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# Developments of Façade Design with a Special Reference to the City Hotels in Kuala Lumpur

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### ABSTRACT

The study examines the façade design developments of the high-rise city hotels since the 1960s post-colonial period in Malaysia. Strategically located in the tourist hub of Malaysia's capital, three case studies of high-rise city hotels built in different architectural periods notably the 1970s Modern, the 1990s Post-Modern and the contemporary Neo-Minimalist, were meticulously selected to undertake a visual survey on the façade design elements. The high-rise hotel façade design in Kuala Lumpur as reviewed, historically began as a modest extension of shop houses and gradually metamorphosed into high-rises embodying a creative interplay of colour, material features, and climate responsive mechanisms as the architectural timeline advances. Ranging from the simplistic Modernist ideals of the International Style to the regionalist approach of the Post-Modernism and ultimately the Neo-Minimalism, each of the case studies is briefly examined from the spectrum of contextual history, functionality, and the aesthetics of the façade design elements. Evidently, the outcome of the study underscores the architectural developments of the city hotel façade design as expressive of the hotels' image and trends in urban hospitality alongside a reconciliation of the capital's history.

## 1. Introduction

The hotel industry is undergoing a major competitive and technological transformation in recent decades. Hotels play a prominent role in the Malaysian tourism industry and the hospitality growth continues magnificently in recent years. The tourism industry is one of the profound catalysts to economic growth in Malaysia and holds the second place following the manufacturing sector in the country, accounting for at least about 8 to 10 percent of the annual GDP [3]. Tourism in essence garnered substantial revenues for governments whilst stimulating greater investments in infrastructure which ultimately contributes to overall improved living standards of the country. The burgeoning growth of the Malaysian hospitality industry consistent with its tourism industry is

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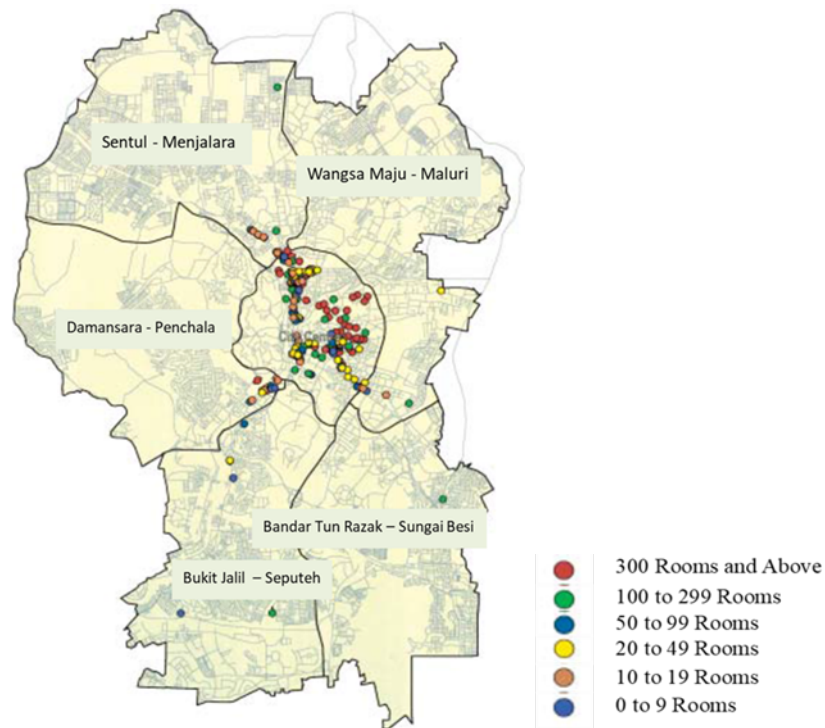
evident in the proliferation new hospitality establishments including high rise city hotels in Malaysia [3].

Historically, the development of hotel design in the post-independence period in Malaysia traces back to early establishment of Kuala Lumpur as the epicentre of economic and commercial hub. Multitudinous hotel establishments of varying styles and functionalities offering visitors with wide ranging consumption choices from basic necessities for the bourgeois to the sites of luxury [11]. Concurrently, according to the National Property Information Centre (NAPIC), the number of hotels in Malaysia represent 2 per cent of the total commercial building stock across the country [14]. A hotel building is invariably referred to as a public establishment offering travellers and temporary visitors two intrinsic needs including accommodation and meals [10]. Concurrently, the hotel industry is considered one of the most lucrative enterprises worldwide [5] and the industry is one of Malaysia's major sources of income and continues to grow both in scale and scope.

