

THE EVOLUTION OF CAMBODIAN SHOPHOUSE

From Colonial Implant To A Vital Component of Contemporary Cambodian Urban Fabric

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Preface

"They are all the same, they are just *Ptes Lveng*, there's not much about them", I recall thinking this at one point. Rows and rows of shophouses line the streets of Phnom Penh. We, Cambodians, refers to it as *Ptes Lveng*. It's just something I see every day. Living in Phnom Penh, I've seen it in every nook and cranny. Growing up in one, I never realised the significance and importance of this building type and how it shaped our daily lives, perhaps because it has always been a part of my life. It wasn't until I majored in interior design that I learned about the complex history and the value it holds in our urban fabric as well as people's way of life. Five years ago, my family moved to the suburbs and rented out our shophouse. Seeing how my childhood home has been transformed into a non-personal space, for commercial purposes with people coming and going, and altered with signage made me feel certain emotions. This dissertation emerged simply from the reminiscence of my childhood memories growing up in a shophouse, as well as my love and appreciation for my beautiful Cambodian architectural heritage and rich culture.

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Abstract

architectures in umerous colonial including public buildings and colonial villas, have been thoroughly documented and diligently preserved. While the shophouse building is a significant vernacular architecture that emerges and flourishes during the colonial era, it garners little attention compared to its counterpart. Rows of shophouses are so prevalent that they are practically engraved into the country's urban fabric, thus being easily overlooked. This dissertation aims to shed more light on the shophouse of Cambodia and its evolution.

stronghold in the region of Southeast Asia, making Indochina a part of French colony. Cambodia as well as Vietnam and Laos were all part of French running them for nearly a century. The purpose

shophouses evolved in Cambodia as a result from colonial implant and gradually assimilated into the contemporary Cambodian urban fabric as a vital element. Tracing how this evolution is reflected in its architecture and design by tracking the changes in structure, façade design, function, service, spatial organisation, materiality and user type. A qualitative research approach and case study strategy is used to explore different aspects of five buildings. These have been chosen from three significant colonial cities, three (Former Établissement Dumarest d'Indochine, Row of Shophouses, St.108 and Chey Cheta From the late 1800s to 1954, France had a Street Apartments) from Daun Penh district of Phnom Penh traditionally known as the Chinese district - a vibrant historical neighborhood with the city's oldest architectural fabric. House 99, Indochina. They had a hand in shaping the history Street 2 from Cambodia's reputable art and and architectural design of these countries after culture hub of Battambang city and Atelier from the colonial leisure town of Kampot. The cases of this dissertation is to gain insight into how will be thoroughly examined in terms of structure, façade(skin), service (stairs), spatial arrangement, materiality, usage and user type, using the adopted framework of Duffy's theory of shearing layers of change. Changes in the country's politics, economy, and socio-culture are additionally investigated to determine how they shape these architectural and user changes. Each case study is observed utilising precedent analysis, historical literature, drawings, photos and information from national archives. It is concluded that shophouses began as a colonial implant, merely properties to generate high rental income from Chinese merchants. They continue to grow in number as a result of urban necessity for shops to be close to residential areas, which the shophouse typology addresses. Its ability to combine commercial and residential uses in a dense urban center makes it a successful tool in the urban fabric of rapidly developing Cambodia. The evolution is reflected in architecture and design. As technique and time progressed, a one to two story high

building with a simple facade evolved into an elaborately decorated and more sophisticated designed apartment building with multiple stories. The traditional wooden frame houses were transformed into fire-resistant reinforced concrete structures. From a private internal stairwell to a centrally located shared stairwell. Given the need to maximise livable space, the once private central courtyard shrunk and shrunk until there was none left in most modern-day shophouses. It began as a mixed-use typology before transitioning to a fully residential one. The user type shifts constantly, from owner being the occupant to solely a commercial or residential asset. Cambodian shophouse is a symbol of versatility, adaptability, and resilience. It was first introduced into the country as a colonial implant, then adapted to the local way of life and architecture, eventually emerging as its own type of dwelling that is the most popular in the country. Shophouse is an everchanging evidence of colonial roots in Cambodian architectural heritage.

Chapter 01: Introduction

METHODOLOGIES & OBJECTIVES

ocally known as "Ptes Lveng", shophouses are perceived as the symbol of working class given that they are not spacious or luxurious but are efficient and affordable. They are very common on the streets of Cambodia. Despite its popularity, not many people value the heritage of shophouse. Shophouses remain in use and are in fact still at large in Cambodia's construction scene today. They are mass-produced in the form of 'borey', gated communities on the outskirts, in a variety of scales and price points that vary from the market of middle and low-income families to, in some cases, investment properties for the elite and upper middle-class.

each phase of shophouse development over the years, depending on how they withstand and adapt under various economic and political times. Five case studies will be studied in depth to investigate changes in structure, façade design, function, spatial organisation, materiality, and user type,

using Duffy's theory of shearing layers of changes as a foundation and numerous additional criteria. The aim of this dissertation is to gain insight into how shophouses evolved in Cambodia as a result from colonial implant and gradually assimilated into the contemporary Cambodian urban fabric as a vital element. The evolution of its architecture and design is followed through changes in structure, façade (skin), service (stairs), spatial arrangement, materiality, usage and user type, as well as how politics, economy, and socio-culture shaped these changes. Through this analysis, I attempt to identify the changes and address how they may help the shophouse typology to be widely popular today. The case studies are carefully chosen to reflect A qualitative research approach and case study strategy is used to explore different aspects of each case study utilising precedent analysis, historical literature, drawings, photos and information from national archives. I also compile a collection of photographs of my site visit and research of the exterior and interior of several of the buildings.

Chapter 02: Where It All Started

Origin and Architectural Essence

WHAT IS SHOPHOUSE?

Shophouse is a type of mixed-use building born out of urban necessity, combining commercial and residential space in a single unit. It typically consists of a shopfront on the ground floor and a home on the upper floor. Throughout history and around the globe, the shophouse concept has been prevalent in many towns and cities. There are taberna of ancient Rome, terrace-houses of London with shop extensions to the street, canal houses of Amsterdam in Europe; shophouses in Japan, China, and Southeast Asia; New York apartment buildings with ground-floor storefronts; and many more. (Davis, 2012, p. 1) The buildings described above may not fall under one defining architectural term, shophouse, but they all share one distinct concept – a structure that merges commercial and domestic functions.

Asian shophouse is a distinctive form of vernacular

architecture. It can be distinguished by its unique regional features despite the fact that shophouse is a global phenomenon. Shophouses are typically arranged in rows, connected to one another with a single party wall on either side, separating each house from its neighbor. The house is narrow in width but deep in length. It has architectural elements such as a veranda or five-foot-way, a covered passageway with arcades, and an internal courtyard to provide shading, sunlight and ventilation in order to combat Asia's harsh tropical climate. (Weinberger, 2010, p. 3). The concept of shophouse has spread throughout Asia, particularly Southeast Asia, including Cambodia, due to its high efficiency, both in terms of affordability and convenience by blurring the boundary between work and home.

Figure 01. A Roman Street Scene



Note. Snack bars known as taberna in Ancient Rome. From JSTOR Daily [Artwork], by Forti, n.d, Wikimedia

Figure 02. Row of tabernae with windows for daylight in



Note. taberna found in Pompeii. From Roman Ports [Photograph], 2023.

