthat* roof forms, all of which belonged to symbolic high-ranking architecture.

[1] Pinyapan Potjanalawan, 'Thai-Lanna: The Historiography of Lanna Architecture (20th Century-2006)', *Na Chua*,10 (2013), 26–59.
[2] Bangkok, M. C. Vodhyakara Varavarn's Archive, The Disgrace of the City, Part of *Khwammai Khong Watsadu Lae Kan Okbeb Sathapattayakam* (Definition of Materials and Architectural Design) (1964)
[3] Bangkok, M. C. Vodhyakara Varavarn's Archive, Thai Architecture (1963)

Figure 5.5.39: Prasat roof at Phra Thinang Dusit Mahaprasat, Bangkok[1]

Figure 5.5.40: *Pyatthat* roof at the South Gate in the West City Wall, Mandalay[2]

[1] National Archives of Thailand
[2] British Library Collections

As regards the 'Thai Gothic' classification that M. C. Vodhyakara gave his design, this should be understood in relation to his ideas about Thai and Gothic. M. C. Vodhyakara's understanding of Gothic architecture can be deduced from the articulation of parts, such as massing and fenestration, in relation to the planning and construction method of the station. First, unlike his previous station and office designs that showed classical articulations, such as symmetrical plans and repetitive fenestration, the design of Chiang Mai Station bore a different quality. The articulation of mass and fenestration in relation to the plans conformed more with Gothic's 'responsiveness' as described by John Ruskin, in order to highlight its fitness for the purpose.[1]

All parts were arranged according to their functional and symbolical aspects. The main building was laid out in an east-west direction perpendicular to the platform that stretched southward from the east end of it. The design of each main part distinguished its function from the others — the main building, the clock tower, the platform. The King's room was at the east end, adjacent to the first and second class waiting room, whereas the third class waiting room was at the other end. Functionally, the east end was the most private and secure part. It was also nearer to the platform, and cooler because of the absence of the afternoon sun from the west. Symbolically, the east was also the good direction, whereas the west was inauspicious. The office was on the first floor above the third class waiting room. It confirms the symbolic concern that no one should be above the King; therefore it would not be possible to put this part over the King's room. Instead, the prasat form was put on the top of the clock tower above the King's room, as this is a suitable decoration for the King.

[1] John Ruskin, *The Stones of Venice* (New York: John Wiley & Sons, 1884), p. 178.

Figure 5.5.41: Ground floor plan of Chiang Mai Station[1]

[1] '*Sathani Chiang Mai* (Chiang Mai Station)' English texts added by Chomchon Fusinpaiboon

Figure 5.5.42: Chiang Mai Station in its rural setting in 1953[1]

[1] Bunsoem Sattraphai's Collection, Chiang Mai University

Figure 5.5.43: The Royal car of King Bhumibhol left Chiang Mai Station[1]

Figure 5.5.44: Chiang Mai Station[2]

[1] Bunsoem Sattraphai's Collection, Chiangmai University.
[2] Ibid.

In addition, main parts of the ceiling and walls, especially those of the office on the first floor, were constructed with timber frame filled with bamboo wattle and plaster. This conformed to M. C. Vodhyakara's understanding of Gothic. For him, a style meant a construction method rather than a mere appearance.[1] Therefore, it was deemed to be permanent, as a consequence of thorough thinking and execution, as well as an adoption of contemporary materials to the method, which was the opposite of the rapid appearance and disappearance of a fashion.[2] Half timbered construction was sometimes called by the architect 'Tudor'. It was described by him as a category of Gothic.[3] M. C. Vodhyakara's attempt to blend a Gothic style that provided practical function, and sound and economical construction, with Thai elements that offered an appropriate atmosphere, therefore, resulted in the 'Thai Gothic' design of the station in his sense.

The design of Chiang Mai Railway Station further demonstrates how western principles and techniques in architecture were localised and reinterpreted in a non-western context, especially in a difficult time in terms of economy like post-war Thailand — not to mention its ongoing mediation between modernity and so-called tradition. It also reveals another issue — the mediation of national and regional character, which, in this public building, happened to be simplified by the authority's ideology of the unified nation. The last case study of this research examines this last issue further with a project related to a domestic building type in order to see how architects thought about the real 'regional' users.