Architecturally, the façade is the most important component of a building showcasing the building's style, aesthetic values and its stylistic architectural expressions [2][21]. [11] explained that hotels are designed from the inside out, with emphasis on interior spaces and how the guest interacts with them and other guests. However, the gradual changes in the façade design can be observed based on the progress of the architectural timeline. Therefore, the study aims to examine the general relationship between façade design elements and architectural developments of high-rise city hotels with major references to city hotels located within the locality of Kuala Lumpur. The capital accommodates the highest portion by hotel numbers in the country and analysis of the variations in façade design is indicative to the gradual developments in architectural design in Malaysia. The outcome of the study provides the significant discourse on the developments of façade design for hotel buildings in the city and elucidating on the profound influence and design elements associated in a particular architectural timeline and social developments in Malaysia.

### *1.1 Hotel developments in Kuala Lumpur*

The developments of the hotel sector happened gradually between the 1970s and 2000s and reached its zenith between 1996 and 2000, thus witnessing a dramatic proliferation in the total number of hotel rooms in Kuala Lumpur which has increased by 12.18 percent accounting for a figure from 16,510 to 26,144. The majority of the hotels available in the capital are at the central urban district accommodating predominantly high rise with the size category of mainly more than 300 guestrooms [23]. In essence, there are three general categories of high-rise hotels in Malaysia namely city hotels, resorts and service apartments. Figure 1 depicts the distribution in the number of hotel rooms across Kuala Lumpur in 2000 as provided by the Kuala Lumpur Structure Plan 2020 [7].



**Fig. 1.** Distribution of hotels by size in 2000 [7]

### 1.2 Hotel design during post-independence Malaysia

In examining the development of hotel facades in Kuala Lumpur it is worth discussing the historical developments of the capital city throughout the various architectural timelines to draw relevant relationships based on the social and cultural influences on the façade design. Historically, the developments of hotels in Malaysia trace its origins to the early establishment of Kuala Lumpur as the Federal Capital epicentre of commercial and administrative melting pot. Malaysia's first tourism efforts goes back to the 1960s [3]. In 1972 where the Tourism Development Corporation of Malaysia (TDC) was set to act as a development authority. By 1980s, the worldwide tourism boom has caused Malaysia to recognize the potential of the tourism sector in economic and social development [3].

The capital of Kuala Lumpur is the earliest place in Malaysia to have built high rise buildings in the country [1]. The transformation from the suburban state to a capital city in Kuala Lumpur began as a result of the shift in the local economy from the traditional agriculture to industrialized economy most prominently in the 1980s [21]. Large migration of the suburban population to the capital city seeking employment and better standards of living caused a dramatic rise in the urban population [29]. The hierarchy of spaces in the existing planning and sections due to rectilinear arrangements of the shophouses incurs constraints in terms of the size and structure of the buildings to accommodate the population in the urbanized space. The pattern of urban development changed progressively by 1970s as high-rise buildings were introduced to replace the shophouses.



**Fig. 2.** Federal Hotel Kuala Lumpur (1957)

The immediate post-Independence period witnessed a period of experimentation featuring multiple transformation in architectural design ranging from the strict Functionalist Corbusien idea to revivalist eclectic attempts to adapt traditional Malay architecture [21]. The hotel design in post-Independence Malaysia appeared as medium-rise shophouses with Art Deco as decorative and architectural style [21][29]. During the advent of true Modernism and International style in the 1950s, the country's high-rise buildings began to take shape. The development of high-rise buildings became more rigorous culminating into the conversion of numerous shop houses into high rise commercial buildings [29] in order to accommodate the rapid expansion of city dweller's population and the surged of commercial and economic activities. Among the earliest examples of hotels built in Kuala Lumpur is the Federal Hotel Kuala Lumpur (Figure 2) built in 1957 which was opened for business in just three days before the Malaya's Independence Day in 1957. By the 1970s, the previously designed shophouses typology is replaced by model developments based on high rise building model to accommodate increasing city dwellers alongside demands for commercial [18][21].

The surge of high-rise buildings in the country however started between late 1970s and at the beginning of 1980s. High rise development was imminent in response to the immediate need for more space within a concentrated urban area. While in the 1980s with the former Prime Minister Tun Dr. Mahathir's nationalist vision, a list of mega projects was actualized with the sole intention to showcase Malaysia as a modern and efficient country as a commitment to a new model of economic development [4] [13]. Malaysia experienced an economic boost in the late 1980s due to foreign investors in industrial production and this condition of rapid economic growth has given huge changes in construction system for commercial sectors [21]. The surge of high-rise buildings in the country however started between late 1970s and at the beginning of 1980s [21][29].