EARLY ROOTS

Dated back to the early 1600s, prior to the ground to avoid flooding, insects and reptiles. arrival of the French, there were early Chinese immigrants settling in Phnom Penh. Phnom Penh, historically known as 'Krong Chaktomuk' - the 'City of Four Faces', is built on a river junction, with each side bordering a river. Therefore, making it an ideal trading place connecting Cambodia to China, Malay, and other countries. Due to the city's geographical location, it was frequently flooded during the rainy season. Traditional Cambodian dwellings were built from wood or bamboo and were always elevated at least 1.5 meters above

(Igout, 1993, p. 5)

Chinese immigrants played a pivotal role in introducing the concept of shophouse to Cambodia. These immigrants mainly made up of refugees from Southern China. The Chinese population continued to grow as a result from interracial marriage and coinhabiting by adopting local Cambodian lifestyles, leading to the establishment of the Chinese district, currently known as Daun Penh district. (Weinberger, 2010,

COLONIAL SHOPHOUSES: FRENCH PROTECTORATE AND COLONISATION

In the 19th century, once powerful and prosperous center, between the French and the Cambodian, Kingdom of Cambodia was on the verge of collapsing with invasion from Siam to the west and Vietnam to the east and internal power struggles within the royal family. In an effort to save the nation, King Norodom was forced to make a critical decision by seeking a French protectorate. (Igout, 1993, p. 3) King Norodom strategically relocated the capital from Oudong to Phnom Penh following the recommendation of a French representative, Doudart de Lagree. The city stands in a location with plenty of commercial opportunities all while being considerably far away from the Siam border. In just a few years since reestablishing itself as the nation's capital, Phnom Penh has seen a surge in population, calling for a frenetic construction boom to accommodate the city's housing shortage. During King Norodom's reign, three distinct districts arose along the Tonle Sap riverbank. Between Wat Phnom and the river was the French quarter, which housed all of the administrative offices and representative housing. The Cambodian neighborhood was located to the south, near the Royal Palace and Wat Unalom. In the

was the Chinese district. In 1872, King Norodom commissioned French contractor, Le Faucheur, to build three hundred of brick walled and tiled roof shophouses for the area in order to rent them out to Chinese merchants at a high rate as it was the most active commercial neighborhood. This marked the first wave of shophouses taking place in the Cambodian urban fabric. (Igout, 1993, p. 6) For the country, this step marked a major architectural transition from the conventional Cambodian dwelling. The changes were made as a result from constant fires terrorizing the wooden frameworks of traditional homes.

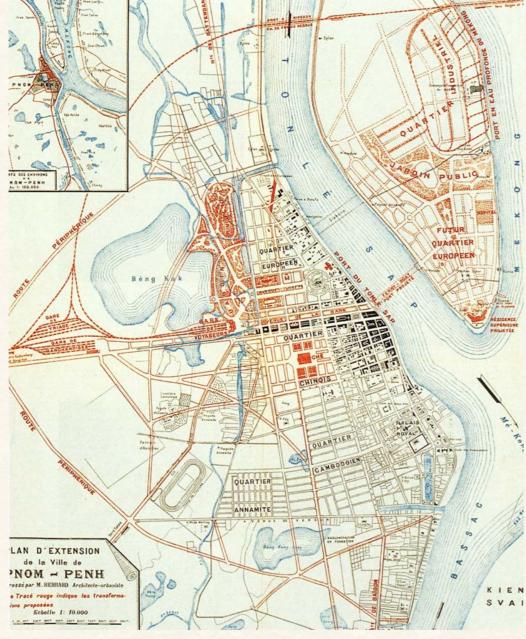
The French protectorate pressured King Norodom to sign a new agreement in 1884, granting them more authority and power over the country. The new policies dissolved royal monopoly on land ownership and set up a new system of public and private property. (Osborne, 2008, pp. 71-72) Starting from then the French was now the one to manage the buying and selling along with rent collection of the property. (Igout, 1993, p. 8)

Figure 03. Diagram of the three emerging districts



Note. Between Wat Phnom and the river was the French quarter. The Cambodian neighborhood was located to the south, near the Royal Palace and Wat Unalom. In the center, between the French and the Cambodian, was the Chinese district. From Kambujaya [Diagram], 2022.

Figure 04. 1937 Urbanisation Map of Phnom Penh by Ernest Hebrard



Note. A 1937 map depicting the extension plan of Phnom-Penh. Expansion plans are marked in red. 'Le trace rouge indique les transformations proposees'. From French National Archives [Map] by Hebrard, n.d.

Colonial buildings are so distinctive that they are classified as their own category of architecture in Cambodia. The most noticeable signature would be the façade. The orche yellow lime wash, also known as 'colonial' yellow, is a trademark of colonial architecture. Written in Exotic Voyages (2017), the writer stated that it is unclear why many colonial buildings are rendered in orche yellow, but it is assumed that the colour was chosen for symbolic and practical purposes. One, the colour represents royalty and power. Two, it is a vibrant colour that absorbs less heat and integrates well with the growing lush green moss, which is beneficial for combating tropical climate. Although the blog is referring to Vietnam, the same principle may also apply to Cambodia. While the colour yellow doesn't carry the same significance in Cambodia as it does in Vietnam, it is possible that because they have established a distinct Art Deco period. Its presence in Cambodia must style and practical solution, they likely adhere to it through all of its Indochina colonies. Encaustic in by colonialism. tiles, also known as cement tiles, are an emblem

of colonial imprint as they frequently appear in buildings designed to replicate the essence of the colonial era. These tiles originated in southern France and northeastern Spain in the mid-1850s and spread to the Mediterranean and throughout Europe. They are known for their efficiency and affordability while remaining unique and stylish thanks to their traditional handmade nature. (TERRACOTA do ALGARVE, 2022) The tiles used during the early period were most likely imported from Vietnam, where the French established a major manufacturer. The French left Vietnam with an amazing technique for making cement tiles. Another notable material is terrazzo. It is a material originated in Italy in which marble fragments are ground together and mixed with mortar to create a one-of-a-kind shimmering mixture of embedded stone pieces. It was a popular material during the have resulted from the western influences brought

Figure 05. Multiple encaustic tile designs found in Cambodian buildings



Note. Original tiles from the colonial era, showcasing the unique and diverse pattern of encaustic tiles. From Architectural Guide Phnom Penh [Photograph], by Henning & Koditek, 2020.

According to Ju (2016) Cambodian shophouses are classified into two types in terms of spatial organisation: private courtyard shophouses and shared courtyard shophouses. A private courtyard shophouse is typically a one bay house that accommodates a single family, but the modernised version takes the form of an apartment block that houses multiple units with a shared staircase and

passageway in the courtyard. A shared courtyard shophouse emerges as a result of land limitations. It is made up of multiple single bay houses that were either built after certain parts of the earlier shophouses were knocked down or a newly constructed block with a shared courtyard. However, Ju failed to address that some of the modern shophouses don't have courtyard at all.

EVOLUTION OF POST-COLONIAL SHOPHOUSES

political phases. As power shifted from one party to another, new eras emerged and shophouse typology adapted to the evolving political situation, resulting in the five distinct Cambodian shophouse phases according to Kambujaya (2022): Introduction, Adaptation, Expansion, Progression and Experimentation. Each phase coincides with a political period.

Dating back to the 1880s and early 1920s, the earliest form of shophouse in Cambodia tends to be from one to two stories high, with an ordinary facade design of louvered windows and minimal ornamentation, likely due to technical and economic constraints. This type of typology is known to have been built prior to the funding from King Norodom, hence the scale and simplicity. Given the remarkable efficiency of the typology, the King reinforced his support for more shophouse construction, resulting in significant improvements in workmanship and detailing. At this time, newly constructed structures are being built to be more fire resistance. Buildings with brick walls and tile roofs began to appear. As time progressed, the French solidified their control over the country turning the Protectorate into a colonisation, from here on they started to become more involved in the country's urban planning. In the midst of all of this, an emerging style appeared in the Western world: Art Deco, an art movement that embodies modernism through the use of geometrical

After the French left, Cambodia endured multiple shapes that produce a timeless elegance without the aid of classical motif. The trend is introduced into the construction of shophouses and other buildings under the direction of Ernest Hebrard. (Weinberger, 2010, pp.46-48) Reinforced concrete was introduced into the country at this time, allowing corner building to have smooth curve façade rather than a segmented curve. This was the "Adaptation" period, the second wave of shophouses with the trendy Art Deco elements. Following the independence from France, Phnom Penh entered its Golden Era known as Songkum Reas Niyum that was led by King Norodom Sihanouk. The political and economic stability of this era result in a surge of population, calling for housing expansion. Hence making this period the "Expansion" phase. In an attempt to develop a modern Cambodia with New Khmer Architecture, many of the early shophouses were teared down and replaced with multiple-story apartments while still maintaining their commercial function on the ground floor.