Research on houses for farmers all over the kingdom (1952–53)

Given the contrast between urban and rural dwelling described at the beginning of this chapter, *No. Po.* (N. P.), possibly a pen name of Nat Phothiprasat, speculated in his article, *Ban Ruen Thai* (The Thai house), published in 1949, that the reasons why the traditional Thai house lost its popularity among the public were the function, materials, and modern culture (*Watthanatham Tam Paen Samaimai*).[4]

[1] Bangkok, M. C. Vodhyakara Varavarn's Archive, *Samai Kab Baeb* (Fashion & Style), Part of *Kwammai Khong Watsadu Lae Kan Okbaeb Thang Sathapattayakam* (Meaning of material and design in architecture) (1964).
[2] Ibid.
[3] Bangkok, M. C. Vodhyakara Varavarn's Archive, *Ban* (House): A Note Submitted to Department of Advertisement as a Proceeding of M. C. VodhyakaraVaravarn's Lecture Broadcast in the State Radio on 1 December 1942 (1942).
[4] No-Po, '*Ban Ruen Thai* (The Thai House)', p. 28.

But he observed that the modern house was popular only among well-to-do people, who craved for modern things, while the majority, especially people in rural areas still lived in the traditional house. Therefore he still wondered if the modern house would be accepted by the majority at all and, if so, how long it would take them to do so. Accordingly, he posited a new house style that would respond to the new era but at the same time also respond to the majority's taste and way of life. His concern was therefore about how the new and old styles and principles of dwelling could be merged into a contemporary one suitable for the majority.

In answer to this question, he proposed, in his own words, the 'safest' way, rather than any avant-garde one: that architects should adapt old principles and characters to suit contemporary behaviours and functions.[1] He proposed nine principles, if not all necessary in one design, for a contemporary house:

1. To mentally promote the people's freedom
2. To respond to a contemporary way of life
3. To exploit modern materials at their best
4. To demonstrate the present era's culture
5. To improve function
6. To promote well-being to reach a good standard
7. To promote convenient and hygienic planning
8. To exploit durable and uncomplicated construction methods
9. To improve and promote the character of this design

Phothiprasat's proposal coincided with the government's concern that material prices and construction costs would be increased due to the large annual budget on construction of 1950. The government, therefore, appointed a committee including, M. C. Vodhyakara Varavarn, the Head of Architecture Department, and Luang Burakamkowit, Director of the Department of Municipal Works, to find ways of limiting costs in 1949.[2]

Having experimented with several projects using half-timbered construction, M. C. Vodhyakara saw that the prospective problem was linked to the fact that there had been little research on the production of economical materials, easily and

[1] No-Po, '*Ban Ruen Thai* (The Thai House)', p. 28.
[2] National Archives of Thailand, (2) S R 0201.69/5, p. 3.

quickly made, which would benefit the population whose lack of funds prevented them building decent homes. He therefore proposed a plan to improve the situation of post-war construction. One of the plans was to support the university to do such research.

Despite the failure of the first *Burana Chonnabot* (improving the countryside) campaign in 1942, and the lack of success due to problems of workforce and funds with prototype houses provided by the Department of Municipal Works, the government led by Phibunsongkhram who served his second term after the war, campaigning with another set of nationalist policies, decided,to continue its mission in 1951, but with some adjustments.[1] This brought about research to find an appropriate prototype for farmers' houses all over the kingdom. It was conducted by M. C. Vodhyakara, Phothiprasat, and other staff in the Faculty of Architecture, Chulalongkorn University, during 1952 and 1953.

The objectives of the research project were 1. Research about existing conditions of farmers' houses; 2. Assist them with a theoretically proper construction and Thai characteristics; 3. Improve their quality of life by introducing an economical design that they can build themselves using abundant domestic materials, and made as durable as possible so that it would correlate with the government's policy on good culture.[2]

The countryside had long been a backward area for people from Bangkok. Prince Damrong who had travelled extensively in the kingdom at the turn of the twentieth century had recorded *Chao Bannok* (Rural people) in his book *Nithan Borannakhadi (Archaeological legends)* as people who lived with simplicity, superstition, ignorance, and uneducatedness, so were therefore less civilised.[3]

The researchers, all from the Bangkok elite, saw the existing houses of farmers as 'not good enough' as they were mostly built for limited life following

[1] Bangkok, National Archives of Thailand, (2) S R 0201.5/26 (Improvement of the Countryside Programme)
[2] '*Ban Chaona Thua Phra Ratcha-Anachak: raingan Gan Wichai* (The House for Farmers All over the Kingdom: Research Report)' (Bangkok: Faculty of Architecture, Chulalongkorn University, 1952), pp. 1, 6.
[3] Somdet Kromphraya Damrongrachanuphap, *Nithan Borannakhadi (Archaeological Legends)* (Bangkok: Khlang Witthaya, 1951).