## **2. Literature Review**

In discussing the façade design of high-rise city hotels in Kuala Lumpur, it is worth examining the different categories of hotels in Malaysia. The understanding of each hotel category based on general definition, functionality and context allows for comparative analysis based on the brief visual survey of the façade design elements [2]. The façade design for hotels is distinctive from the residential apartments and high-rise commercial offices. A close inspection on the façade design elements embodying the city hotel facades reveal the stylistic traits attributable to the historical architectural timeline for buildings in Malaysia. The underlying significance of the research undertaking provides invaluable discourse on the influence of architectural styles and hotel designs in Kuala Lumpur. While research on façade design for other building typologies can be easily retrieved, similar studies on high-rise hotels are limited within the scope of Malaysian architectural discourse.

## *2.1 Hotel Typology in Malaysia*

In general, the hotel typologies can be divided into three categories including the city hotels, resorts and service apartments [10]. The city hotels can be defined as hotels located in the central urban district having the characteristic In Malaysia, there are three common types of temporary accommodation consisting of the city hotel, resorts and service apartments [10]. A city hotel (hotel bandar in Malay language) is regarded as an establishment that provides lodging and meals to cater the business travellers and strategically located in downtown or business districts [12]. The city hotel is commonly found nestled within the commercial urban district to allow for easy access to accommodation by the business travellers [11]. While a resort hotel is a full-service lodging facility invariably located in strategic locations to cater for the needs for vacation, relaxation or recreation. The resort hotels are commonly constructed on sites following the coastline and sit atop of hills away from the city or business district [11]. Unlike the city hotels which mostly cater the needs for business travellers, the primary function of resort hotels includes provision of leisure and tourism. Collectively, a service apartment is a type of accommodation generally involves the use of domestic type property that offers end users with the services that are cost-effective, convenient and comfortable accommodation [11]. Among the three types of lodging facilities, the city hotels are the most dominant in numbers among the high-rise hotel categories in Malaysia (Penang City and Business Hotels, 2020; Tourist Accommodation Premises, 2020). In the large cities in Malaysia including Kuala Lumpur, the city hotels mostly dwell within touristic urbanized city and business landscape, making the city hotels serve double purpose of not only for business but also for relaxation and tourism.

## *2.2 Architectural design in Malaysia*

### *2.2.1 Façade design from 1970s to 1990s*

The architecture style during this period still remained “International Style” [21]. The majority of the architecture firms were significantly influenced by the modern architecture. This can be seen through the work of Le Corbusier, Mies Van Der Rone, and Walter Gropius [26]. High rise buildings built during this period bears similar stylistic affinities to the Modern-International style in its planning and architecture, a continuation of the Early Modern styles. The discernible characters of this periodic style are manifested through the simple design praxis of simplicity and clarity of forms and elimination of “unnecessary detail” [30]. The building façade built in this period commonly features simple geometric elements tracing the design affinities to the architecture during the era of the Industrial Revolution [28]. The style reaches its apex during late 1970s and 1980s. The high-rises built in the 1980s had little consideration to the local climatic conditions [19]. In contrast, they resemble high-rise building solutions of the modern Western countries characterized by glass clad buildings without any form of sun shading means [26]. The Modernist paradigm which favours Western patterns of design lacks the ideal world icon conceived of Western oriented design traits which rendered it uncompromising to the south East-Asian architectural patterns.

### *2.2.2 Façade design from 1990s to 2010s*

In the late 1980s, a crisis of meaning and historicity became the main agendas in the architectural design of Malaysian buildings. The high-rise building model of Modern period conceived from the International Style has been seen as unfit to the context of Malaysian climate [16]. In most parts of the world, the late twentieth century international style was used mainly for commercial and institutional buildings [21]. Compared with examples of the international style from the post war

period, the exteriors of many buildings in the 1960s and 1970s had a greater three-dimensional quality and displayed more assertive textures through the use of sculpturally modelled precast concrete cladding panels, instead of a flat, metal curtain-wall treatment [21]. The search for 'Malaysianisation' was critical in the late 1980s and regionalist idea became the recurring theme in the architectural design considerations. The commercial high-rise buildings in Malaysia have witnessed a shift in Malaysian architectural paradigm from Modern International Style to the Regionalist architectural style of Post-Modernism towards the end of the 1980s. While the Modernist architecture is attached to its universal currency known as the International style, the Post Modernism period bears the attributes of traditional and classical architectural elements, embodying the ultimate emphasis on location and climate as the basic attributes to architectural design [19]. The Post-Modern represents a philosophical shift towards a more contextualized, symbolic, and referential architecture [20]. Post-Modernist architecture creates a new language of architecture by recognizing the significance of Classical elements adapted for modern form [20]. According to [19] in the 1990s, there was a shift of local architects' concern and sensitivity towards environmental and responsive Regionalist architecture. The architecture seeks to incorporate in its design the 'spirit' of the place in which the building is located, thus corresponds to its contextual requirements [19]. The Post-Modernism in Malaysia is epitomized by incorporation in its design elements the context of the place in which the building is located showcasing colourful surface decoration, playful and whimsical translation of façade elements, architectural irony and fragmentation [20]. In the late 1990s, the emergence of Post-Modernist and Regionalist architecture is comprised of a myriad of new tendencies including High-tech architecture, Neo-minimalism, and Deconstructivism [20].