> After a brief period of prosperity, the country was overtaken by the repressive Khmer Rouge regime, which halted the country's development. The communist Khmer Rouge drove people out of the city in an attempt to reform agriculture, but failed and plunged the country into famine. During this time, Phnom Penh was known as a ghost town because it appeared to be frozen in time, with little to no activity. After the regime fell, the shophouse

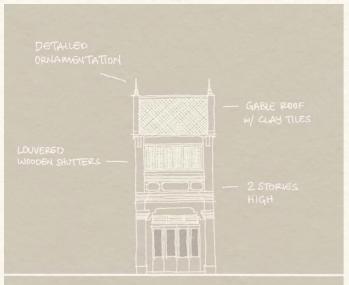
typology mirrors the country's paranoid post-war state. People begin to add 'fences, metal bar, and barbed wire' as an extra layer of protection. (Kambujaya, 2022) Meanwhile the ground floor gradually transforms into a residential space. This marked the "Progression" state. The modern shophouse typology is still in its experimental stage; it lacks a distinctive style and instead

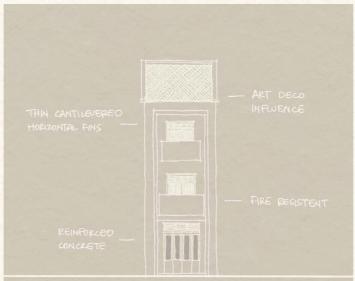
combines elements ranging from a generic house to the 'excessive neo-classical' design in the hope to imitate the aesthetic of earlier shophouses. (Kambujaya, 2022) The concept and typology of shophouse is always evolving. As you may know, in the following chapter, I will be delving into certain criteria of change on five case studies of shophouses from multiple cities across Cambodia.

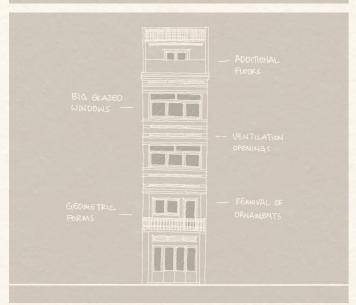
PRESENT-DAY SHOPHOUSES

Shophouse is still one of the most popular, if not the most popular, type of dwelling in Cambodia today, but its traditional typology is not designed for modern living. As the building transitions into a fully residential block, the ground floor that is formerly a storefront has been converted into a garage. It does not quite fit a car, so the homeowners extend the front of their home by installing metal bars on the pavement to make more room for their vehicles. As stated by Kambujaya (2022) of the modern problem of maximising space,

the central courtyard is eliminated, resulting in a poorer condition of ventilation and natural light into the building. Even though times have changed, the past trauma of Khmer Rouge, as well as the unstable political condition, the installation of barb wires and metal structures on windows and balconies have become a common practice. Some shophouses that still have commercial uses are frequently littered with business signage, obscuring the beauty of the façade.







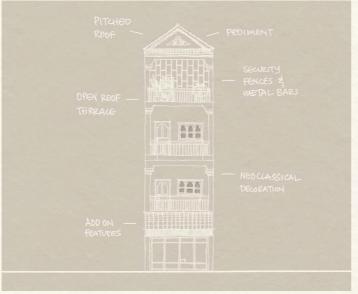


Figure 09.

Progression (1980s-2000s)

Figure 08. Expansion (1950s-1960s)



Figure 10. Experimentation (2010s-Present)

Note. Evolution of Cambodian Shophouse [Drawing], From Kambujaya, 2022.

Chapter 03: Shophouses of Cambodia

Understanding Contemporary Shophouses

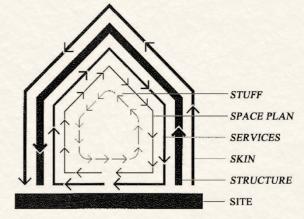
SHED THE OLD AND BEGIN ANEW: SHEARING LAYERS OF CHANGE

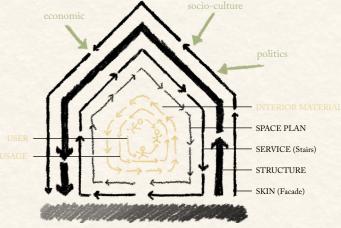
changes in key aspects of the building. In How Building Learn, Brand (1994) further elaborated Frank Duffy's Shearing Layers of Change theory, it is proposed that all buildings are composed of six shearing layers (6 S's): Site, Structure, Skin, Services, Space Plan, and Stuff. According to the terms listed above, Brand only viewed building as an object of its own that went through multiple layers of change without considering another dimension which is the user of the space who

To trace the evolution of shophouse, we must track occupied the building over time and the complex interplay of historical events, architectural styles, and economic factors. Based on the literature review and a newly expanded version of shearing layers adopted from Duffy's theory (figure 12), the case studies will be examined in terms of structure, façade (skin), service (stairs) spatial organisation, materiality, usage, and user type. External factors such as politics and socioeconomic conditions, and how they influence the building changes, must also be investigated.

Figure 11. Brand's shearing layers of change

Figure 12. Expanded version of Brand's shearing layers





Note. Brand's version of his expansion from Duffy's shearing layers of change. From How Building Learn [Diagram], by Brand, 1994.

Note. A diagram showing additional layers of change including interior material, usage and user. [Diagram], by author, 2023.

Shophouses from three notorious colonial cities been selected for their differences in development true to its colonial heritage.

phases and spatial organisation, as well as the has been chosen as case studies. Each of the way they are utilised, which serve as excellent city has its own significance with its location that examples for shophouse evolution. House 99 on is influenced by colonialism. The case studies of Street No. 02 in Battambang is chosen because of Phnom Penh are the *Row of Shophouses on Street* its complex history and smooth transition from one 108, Former Etablissement Dumarest d'Indochine period to another. Atelier is chosen because of its and Chey Cheta Street apartments. They have modern approach to renovation while remaining

SHOPHOUSE OF PHNOM PENH

Figure 13. Phnom Penh's commercial district



Note.From Kambujaya [Postcard], by French National Archives, n.d.

Figure 14. Phnom Penh in 1914



Note.From Kambujaya [Postcard], by French National Archives, n.d.

Figure 15. Street of Phnom Penh filled with 'cyclos', traditional ricksaws that were once a popular form of transportation in Cambodia



Note. From The cyclos, street food and shophouses of 1950s Phnom Penh [Photograph], by Forman, 1953.

concentrated in the capital city. Therefore, making Phnom Penh a metropolis enriched with history and diverse architectural heritage. Three buildings

Cambodia, like most of Southeast Asian representing different phases of evolution and countries, is a country where most activities are uses are chosen from Phnom Penh's Chinese district, now known as Daun Penh, which is home to the city's oldest architectural fabric.

FORMER ÉTABLISSEMENT DUMAREST D'INDOCHINE (1905)

story corner building occupies a spot along the Preah Sisowath Quay. It stands out among the others nearby perhaps from its eye-catching turquoise French-style shuttered windows which dated back to 1905 (Henning &Koditek, 2020) Introduction phases of the shophouse evolution. As time passed, the buildings continued to house new functions, adapting to the needs of the users. It was once owned by the French trading company Établissement Dumarest d'Indochine, which

Constructed during the colonial era, the three- connects it to Phnom Penh's history as a river port city. For a while, it was used as their office while upstairs served as a luxury apartment. Later, it became known as Riverside Bistro, a restaurant that has been open since 1996. During this time the first floor was also used a commercial space. Considering its simple façade, minimal details and It currently operates as an Italian restaurant on time built, the building is considered to be in the ground floor. As you enter, you will notice beautiful high arches of varying heights, some of which reach all the way to the ceiling. It is recently renovated, and the current interior is designed to evoke the glamour of its era with porcelain tiles and cladded columns that resemble marble.