inherited knowledge. So they needed help with 'up-to-date' construction.[1] Even though the researchers realised that the lifestyle of farmers was not the same as theirs, they tried to understand their livelihood and summarised it in their report. The outcome reflected the Bangkok elite's understanding of rural life based mainly on physical evidence but not on the farmers' rituals and spiritual life:

> Farmers' life is a simple life. They are patient and isolated, being familiar with outdoor life, vast fields, and clear weather. Dwelling is simple and not sophisticated. They live a relaxed life and find happiness from what is mainly natural. Farmers are not extravagant. The poor ones live in the easiest-made cottages built by their least effort with abundant materials, such as bamboo and nipa-thatched roof. They have never invested in comfort unless they gain a better status in which case they would build timber houses with raised floors and nipa-tatched roofs. But we rarely saw any of their houses that were better or more durable than this. Therefore, these show the simplicity in farmers' lives that has been like this for a long time.[2]

What is missing in the survey was the actual 'problem' felt by the farmers. The survey seemed to show that the farmers were actually quite happy with their life and indeed their houses. On the other hand, those who were not happy were the Bangkok elite – politicians, academics, and architects, who used their standards to measure the farmers' lives and dwellings. The sense of reasonable happiness in farmers' lives was also reflected in the report regarding craftsmanship. The researchers found that farmers could do basic construction and, in some areas, could do sophisticated works, building their houses beautifully and decoratively. This led to the aspect of taste and artistic fondness that they thought farmers had reasonably good artistic taste but in a simplistic way which expressed their innocence of mind following their surrounding nature, as written:

Some farmers' houses show naturalness such as beauty of form and proportion (innocent beauty) not from decoration. The simplicity and

[1] '*Ban Chaona Thua Phra Ratcha-Anachak: Raingan Gan Wichai* (The House for Farmers All over the Kingdom: Research Report)', p. 1.
[2] Ibid., 2–3.

straightforwardness are worth noticing as artistic character. Decorations appear in some places such as gables, stairs, railings […] as required, and not more than this.[1]

After researching the existing conditions, the design process started with site planning and requirements.[2] The special focus lay on the house. The researchers proposed that generally a house needed a bedroom for all members of a family with walls on all sides including doors and windows. Living areas were *Chaliang* (gallery) or *Honang* (sitting hall) that were used for dining, relaxing, and cooking. A kitchen could be a separate room in a large house. Bathroom and toilet were not generally built within a house. A toilet was separated, and people tended to take a bath in waterways or ponds. But it could be introduced as a proper room in the future by considering the convenience in particular cases. They saw the practice of the extended house for an extended family using shared *Chan* (deck) as useful and reasonable because it was economical, safe, easily standardised, and orderly. They also saw the raising of the main floor as practical, especially for the flood plain and so it should be adopted.[3] The ground floor could be the location for a kitchen also. Wind direction should be considered. The character of the house should be simple, airy, following nature as before. It should be locally specific as local taste and culture required.[4]

As durability was thought to be a main necessity that the countryside still lacked, M. C. Vodhyakara's half-timbered construction was promoted. These issues were, again, modern concepts and concerns increasingly adopted by Bangkok elite after contact with the West in the mid-nineteenth century. The researchers found that poor farmers could not acquire a large amount of timber easily. The half-timbering with mud and straw walls was therefore the most appropriate, and other things such as logs, vetiver grass, nipa tatch, tile, lime, sand, cement, ashes, brick could be adapted to suit local geography and culture as well as individual requirements.[5]

[1] '*Ban Chaona Thua Phra Ratcha-Anachak: Raingan Gan Wichai* (The House for Farmers All over the Kingdom: Research Report)', p. 6.
[2] Ibid., 8.
[3] Ibid., 9.
[4] Ibid., 10.
[5] Ibid., 11.

Figure 5.5.45: Sketch Designs of the Farmers' House project (1952) by students of the Faculty of Architecture, Chulalongkorn University. The built scheme was designed by professors.[1]

[1] '*Ban Chaona Thua Phra Ratcha-Anachak: Raingan Gan Wichai* (The House for Farmers All over the Kingdom: Research Report)', unnumbered p.2

The budget for the prototype house was relatively high, but the researchers argued that this budget could give a house ten times more durability than what farmers had done.[1] This was a great challenge to farmers who still did not take durability seriously.