Figure 16. Former Établissement Dumarest d'Indochine



Note. Former Établissement Dumarest d'Indochine's facade in 2023 [Photograph], by author,

Figure 17. Former Établissement Dumarest d'Indochine's front facade



Note. 2023 photo of Italian restaurant on the ground floor of the building [Photograph], by author,

Figure 18. Former Établissement Dumarest d'Indochine and its neighboring shophouses



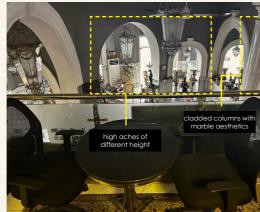
Note. Former Établissement Dumarest d'Indochine next to its neighbors, depicting the varying styles of Cambodian shophouses and how the colonial building stood out in the area. [Photograph], by author, 2023.

Figure 19. Interior: Ground floor bar area



Note. Interior photo of the bar area showing intricate molding replicating Neoclassical elements. From Google Maps [Photograph], by John, 2022.

Figure 20. Loft overseeing ground floor



Note. Interior photo from loft showing the high arches and the cladded column of marble-looking formica. From Google Maps [Photograph], by Riverside Hotel Phnom Penh, 2023.

Table 01. Former Établissement Dumarest d'Indochine's Elements Table

	Former Établissement Dumarest d'Indochine (1905)				
Period	Phase	Element			
		Structure	Reinforced concrete		
		Façade (skin)	Style: Colonial		
			Simple		
			Minimal ornamentation		
			Wooden louvred-window finished with		
			turquoise paint		
		Service	Private internal staircase		
		Spatial organisation	No courtyard		
		Interior material	Porcelain tiles		
			Marble aesthetic cladded columns		
			Crown molding		
		Usage	Mixed-use		
			GF: Restaurant		
	_		1F& 2F: Apartment		
	ntroduction	User	The owner may not be the occupants. It is suspected		
Colonia	npo		that the building may be rented out to the restaurant		
S	I I		owner.		

Note. Descriptive summary of each element [Table], by author, 2023.

Row of Shophouses, Street 108 (1915-1925)

Henning and Koditek (2020) describe the row of and 1925, as they were included in a 1920s French six shophouses on the corner of street 108 and street 53 as having "perhaps the most elaborate and lavishly decorated façade of all shophouses in the city." It was built during the colonial period with the essence of a Neoclassical French villa, were wealthy and affluent individuals due to the elaborate level of detailing and craftsmanship. These houses may have been built between 1915

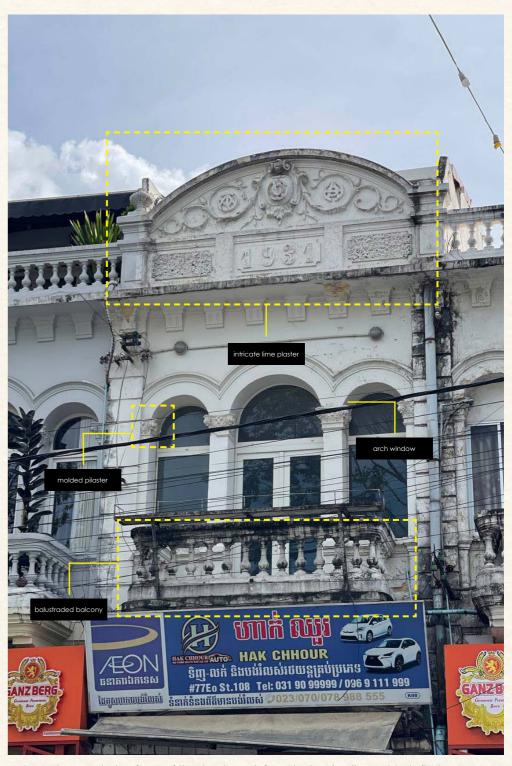
urban map of Phnom Penh. The original wooden louvred shuttered windows were recently replaced with glass windows, and signage completely blocked the ground floor façade. The houses used to have their own private courtyards and were completed with arch windows, molded pilasters made up of single-family units, but the layout has behind balustraded balconies, and intricate lime since changed. Another row of shophouses was plaster. It is assumed that the original owners built behind the existing six, where the kitchen and toilet were. They now share a courtyard that can be accessed from Street 53.

Figure 21. Intricate facade of row of shophouses on street 108



Note. Front facade of shophouses on street 108. The first floor facade is better preserved as the ground floor is littered with business signages. [Photograph], by author, 2023.

Figure 22. Close up of the most elaborate facade



Note. A closeup photo of one of the shophouse's facade showing the molded pilasters, balustraded balcony and elaborate detailing of neoclassical elements. The year the house was built or renovated is engraved onto the facade. [Photograph], by author, 2023.

Figure 23. Corner view of shophouses on Street 108 and Street 53



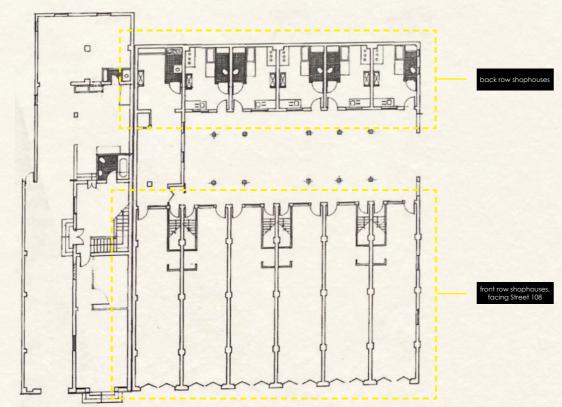
Note. A corner view photo showing the entrance into another row of shophouses from Street 53 [Photograph], by author, 2023.

Figure 24. Shared courtyard



Note. Shared courtyard between the shophouses in front and the row behind. From Architectural Guide Phnom Penh [Photograph], by Henning & Koditek, 2020.

Figure 25. Plan of shophouses on Street 108 and Street 53



Note. Floor plan of shophouses on Street 108 and another row of shophouses behind them. The alleyway acessing the lately constructed shophouses used to be the private courtyard of the houses in front. Adapted from Architectural Guide Phnom Penh [Drawing], by Henning & Koditek, 2020.

Table 02. Row of Shophouses, Street 108's Elements Table

	Row of Shophouses, Street 108 (1915-1925)					
Period	Phase	Element				
		Structure	Reinforced concrete			
		Façade (skin)	Style: Neo-classical			
			Intricate ornamentation (neo-classical French			
			villa elements)			
			Arch windows			
			Molded pilasters and balustraded balconies			
			Lime plaster finish			
		Service	Private internal staircase toward the rear end			
		Spatial organisation	Originally had private courtyard but currently has			
			shared courtyard			
		Interior material	N/A			
		Usage	Mixed-use			
			GF: Restaurant			
• 1F: Residential						
Colonial	Adaption	User	The owner is the occupant. They run a business on			
Ö	Adč		the ground floor while living upstairs.			

Note. Descriptive summary of each element [Table], by author, 2023.

CHEY CHETA STREET APARTMENTS (1960S)

designed and built in New Khmer Architecture style and newly elevated technique, the building is made up of many units that reach up to five stories in height. Due to the additional floors and modern style of the building, it is considered to be in the Expansion phase of the evolution. The front of the same amount of attention. In the center of the each family owning a floor. complex, there is a modest inner courtyard with

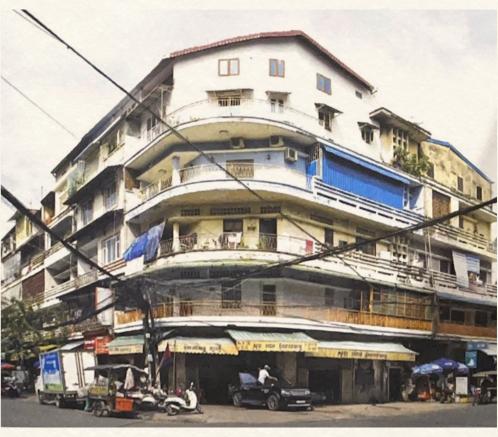
In the heart of the former Chinese district, this tall a shared staircase leading up to open galleries concrete apartment complex stretches from one with two bridges connecting the front and back end of Street 118 to the other, between Streets 53 of the building. Close inspection of the staircase and 61. During the Golden era, the building was area may reveal the white and yellow cement tiles that furnished the open corridor, as well as the with modern approach of simplicity and geometric beautifully crafted metal railing. Terrazzo-glaze is shapes. A combination of the housing shortage used to finish the staircase. The ground floor of the apartments remains as storefronts, while the upper floors are residential. Since there are so many shophouses in this complex, it is impossible to draw conclusions about the entire structure, but the users are quite diverse. Some blocks may be the building, which faces Chey Cheta street, was owned by a single-family unit, whereas others may carefully designed with a smooth corner curve, have multiple owners. It is extremely common for whereas the back of the building did not receive this type of building to have multiple owners, with

Figure 26. Shared courtyard condition



Note. A photo of the shared central courtyard, full of extentions and deteriorating finishes. From Architectural Guide Phnom Penh [Photograph], by Henning & Koditek, 2020.

Figure 27. Chey Cheta Apartments' front facade



Note. A photo of the apartment's facade showing diverse businesses on the ground floor and multiple stories of residential quarters. From Architectural Guide Phnom Penh [Photograph], by Henning & Koditek, 2020.

Figure 28. Shared main staircase



Note. A photo of the shared main staircase with its metal railing. Toward the right is a former lift hole that used to house a lift during its early days. The corridor is furnised in white and yellow checker pattern of encaustic tiles. From Architectural Guide Phnom Penh [Photograph], by Henning & Koditek, 2020.

Table 03. Chey Cheta Street Apartments' Elements Table

	Chey Cheta Street Apartments (1960s)					
Period	Phase	Element				
		Structure	Reinforced concrete			
		Façade (skin)	Style: New Khmer architecture			
			Smooth curve facade			
			Metal railing balconies			
		Service	One shared main staircase (equipped with a lift			
			when it was newly built)			
		Spatial organisation	Shared narrow central courtyard			
		Interior material	White and yellow cement tiles			
			Terrazzo-glazed staircase and metal railing			
		Usage	Mixed-use			
			GF: Businesses (shops, restaurants, car			
			polishing garage etc.)			
			1F-4F: Residential			
Golden Era	io	User	Some blocks may be owned by a single-family unit.			
Some blocks may be owned by a single-family While some may have multiple owners, with each owning a floor.						
Gol	Exp	owning a floor.				

Note. Descriptive summary of each element [Table], by author, 2023.

BATTAMBANG: THE HEART OF ART AND CULTURE

Figure 29. Historic photo of Stueng Sangkar River



Note. From Pinterest [Photograph], 2023

House 99, Street 02

Battambang was an important trading and administrative center during the colonial period. It is still known for its rice trade. The profits from trade helped develop the town into a major art with early 20th century colonial shophouses. and culture center in Cambodia. According to The Battambang Municipality is preparing Architecture Battambang (2012), a detailed guide of Battambang's heritage buildings authored to the UNESCO World Heritage list. Here, I dive by GIZ Land Rights Programme, Battambang Municipality, and Khmer Architecture Tours, the

colonial neighbourhood sits on the eastern side of town between -Street 1 and 2, where alongside these main roads are alleys of 1 ½ and 2 ½ filled documentation to add this historical neighborhood into the case of House 99 on Street 02.

Figure 30. House 99's facade

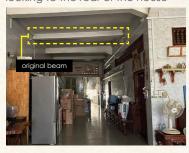


Note. Current condition of House 99's facade. From Google Maps street view [Photograph] by Google Maps, 2023.

use. The ground floor is entirely dedicated to the occupant.

This three-story reinforced concrete structure sale of construction supplies. Kitchen is located is currently under heritage protection of the at the back of the house, along with a toilet, and Battambang municipality. Dating back to the the stairwell connects the back and front of the colonial age, the house smoothly adapted to the house, leading up to the residential space on the needs and styles of different eras. Before there first and second floors. The aged yellow terrazzoare regulations put out to protect the heritage of glazed stairs and green railing shows the essence colonial shophouses, metal bar structures on the of colonial impact. The building is owned and façade are installed. Composing of three bays, the ran by a single family. In this case, it still houses house offers a generous space for commercial the conventionally 'working and living' type of

Figure 31. Interior: Ground floor looking to the rear of the house



Note. Kitchen is situated at the rear end of the house. The existing beam is the original structure from colonial period. [Photograph], by author, 2023.

Figure 32. Kitchen ventilation



Note. Ventilation blocks, a common feature in Cambodian dwellings. The arrangement of the blocks may have been influenced by early Chinese shophouse design. [Photograph], by author, 2023.

Figure 33. Ventilation blocks



Note. A different style of ventilation blocks. [Photograph], by author,

Figure 34. Terrazzo-glazed staircase



Note. Sage green terrazzo-glazed treads. [Photograph], by author, 2023.

Figure 35. Terrazzo-glazed staircase railing



Note. Terrazzo-glazed railing. [Photograph], by author, 2023.

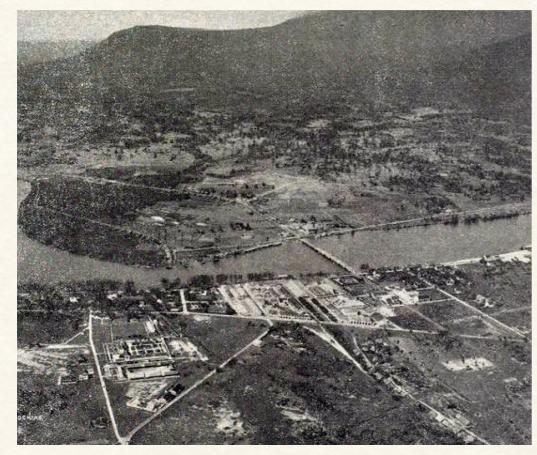
Table 04. House 99's Elements Table

	House 99, Street 02					
Period	Element					
		Structure	Reinforced concrete			
		Façade (skin)	Style: Art Deco			
			Alteration of metal structure			
		Service	Private internal staircase toward the rear end			
		Spatial organisation	No courtyard			
		Interior material	Terrazzo-glazed staircase and railing			
			 ceramic tiles (not original flooring finish) 			
	l o		 wooden louvered doors and windows 			
	essi		aging yellow tinted cream finish (original finish)			
	ntroduction - Progression	Usage	Mixed-use			
	ا ر		GF: Construction supplier			
	ctior		1F & 2F: Residential			
Colonial	npo.	User	The owner is the occupant. They run a business on			
S	the ground floor while living upstairs.					

Note. Descriptive summary of each element [Table], by author, 2023.

THE CASE OF KAMPOT

Figure 36. Kampot city around 1920 - 1940



Note. From Bloom Architecture [Photograph], n,d.

Figure 37. Row of shophouses on the riverside dock around 1920 - 1940



Note. From Bloom Architecture [Postcard], n,d.

Figure 38. Historic image of Chinese shophouses in Kampot



Note. From Bloom Architecture [Photograph], n,d.

ATELIER



The historic town of Kampot was a significant port known as Atelier. town that runs down the coast, bordering the Gulf of Thailand. It was the administrative headquarters for circonscription résidentielle and a popular destination for French expats and their families as a riverside and seaside leisure town. (Takako, 2005). As they arrived, they constructed a church, resorts, hotels, and restaurants, filling the town newly constructed structure closely resembles the with exquisite colonial architecture.