As regards hygiene, the researchers tried to suggest farmers how to use nature to benefit their lives, such as sunlight, air ventilation, freshness of plants, sky, etc. An example was how to consider wind direction, and sun direction. This demonstrates the issue of scientific versus traditional practice. The farmers might never have heard about scientific principles of orientation before, but those who had been sophisticated enough might have arranged the orientation following ancient principles and auspiciousness, while others might have lived as simply as they could as long as they felt comfortable. Phothiprasat himself pointed out that the orientation of most existing houses did not consider wind direction, but this was because they were located in open areas where wind generally flew from every direction, and farmers actually went to the field from dawn till dusk so they never wanted more fresh air.[2]

In the postscript of the research, Loet Uratsayanan, a member of the research team, added a note about '*Khongkhang* (mystic stuff)' explaining ceremony and auspiciousness related to farmers' house building. This brief observation on the so-called superstition demonstrates the ongoing attempt of Thai academics to make sense of them within a scientific explanation in order to get along with '*Samai Witthayasat* (Scientific era) and to see if these ideas could get along with each other.[3]

[1] '*Ban Chaona Thua Phra Ratcha-Anachak: Raingan Gan Wichai* (The House for Farmers All over the Kingdom: Research Report)', p. 40.
[2] Ibid., 47.
[3] Ibid., 51-53.

Figure 5.5.46: Plans and elevations of the prototype house for farmers all over the kingdom (1952)[1]

[1] '*Ban Chaona Thua Phra Ratcha-Anachak: Raingan Gan Wichai* (The House for Farmers All over the Kingdom: Research Report)', unnumbered p.5

Figure 5.5.47: The prototype house for farmers all over the kingdom with the cubic Building No.1 of Triam Udom Suksa School as a background[1]

[1] '*Ban Chaona Thua Phra Ratcha-Anachak: Raingan Gan Wichai* (The House for Farmers All over the Kingdom: Research Report)', unnumbered p.6.

Figure 5.5.48: Sketches indicate the specifications of walls' in-fill, and show possible extension of the house in a traditional manner[1]

[1] '*Ban Chaona Thua Phra Ratcha-Anachak: Raingan Gan Wichai* (The House for Farmers All over the Kingdom: Research Report)', unnumbered p.7.

Figure 5.5.49: Drawings show details of components including lath-and-plaster-wall[1]

[1] '*Ban Chaona Thua Phra Ratcha-Anachak: Raingan Gan Wichai* (The House for Farmers All over the Kingdom: Research Report)', unnumbered p.8.

Figure 5.5.50: A section and the attic of the prototype house for farmers all over the kingdom. The usable attic, unprecedented in the traditional Thai house, was championed by M. C. Vodhyakara Varavarn for its functional benefit[1]

[1] '*Ban Chaona Thua Phra Ratcha-Anachak: Raingan Gan Wichai* (The House for Farmers All over the Kingdom: Research Report)', unnumbered p.9

Conclusion

This chapter deals with two separate but related things — dwelling projects and half-timbered construction. It has further examined the issues of modernity and of national character in buildings and architecture, both of which were main issues in the transplantation of the concept of architecture from Europe to Thailand during the 1930s to the 1950s. The examinations of the experiment and promotion of half-timbered construction by M. C. Vodhyakara Varavarn reiterates the way pioneering Thai architects selected, applied, and reinterpreted western ideas and practices to the local context, already demonstrated in previous case studies. But the case studies in this chapter demonstrate that what was modern in Thailand between the 1930s and 1950s was not only the so-called modern style or up-to-date buildings and architecture, but also something else that was not considered modern in the West but fitted the criteria of Thailand's particular modernity.

Regardless of style and construction method, the issue of national character was important, and the case of Chiang Mai Railway Station shows an uneasy mediation between the national and regional characters and the way its justification was over-simplified by the state's nationalist attitude. The issue of modernity and national character also engaged with domestic projects, and half-timbered construction was seen by M. C. Vodhyakara as relevant to these discourses thanks to its exploitation of domestic and economical materials that responded well not only to climate but also to issues of durability and hygiene in that economically difficult time. But the expectation of the authority regarding national character sometimes went beyond the architect's control resulting in a rather superficial outcome aiming mainly at visual impact.