Nestled on the sleepy riverfront is a traditional run down Chinese shophouse, dating back to the until being purchased by an architect's family. new life. A French-Cambodian architect, Antoine Meinnel, transforms a once-abandoned family-run storefront into a cozy home and restaurant now

The architect infuses the building with a contemporary aesthetic for modern comfort while preserving majority of its historical elements. The main structure made up of reinforced concrete and apparent wood frame. Although a portion of the ground floor façade has been demolished, the initial concept, with only minor modifications to the ventilation opening and the replacement of the entrance door. As shown in figure 43, the façade colonial age. It had been abandoned for years has clearly retained its original style and most of its historic characteristics remain intact. Note From then on, the building sees a chance at a the arched openings with Greek style pilasters, filled-in arcade that originally served as a covered walkway and the orcher-coloured lime render signify the colonial imprint.

Figure 39. Atelier's renovated facade



Note. From House in Kampot concept report [Photograph] by Bloom Architecture, 2014

Figure 40. Atelier's original facade before renovation

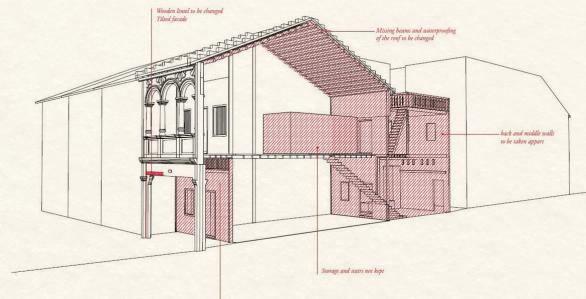


Note. From House in Kampot concept report [Photograph], by Meinnel, 2014

In terms of spatial organisation, it adheres to the conventional traditional shophouse typology, consisting of three components in sequential order. The main home is set on the street in front of the house, which is followed by a courtyard, and to the original two-story building. On the rooftop, then in the back is the annex, which consists of the a light structure called the nest is set up to create kitchen and the toilet. From front to back, the upper a space where users are able to appreciate the floor is divided into three sections: a living room scenic view of Mount Bokor and the Kampot

with a balcony facing the river, a dining area on the patio overlooking the courtyard, and a terracebedroom facing the back alley. To accommodate another bedroom, an additional floor was added

Figure 41. Section- Site survey of existing building



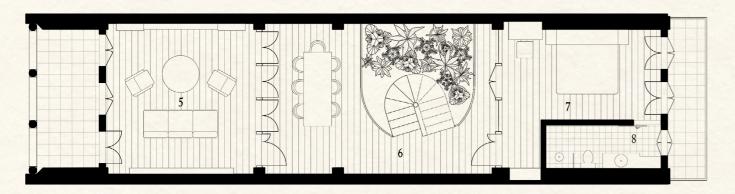
Note. From House in Kampot concept report, [Drawing] by Meinnel, 2014

Figure 42. Section - New spacial arrangement with an additional floor, central courtyard and the nest

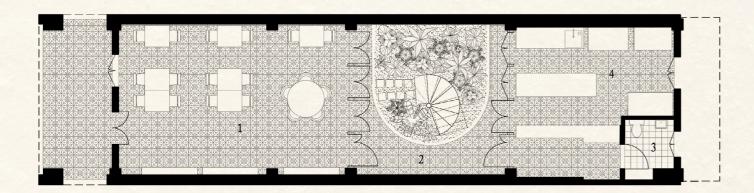


Note. Adapted from House in Kampot concept report, [Drawing] by Meinnel, 2014

Figure 43 . Atelier's ground and first floor plan



FIRST FLOOR PLAN Scale: 1/100

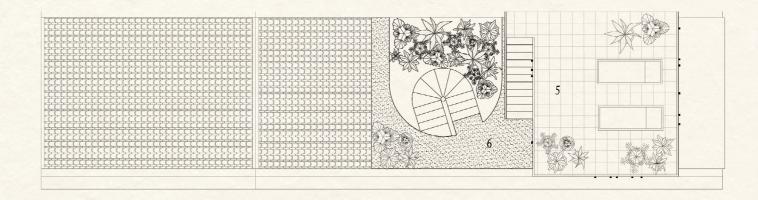


GROUND FLOOR PLAN
Scale: 1/100

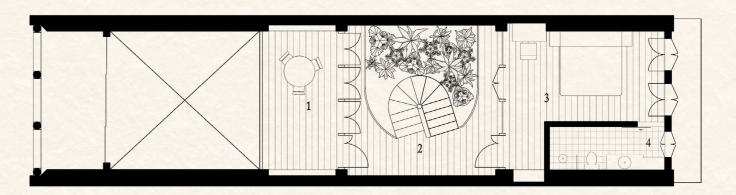
Restaurant
 Patio
 Patio
 Patio
 Terrace Bedroom
 Kitchen
 Bathroom

Note. From House in Kampot concept report, [Floor Plan Drawing] by Meinnel, 2014

Figure 44. Atelier's third floor and roof plan



ROOF PLAN Scale: 1/100



THIRD FLOOR PLAN
Scale: 1/100

1. Restaurant 5. Living Room
2. Patio 6. Patio
3. Restroom 7. Terrace Bedroom
4. Kitchen 8. Bathroom

Note. From House in Kampot concept report, [Floor Plan Drawing] by Meinnel, 2014

features an interior courtyard garden with lush deal of the interior space has been refurbished, the design of the existing site. The existing encaustic tiles flooring on the ground floor has colonial architecture.

riverside. Unlike the first design, where it only has been removed due to their deteriorating condition a small service courtyard, the renovated house but are replaced with custom-made encaustic tiles of the same design to maintain the vintage vegetation and modern spiral staircases leading to ambience. The bathroom flooring is terrazzo the third floor. Regardless of the fact that a great render, a technique and material introduced to Cambodia by the French. The majority of the the newly specified materials and finishes mimic interior walls are finished with pigmented lime plaster and lime wash, which is a hallmark of

Figure 45. List of Atelier's material and finishes for the renovation

MAIN STRUCTURE:

Reinforced concrete, apparent wood frame texture

FLOORINGS:

Wood beams Wood planks Liming treatment

WALL FILLING:

Full brick, traditional type (option: recycle bricks from other houses) Lime mortar

PLASTERING:

Pigmented lime Plaster White lime wash finish

ROOF:

Wood beams and wood lattice Underside in wood Cambodian earth tile to be chosen from samples (option: Exiting kind of tile if possible to find or recycle)

GROUND:

Custom cement tiles, same design as existing ones

BATHROOMS:

Cement render Terrazzo render Translucent glazing

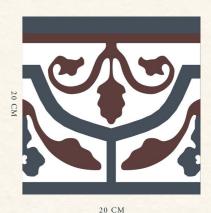
Note. Materiality of the renovated project - main structure, interior material and finishes. From House in Kampot concept report, [Photograph] by Meinnel, 2014. Emailed to author.

While the function remains relatively unchanged (the bottom level is used as a commercial space, while the first floor houses a living quarter), the type of people using the space has changed slightly. When the house was initially constructed in 1945, the previous owner ran a storefront on the main street and lived on the top floor. It is currently

operating as a restaurant on the ground floor, but the owner does not live in the same building. Evidently, there is a shift away from the traditional 'live and work' type of occupancy and toward more commercially focused occupants who do not necessarily need to reside in the same location.

Figure 46. Encaustic tile pattern





PATTERN SIDES

The Evolution of Cambodian Shophouse 47

REGULAR PATTERN

Note. Precise drawing of original encaustic tile's pattern for replication. From House in

Figure 47 Site survey photo of existing encaustic tiles before renovation.

Kampot concept report, [Drawing] by Meinnel, 2014. Emailed to author.



Note. From House in Kampot concept report, [Photograph] by Meinnel, 2014. Emailed to author.

Figure 48. Ground floor restaurant with the view of the courtyard



Note. Emailed to author. [Photograph] by Bloom Architecture et al, 2014.

Figure 49. Interior views of Atelier - from left to right (Ground floor restaurant, first floor living area, and interior airwell overlooking the courtyard)







Note. Emailed to author. [Photograph] by Bloom Architecture et al, 2014.

Figure 50. First floor veranda view to riverside



Note. Emailed to author. [Photograph] by Bloom Architecture et al, 2014.

Table 05. Aterlier's Elements Table

	Atelier Kampot (1945)					
Period	Phase	Element				
		Structure	Reinforced concrete & apparent wood frame			
		Façade (skin)	Style: fusion of colonial & contemporary			
			Arch openings			
			Molded columns Private central staircase in the courtyard Central courtyard joining the rear and the front			
		Service				
		Spatial organisation				
		Interior material	Encaustic tiles (same design as the original)			
			Plaster: pigmented lime plaster & white lime			
			wash			
			Bathroom: Terrazzo render and cement render			
		Usage	Mixed-use			
			GF: Restaurant			
			1F: Residential			
The owner is not the occupant. The						
Colonial	Adaptation	restaurant on the ground floor while having residential				
S	Adč		quarter upstairs but they permanently reside elsewhere.			

Note. Descriptive summary of each element [Table], by author, 2023. $\label{eq:continuous}$

Chapter 04: Conclusion

Trace the Changes & Anticipate the Future

TRACE THE CHANGES

The shophouse typology is a distinct vernacular architecture in Cambodia, despite being introduced by Chinese immigrants and popularised by French colonialism. Shophouses began as a colonial implant, merely properties to generate high rental income from Chinese merchants. They continue to grow in number as a result of urban necessity for shops to be close to residential areas, which the shophouse typology addresses. Its ability to combine commercial and residential uses in a dense urban center makes it a successful tool in the urban fabric of rapidly developing Cambodia. Due to its efficiency, both in terms of affordability and convenience, by blurring the boundary between work and home, it has gradually assimilated itself and is virtually engraved into the contemporary urban fabric of Cambodia. Shophouse is more than just a building type; it is a concept of living, resided in the same building.

Following an in-depth examination of the origins of Cambodian shophouses and numerous case studies, it is reasonable to conclude that colonialism played a significant role in the early establishment of shophouses and its popularity. The once-timber structure progresses to a more fire-resistant

building material with the introduction of reinforced concrete. The structure of Atelier is evidence of the gradual transition of building structure as it is made up of wood frame and reinforced concrete. Due to economic and technical limitations, the facades of earlier shophouses such as Former Etablissement Dumarest d'Indochine and House 99 are simple with minimal detailing. Later shophouses during the Adaptation period, such as the Row of Shophouses on Street 108, have more elaborately decorated façades, most likely because the owners were wealthy individuals who could afford high standard of craftmanship while building techniques at the time have improved. The original two-story shophouse expanded into a tall apartment complex accommodating numerous families rather than a conventional singlefamily residence as a result of advancements where the occupants sustain their livelihoods and in construction methods and housing shortage. The Chey Cheta apartments marked the phase of Expansion with New Khmer Architecture style, and the façade became minimal with a sophisticated modern touch. Early shophouses had private internal staircases until the Expansion phase, when tall apartment buildings required communal access to accommodate the traffic,

resulting in shared staircases. The once-private central courtyard shrunk and shrunk until there is none left in most present-day shophouses. During the Progression period, when Cambodia was recovering from Khmer Rouge, courtyards in shophouses began to disappear. It is removed in order to maximise livable space. This resulted in poorer natural light and ventilation. Due to primary necessity and urgent need for space, homeowners were willing to sacrifice aesthetics for practicality by adding extensions to create more usable space. Encaustic tile and terrazzo are commonly found in shophouses built prior to or during the 1960s. Although modern shophouses lack the essence of colonial shophouses, they still exhibit traces of colonial influences such as arcades, moulded pilasters, and the incorporation of neoclassical elements. Both the users and the usage evolve over time. Despite the fact that shophouse starts out as a mixed-use building with a single-family unit, its typology evolves over time and shapes

itself to the needs of its users. Nowadays, the shophouse typology serves a number of usages. It could be a 'live and work' space for some, a commercial space or a residential block for others. Shophouse represents the working class and is the embodiment of practicality and hard work. While not being a wealth symbol, it is a popular investment among the upper middle class and

Considering the tremendous changes, it has undergone, Cambodia's shophouse is a symbol of versatility, adaptability, and resilience. The shophouse typology has evolved, adapted and survived multiple political phases, modernisation and relentless change of function and user type. It was first introduced into the country as a colonial implant, then adapted to the local way of life and architecture, eventually emerging as its own type of dwelling that is the most popular in the country. Shophouse is an everchanging evidence of colonial roots in Cambodian architectural heritage.

	SHOPHOUSES	Former Établissement Dumarest d'Indochine (1905)	House 99, Street 02	Atelier Kampot (1945)	Row of Shophouses, Street 108 (1915-1925)	Chey Cheta Street Apartments (1960s)
	Period	Colonial	Colonial	Colonial	Colonial	Golden Era
	Phase	Introduction	Introduction - Progression	Adaption	Adaption	Expansion
	Structure	Reinforced concrete	Reinforced concrete	Reinforced concrete with apparent wood frame	Reinforced concrete	Reinforced concrete
	Facade (Skin)	Style: Colonial	Style: Art Deco&Chinese shophouse	Style: Colonial & Contemporary (hoe/uner, 2014)	Style: Neo-classical	Style: New Khmer Architecture
	Service (stairs)	Private internal staircase	Private internal staircase at the rear	Private central staircase	Private internal staircase at the rear	shared main staircase (Henningskodtek, 2019)
ELEMENTS	Spatial Organisation	no courtyard	no courtyard	central courtyard	Private courtyard -> Shared courtyard	Shared central courtyard (Hemningskoditek, 2019)
	Interior Material	 porcelain tiles marble-aesthetic cladded columns crown molding 	 Terrazzo-glazed staircase and railing ceramic tiles wooden-louvered doors and windows aging cream finish 	 Encaustic tiles Terrazzo and cement render pigmented lime plaster and white lime wash 	N/A	 white and yellow cement tiles terrazzo-glazed staircase and metal railing
	Usage	Mixed-use GF: Restaurant IF&2F: Apartment	Mixed-useGF: Construction supplier1F&2F: Residential	Mixed-use GF: Restaurant 1F: Residential	Mixed-use GF: Restaurant 1F: Residential	Mixed-use/Residential GF: Businesses (shops, car polishing garage, restaurants, etc.) 1F-4F: Residential
		Owner may not be the occupant.	Owner is the occupant.	Owner is not the occupant.	Owner is the occupant.	Owner is typically the occupant but some GF may be rented out to business owners
	User	It is suspected that the building may be rented out to the restaurant owner.	They run a business on the ground floor while living upstairs.	They open a restaurant on the ground floor while having residential quarter upstairs but they permanently reside elsewhere.	They run a business on the ground floor while living upstairs.	 single-family owning one bay (ground floor to top floor) multiple family each owning a floor in a one bay block

Note. A visual representation summarising and tracing the evolution of our case studies in term of structure, facade, service, spatial organisation, material, usage and user [Table], by author, 2023.

ANTICIPATE THE FUTURE

It is anticipated that historical shophouses are then will shophouses be properly appreciated and better documented and well protected as law conserved. As long as shophouse is a successful and regulation are starting to form to protect asset to Cambodian urban development, it will their meaningful heritage. People ranging from continue to be a powerhouse in the country urban professionals (urban planner, architects and fabric and will grow in numbers if it remains as lawmakers) to citizens must understand the value affordable as it is designed to be. shophouses hold in our cityscape and history; only

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qualities

Figure

Bloom Architecture. (2014). *Atelier's renovated facade* [Photograph]. Emailed to author.