But ultimately, the project of a prototype house for farmers all over the kingdom demonstrated that the quest for modernity and the national character in architecture were only concerns of the urban elite and professionals in the beginning of the 1950s. Through this research project, the Bangkok elite wanted to help rural people who seemed to already have a reasonably happy life to achieve a yet happier life in properly built houses that were durable and hygienic by the standards of the urban elite. This was done not just for the well-being of the rural people but also for the dignity of the nation — again, a concern only of the elite. Within this process the

elite learnt to mediate what they perceived as superstition with scientific measures. But actually the superstition was sometimes not far from what the elite and middle classes themselves still practised in their urban homes. The point is that they chose to maintain some practices, neglect others, and reinterpret the rest of them for themselves. This situation had started since the Imperial West had imposed their good will-turned-pressure to civilise all the countries on earth on the Bangkok elite in the mid-nineteenth century. A century later, the Bangkok elite's benevolence towards the rural people was not unlike the attitude introduced by the Imperial West.

6 Conclusion

The opposed values of modernity and tradition, still embraced simultaneously by the majority of Thai middle-class society nowadays, has long affected architectural culture and production in Thailand. This research takes the transplantation of the concept of 'architecture' from Europe to Thailand between the 1930s and 1950s to examine the origin of this dual value, because the period under scrutiny saw the origin of the architectural culture in the country systematically established by local architects who had graduated from Europe. The research, therefore, locates itself in the field of transcultural history of modern architecture, and, more specifically, in the history of modern architecture in Thailand.

Conventional literature in these fields tends to see the transplantation of 'modern' architecture from the western world, or, indeed, from Western Europe and North America, to so-called non-western contexts as a one-way process, adaptations notwithstanding. By challenging this western-centric-way of understanding modern architecture in non-western contexts, this thesis fundamentally questions the local concept of not only 'modern architecture', but even 'architecture' per se. This is because, for the case of Thailand, the concept of 'architecture' happened to be created at more or less the same time as the concept of 'modern'.

This thesis first seeks to understand what it means to be modern in a non-western context in a particular time, in this case, Thailand during the period from the 1930s to 1950s. It then examines how the concept 'architecture' was created as part of the introduction of architectural culture within the particular circumstances, and what was produced. It looks at the situation at the time not as a direct transplantation of architectural ideas and principles from Europe to Thailand but as a consequence of the socio-political circumstances that brought the transplantation. It also seeks to examine within the process of transplantation, the process of transformation and reinterpretation of original ideas and principles to suit the local context and time, not just as a mere 'adaptation' of the original concept. Furthermore, it examines how these processes interacted with indigenous beliefs and how they affected traditions related to buildings, and vice versa.

In achieving these, the research examines materials from not only pioneering Thai architects and material about their buildings, but also the state and the public to expose the multiple meanings of architecture. It compares these local and multiple meanings of architecture to what had been learnt in Europe by the pioneering Thai architects. Furthermore, it compares all these things with what had been understood about buildings in Siam by the traditional Siamese society.

Acquisition of archival materials in Thailand was a time-and-effort-consuming-job due to the limited number of well-organised archives and the limited access to many government and private organisations to search for possible resources. This situation is reflected in this thesis in that some aspects and case studies are backed by far more supporting material, and are therefore examined more deeply than others. This thesis is divided into two main parts. First, the examination of the architectural culture that set an alternative way to understand the subject in this period. Second, case studies that give examples of the process and products of the architectural culture that was examined in the first part. Both parts of this thesis can be expanded by future research if more material about particular aspects or cases, or even new cases, are discovered. On the other hand, both parts can be also challenged if the subjects need to be examined from different perspectives.

The thesis starts with a discussion about how traditionally buildings were perceived, produced, and inhabited. It shows that the perception, production, and habitation were conducted within a particular worldview of the Siamese society before the mid-nineteenth century, where transience, hierarchy, auspiciousness, religions, and myths were the norms. And foreignness was not absent from this period. Then it scrutinises how these factors were transformed after Siam's contact with the Imperial West in the mid-nineteenth century.

As the Siamese elite during the mid-nineteenth century and into the 1920s wanted to catch up and to be on a par with their western peers, while at the same time securing their prestige domestically, the style of their traditional building types, such as palace and house, and, in some cases Buddhist monastery, was changed but not in terms of their intrinsic meaning, the ways they were used, or the rituals associated with them, some transformations notwithstanding. However, a new

meaning of those existing building types with new styles was introduced. It was that they also represented a modernity. The use of the article 'a' here emphasises that there are various types of modernity and the one experienced by Siam at this period was a particular one. The representation of the modernity was also done through the erections of new building types, such as government offices and modern facilities, introduced through many reforms, that served not only functional purposes. Moreover, some of these building types were hybridised, not only between modern and traditional styles, but also in their symbolic meanings and roles. An example is the Thai-style Royal Pages School that was built by King Vajiravudh (reigning 1910–25) instead of a royal temple of the reign to serve not only education, previously done in temples, but royal nationalism. But even by the end of the 1920s, the concept of 'architecture' was still far from widely known.

It was not until the period between the end of the 1900s and the beginning of the 1930s that the concept of 'architecture' was learnt by Siamese students in France and Britain. There, they learnt a completely new concept, not known in Siam before. One of the most important points is that they learnt about the new concept in a totally different context. Even though some slight notion of local contexts beyond Europe was addressed in the design classes, it mainly concerned buildings' general outline and materials. The main principle was strictly European.

The main challenge for the Siamese graduates was how to make sense of applying a new concept to objects previously understood as something else. To be more precise, those things were not objects but houses, palaces, Buddhist monasteries, each with its own meaning and rituals that associated with it. They also had to make sense of a concept of architecture that applied to modern building types.

Apart from the challenge in making sense of the concept of architecture, the returning Siamese graduates had to secure their place and prestige in the government workforce. It was in the period under the last absolute monarchy (1925–32) that they had more chances to prove their capability. This was because European architects, previously employed by the royal government for almost five decades to design old and new building types, gradually left the country due to the government's attempt to reduce expenditure and to employ more Siamese, amidst an

economic recession. However, some European architects remained, since they were still needed for most of the largest projects. At the same time, Thai master builders and contractors, who had previously lost a huge amount of work to the European architects and immigrant Chinese builders over previous decades for new styles and new types of building utilising new construction methods, also had more chances to prove their ability to adapt. The Thai master builders were involved particularly with Thai-style modern buildings that needed modern construction and planning from Siamese architects, who had been equipped with the knowledge about them from abroad but lacked knowledge about traditional architecture. It was this period that characterised the compromise among old and new practitioners, both Siamese and foreign, and also patrons, constituting a hybridised intermingling between modernity and tradition. However, the formal establishment of architectural education and of a professional association, as well as the dissemination of the concept of architecture, were yet to be achieved.

The major opportunity for the pioneering Siamese architects to set up the architectural association and education, as well as to disseminate the theoretical concept of architecture to a wider realm, came after the 1932-revolution when the monarchy was put under a constitution. Throughout the post-revolution period until the end of World War II, the democratic-turned-paramilitary government ran the 'nation building' campaign, championing nationalism that shared the same cultural aim as had been promoted under King Vajiravudh's royal nationalism (1910–25), to achieve the stage of *Siwilai* — the indigenous version of civilised — a modernity. Pressure and inspiration from the global scene, including the rise of German Nazism, Italian Fascism and Japanese Imperialism, played a significant role in the actions of Thailand's new elite. From the end of the war until the end of the 1950s, the nationalist policy was still pursued with some adaptations, emphasising tradition more.

Under these circumstances the pioneering Siamese architects set up their professional association in 1934 to set a standard and code of conduct for the new profession. They started to make sense of what they had studied from Europe by producing architectural publications. They did try to promote architecture as art for art sake, as they had learnt from Europe, where art had been appreciated by the wider public. But they found that to promote architecture as an important tool for the

‘nation building’ campaign made more sense to Thailand at the time. Either way, they prioritised both ‘scientific rationale’ and ‘appropriateness’ in applying architectural knowledge in projects — building them theoretically correct following universal principles and suitable for the local context. In this process, though, they found themselves engaged in translation, reinterpretation, and transformation of the architectural knowledge and practices from Europe, re-establishing their own power over the western knowledge, to which they had been subjected.

The establishment of architectural education amidst limitations in budget, in number of teachers and in textbooks, also engaged them with the processes of translation, reinterpretation, and transformation of architectural knowledge and practices from Europe. Even though the structure of the curriculum was largely drawn from the University of Liverpool, many aspects were adapted and hybridised, even to the point that some of them, such as the relationship between teachers and students, conformed to what had traditionally been the case with apprenticeship in building practice. The introduction of ‘definition’ and ‘history’ of architecture at the same time in both publications and training brought the matter of ‘style’ to the fore, but largely with the idea that it was a consequence of each period’s particular situation, rather than the creation of individual architects. This supported the priority of ‘appropriateness’ in architectural design. And this is why Modernism from Europe was localised, alongside conventional ideas and principles of architecture, by the pioneering Siamese architects in Thailand by championing its practical path more than its ideological one. As a result, the imported knowledge and practices, both conventional and Modernist, were localised in hybridised ways. Thai architects and authority, finding themselves subjected to the perceived superiority of western knowledge, again, discovered also the power to alter the superior knowledge to suit their own purposes.