Bloom Architecture. (2014). *First floor veranda view to riverside*. [Photograph]. Emailed to author.

Bloom Architecture. (2014). *Ground floor restaurant with the view of the courtyard*. [Photograph]. Emailed to author.

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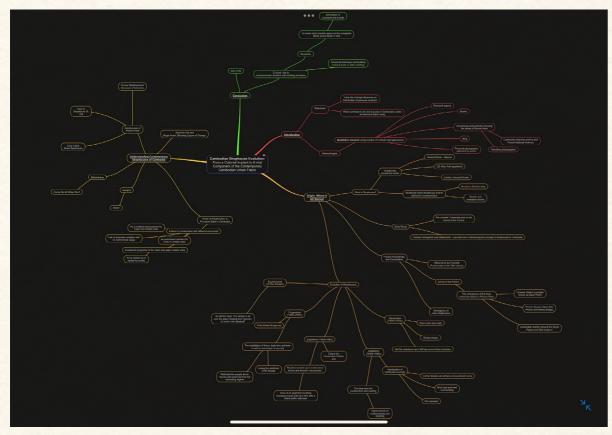
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APPENDIX:

Appendix A

Brainstorming

Figure A.01. Mind Map of Essay Structure



Note. Mind map listing the topic to be covered, structuring the dissertation [Diagram] by author, 2023.

Figure A.02. Architectural Guide of Heritage Buildings in Battambang City

ARCHITECTURE BATTAMBANG Walking Map Central

History

Battambang City, with around 140,000 inhabitants, is the largest secondary city in Cambodia. Its name comes from the legend of Bat Dambong, the "Disappearing Stick". Situated on the Sangker River, people have lived in wooden houses along its banks for centuries. When the province was associated with the Stamese (1795 to 1907), Battambang City had about 2,500 residents. By the end of the 19th century the number increased to around 100,000. An open-air market (toddy known as Psar Nath), numerous pagodas, a Chinese temple and rectangular fort with the palace of the Lord Governor dating to 1830 were landmarks of the city.

During the French protectorate the formerly dispersed settlement was transformed into a busy marketplace, urban agglomeration and administrative stronghold. The French introduced two urban development plans, including a grid pattern of streets, the construction of bridges and a railway linking Battambang to Phnom Penh.

After Cambodia's independence Battambang City quintupled its area and became the industrial and commercial centre of the region. Several large infrastructure and public facilities were built under the state modernization program; including schools, university, sports centre, museum and exhibition hall, roads, airport and the extension of the railway line to Project.

Further Information

The Battambang Municipality, supported by the GIZ Land Rights
Programme, has launched the initiative "Our City" – Our Heritage"
with the aim of preserving valuable heritage buildings with their
original appearance to sustain the cultural identity and unique
historic character of the city, the inner city area shown on this map
is classified as a "Heritage Protection Area". Khmer Architecture Tour
promotes urban heritage in Cambodia, especially in Phnom Pent,
and conducts tours on architectureand public-awareness projects.

KHMER ARCHITECTURE TOURS **GIZ**



Battambang Gity has inherited a rich urban heritage with a great variety of historic architecture, representing different phases of the city's history. The city center between Road #1 and Road #3 is characterized by a coherent ensemble of abou 800 heritage buildings from the French protectorate an Sangkum Reastr Niyum (period after the country's inde

Outside of this area, outstanding heritage buildings, like the New Namer Architecture of the Battambang University, French-Classical style villas along the river and traditional Khmer wooden houses can be found. Throughout the city beautiful Was are expression of the city's religious heritage. All these historic buildings and ensembles tribute to the city's unique character and beauty.







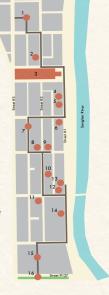




The huildings included on the man

The maps are about understanding and appreciating the city as a whole and include buildings from various periods. We have not tried to The substantially comprehensive but aim to offer interesting walks, which capture the special qualities of ordinary buildings and streets as well as some important landmarks.

The inner city of Battambang is dominated by SHOPHOUSES, a vernacular type of building common in urban Southeast Asia. Chinese immigrants introduced the shophouse to Battambang in the early 20th century. The mostly two-story buildings combine residential with commercial use. A courtyard providing light and air separates front and rear buildings. The average plot size is 4-to-5 meters by 20-to-25 meters. Typical is the "five-foot-way," a covered walkway protecting pedestrians from rain and sun. The façades show a variety of styles and ornamentation. During the French period they were representative and rich in decorative plaster ornaments, but much simpler during the Sangkum period.



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Edition 2, September 2012.

Note. Battambang, the second largest city of Cambodia is a place with rich urban architectural heritage representing the different phases of Cambodian architectural history. [Diagram] by Khmer Architecture Tours, GIZ Land Rights Programme, & Battambang Municipality, 2012.

Appendix B

Gathering historic images (colonial shophouses, villas and public buildings)

Figure B.01. Phnom Penh street scene (with Chinese shop-houses) c. mid-1950s.



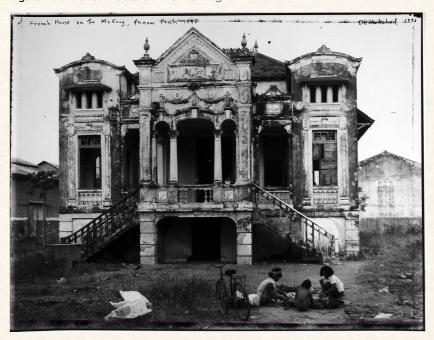
Note. Store signages in three languages, showing the commercially active Phnom Penh at the time. From Mekong Upstream [Photograph] by Burchett, 1957.

Figure B.02 Phnom Penh in the 1950s.



Note. Row of identical Chinese shophouses. From New English Review [Photograph], n.d.

Figure B.03. French House on The Mekong



Note. Abandoned French villa on the Mekong river time. From Howard Greenberg Gallery [Photograph] by Burke, 1995.

Figure B.04. Deteriorating White Building.



Note. White Building was a prominent New Khmer Architecture apartment buildings built in the 1960s. In 2017, it was teared down despite being a major piece of architectural history. From Mekong Review [Photograph], by Waller, 2012.

Figure 48. Cantonese School in Battambang



Note. From French National Archives [Photograph] by Service Ciné Photo, n.d.

Figure 48. Psar Nat Battambang



Note. A renowned colonial market in Battambang. From French National Archives [Photograph], n.d.

Figure 48. Kampot Fish Market



Note. A colonial fish market and is now Starbucks Kampot, who recently opened its door to the public in late 2023. From French National Archives [Photograph], n.d.

Appendix C

Draft of Literature Review: The French Colonial's Contributions to Phnom Penh's urban planning.

France began to tighten their grip on Cambodia's politics and economy, pressuring King Norodom to sign a new agreement in 1884 with alterations redefining the current protectorate, granting them more authority and power over the country. The new protectorate dissolved royal monopoly on land ownership, setting up a new system of public and private property. (Osborne, 2008, pp. 71-72) Starting from then the France was now the one to manage the buying and selling along with rent collection of the property previous owned by the royal. In the same year the Municipality of Phnom Penh was formed with the responsibility to create an administrative system and carry out a proper urban planning. (Igout, 1993, p. 8)

Appointed as the new Resident Superieur of Cambodia in 1889, Huyn de Verneville began the city planning with the goal of giving Phnom Penh a new face, a city with cleaner and healthier living conditions. He started by digging a semicircular canal around the French quarter and the earth resulting from the canal was used to filled the many lakes in the city for further development which were later used as a model for modern urbanization of the city (Weinberger, 2010) De Verneville laid out Phnom Penh in a grid layout filled it with hundreds of concrete houses, created new roads and widened the old ones, constructed permanent public buildings such as the Post Office, the Treasury, the Prison, the Public Market and many more. (Igout, 1993, p. 8) Under his direction, Phnom Penh was able to transform from a run-down city into a more captivating and modernized capital in a single generation.