The second part of the research is case studies. These examine how the pioneering Siamese architects created their built works under the circumstances discussed in the first part. It scrutinises how particular cases were created from what the architects learnt, wrote, and thought, and how they were influenced by patrons and received by the public.

The first case is Sala Chaloemkrung Theatre (1931–33), initiated before the establishment of the architectural school, the professional association, and specialised publications. It was therefore a product largely created under the old perception of the Siamese society concerning a prestigious project built by a King. It was built under the old idea of a benevolent King seeking not only to reassure the well-being of his subjects, but to secure his legitimacy to rule the Kingdom absolutely. This was because his legitimacy had been undermined by the previous reign's excessive spending of state's funds, and the current government's struggle to cope with economic difficulties. For the absolute monarchy, this action might have been considered ineffective, as new surge of global economic depression started with 1929 Wall Street Crash, and then accumulating liberal ideas among members of the educated Siamese middle class finally brought the end to the absolute rule. But for Siamese architects, they were proved successful in their capability to design a state-of-the-art project, and they were able to start to establish a good recognition of their profession. However, the recognition of their work, in this case, the prestigious cinema, was still seen under the old perception of the public towards a modern 'building' that symbolised progress rather than an appreciation of it as 'architecture'.

The concept of architecture was later applied widely in new public buildings built by the new regime between 1932 and World War II. But the differentiation between architecture and building largely depended on prestige of the projects. This, for most of the time, resulted in the differentiation justified by the absence or presence of decoration. Fortunately for the new regime, the buildings without decoration, or, the architecture with little decoration, could be put in a par stylistically with projects abroad. This assured the 'up-to-date' value of the seemingly devalued buildings. Accordingly, what continued from the time under the old to the new regime was that Thailand still tried to 'catch up' with the West. But these case studies show that, under this general aim, pioneering Thai architects departed from some principles they had learnt from the West. As with their writing and teaching, their works were hybridised in a way that they saw as 'appropriate' to the local context and situation. In general the concept of architecture was high and expensive. It was for the nation rather than individuals. But in everyday use, both architecture and building were subjected to users' understanding of space and elements of buildings, sometimes in indigenous ways.

Alongside the craving for modernity, the Thai elite was also concerned about their identity. This dual value was intrinsically the essence of *Siwilai* — Thailand not only should be modern but should have its own roots. An early case study engaging with this issue was the Thai pavilions developed for international expositions from and after the time under the absolute monarchy. These aimed to exhibit the dual quality already discussed: they show that an early attempt at the turn of the twentieth century to exhibit national art that was both 'modern' and 'Siamese' was later replaced by a mere response to what a western audience expected to see. And the fact that the Siamese elite responded well in this direction made the situation continue into the time under the new regime. At the same time, the meaning of traditional arts, now constituted as symbols of national culture, was transformed into a static heritage, which made its originally spiritual role in everyday life less relevant. The main roles of the traditional arts were exhibiting a civilised image of the nation and drawing tourists to the country. This entailed some new ways to treat them, such as the use of Buddha's head images as artistic sculptures in place of the whole Buddha images intended for religious rituals and serving spiritual purposes. This situation also prevented discussion about alternative ways to interpret and create modern Thai art.

Back in Thailand, the case study of Chulalongkorn University Auditorium (1937–39) demonstrates that the idea about national character in architecture, exhibited in both Thai pavilions in international exhibitions and Thai-style modern buildings built since the reign of King Vajiravudh, was adopted by the new regime. The main aim in erecting Thai-style architecture in order to express that Thailand not only embraced progress but had her own civilisation continued to overshadow the intention of handing down traditional art for people to appreciate. The traditional art was not much appreciated for its own art sake, but was meant to be appreciated as a representation of the nation's glory. The authoritarian nature of the top-down commission led to a design process that neither the architect nor the master builder had seen as appropriate in designing a Thai-style modern building. The master builder dictated a form that did not respond well enough to the modern function of an auditorium.

The last case study is architecture and buildings built with a particular kind of construction method — half-timbering — promoted by M. C. Vodhyakara Varavarn.

This case study addresses both the notion of modernity and tradition. But also within this case, dwelling projects demonstrate an interaction between the elite's ideology of modernity and the everyday life of both the elite and normal people. The elite's residences were seemingly built following western models, while those for lower classes adopted a more-traditional articulation of space. But a closer examination in both cases show that traditional rituals and beliefs, especially those related to auspiciousness, still lingered on in the process of projects' initiation, design, construction, and habitation.

M. C. Vodhyakara Varavarn's 'Tudor house' at 42 Soi Tonson is a good example of how western ideas and practices were selected, reinterpreted, and applied to the Thai context, and how traditional beliefs imbued in a modern form could be explained in a modern way. These processes were similar to what happened to the 'up-to-date' architecture and buildings of the state, but the point here is that the 'modern style' applied to the public buildings was perceived as modern worldwide, while the half-timbered house was not modern by origin but modern in Thailand when it was built. The situation was even more complex when considering another project adopting half-timbered construction. The 'Native Cottages', built for the National Day Exhibition in 1943, were not associated with the English origin of the construction method. Despite their English origin, learnt in England by the architect who promoted it, the Native Cottages were supposed to be native, supported by the use of local materials.

At the same time, there were also attempts to incorporate the national character into half-timbered buildings. Following his own aspiration, the client's consent, and the nationalist Prime Minister's influence, M. C. Vodhyakara Varavarn tried to do this with the house of Soen Panyarachun at 23/1 Soi Chitlom. At the end of the day, the style seemed less relevant than the appropriate design that responded to the client's real use and domestic beliefs. Another attempt to incorporate the national character into half-timbered buildings, or, actually in this case, architecture, took place with the design of Chiang Mai Railway Station. This project raised the issue of a balance between national and regional character in modern architecture that was finally oversimplified by the authority's obsession with national unity.

The case study section concludes with the last case study of half-timbered buildings — the prototype house for farmers all over the kingdom, executed by the Faculty of Architecture, Chulalongkorn University in 1952. In this project, the Bangkok elite tried to 'help' rural people who actually seemed to be reasonably happy with their life. It shows an attempt by the urban elite to impose standards on the rural people. This is not unlike what Imperial westerners had done to the Siamese elite a century earlier.

The examination of building culture in Thailand before the mid-nineteenth century, the transformation of it in the following seven decades, and the introduction of architectural publications, education, and professional association, as well as the examination of case studies, reveals that the concept of architecture transplanted from Europe to Thailand from the 1930s to the 1950s did not precisely replicate its source.

The transplantation was not just an introduction of modern 'art and science of building' from Europe to Thailand with some adaptations, but a systematic yet complexly hybrid process to modernise the traditional concept of 'building' perceived by Thai society.

While the practice and profession were promoted by pioneering Thai architects alongside the government's nation building campaign, the rationale that constituted the promotion was culturally the same as had been adopted under the absolute monarchy. The concept of architecture was used to help the Thai elite to achieve the stage of *Siwilai*, *Araya*, *Khwam Charoen*, etc, all of which constituted a particular kind of modernity, to secure their position among international peers, and to confirm their superiority over domestic subordinates. The appreciation of architecture as art was secondary.

This situation also applied to the architecture with national culture — the Thai style. And while the new concept was being introduced, old concepts were being transformed. They were changed through a dual process and both were hybridised. Ironically, throughout this hybridised process, an idea of authenticity was constructed. So was the dichotomy between East and West, Thai and non-Thai, all of which are actually ambiguous. Buildings that look 'foreign' might have been created and used in a very local way; therefore it is no exaggeration to call it 'Thai'.

Buildings that look ‘Thai’ might have been imbued with imported ideas, without which they could not have been built as they are; therefore it is not fully justified to call them ‘Thai’. In short, both kinds of buildings, some of which are included in an imported classification of ‘Architecture’, have been created to be ‘seen’ as they are by the socio-political and cultural factors under the craving for modernity for the Thai elite at the time. While the ways they were conceived, constructed, and used by their patrons, architects, users, and the public entailed complex issues worth understanding.

It is clear that more research could be done with focus on the subjects related to the architecture of Thailand between the 1930s and 1950s if more material about particular subjects and case studies are discovered, or if a new theoretical perspective can be applied. Beyond that point, this thesis forms a foundation for further research related to modern architecture of the country after the 1950s. Ultimately, what has been achieved by this research is a re-examination of how we might begin to understand transcultural modern architecture anywhere in the world.

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