### *2.2.3 Building design from 2010 onwards*

The building design of this period is the subsequent product following the post-Modern architectural developments. During this period, Malaysia experiences declining economic developments due to economic recession globally triggering an extenuation in new construction in high-rise building developments [17]. Among the notable style of hotels in this period in Malaysia including the Neo-minimalist style epitomized through the embodiment of both post-modern and minimalist design attributes. Neo minimalism is commonly associated to an art movement of the late 20th and early 21st centuries which is commonly regarded as a product of the modernist movement of the 1960s [15]. The elements of the minimalist style from the period of Modernism is employed in the design of contemporary buildings due to its cost efficiency in the era of global economic downturn. Additionally, buildings constructed during this period features numerous complex technical solutions for the load-bearing structure while showcasing simplistic design of the façade [25]. The style indicators of Neo-Minimalism include 'geometrics' in design, efficient concept, open and simple planning configuration [8]. The prominent features of Neo-minimalism as examined by [24] include clear and integrated with simple lines reminiscent to the principles of the early Modern architecture. The style has the major influence of the Bauhaus style of art which rejected lavish designs for a more simplistic and practical approach. The usage of the basic shapes, monochromatic and primary colour palette, simplified lines, flatten and clean surfaces replaces decorative plastics with simple and reduced design.

In essence, based on the review of previous studies, the underlying history alongside the architectural elements and design principles of the hotel styles can be summarized as shown in Table 1.

**Table 1**

Architectural style, elements and characteristics based on different timeline in Malaysia

| Architectural timeline/period | 1970s to 1990s   | 1990s to 2010s  | 2010s onwards  |
|-------------------------------|--|---|--|
| Style                         | <ul style="list-style-type: none"> <li>• Modern Architecture</li> <li>• International Style</li> </ul>   | <ul style="list-style-type: none"> <li>• Post-Modern Architecture</li> <li>• Regionalist Style</li> </ul>   | <ul style="list-style-type: none"> <li>• Post-Modern: Neo-minimalist</li> <li>• Commercial Architecture</li> </ul>   |
| Background/History            | <ul style="list-style-type: none"> <li>• Preference towards functionalism.</li> <li>• Resemblance to the International Style.</li> <li>• Rejection of traditional/classical ornamentation and style.</li> <li>• Emphasis on volume rather than mass.</li> </ul>                                  | <ul style="list-style-type: none"> <li>• National identity through elements of architecture is visible.</li> <li>• The styles made recognizable references or allusions to aspects of historical or vernacular architecture.</li> </ul>                         | <ul style="list-style-type: none"> <li>• Clear and integrated with simple lines reminiscent to the principles of the early Modern architecture.</li> <li>• Bauhaus style of art which rejected lavish designs for a more simplistic and practical approach.</li> </ul> |
| Broad Characteristics         | <ul style="list-style-type: none"> <li>• The image of functionalism and minimalism was represented by a simple, white, box-like building.</li> <li>• Unornamented.</li> <li>• Clean lines.</li> <li>• Dependence on the intrinsic quality of materials instead of applied decoration.</li> </ul> | <ul style="list-style-type: none"> <li>• Deliberate clash of incompatible geometries.</li> <li>• Focus on creating eye-catching and whimsical buildings.</li> <li>• Classical Motifs.</li> <li>• Incorporate classical elements with a modern twist.</li> </ul> | <ul style="list-style-type: none"> <li>• Large curtain wall</li> <li>• Unornamented</li> <li>• Steel and beam construction</li> <li>• Vertical emphasis</li> <li>• Elements of passive design included.</li> </ul>   |
| Style indicators              | <ul style="list-style-type: none"> <li>• Glass</li> <li>• Curtain wall</li> <li>• Unrelieved cubic blocks and corners.</li> <li>• Lighter materials.</li> </ul>  | <ul style="list-style-type: none"> <li>• Irregular shapes</li> <li>• Traditional ornaments and motifs employed on the façade.</li> <li>• Emphasis on decorative elements.</li> </ul>  | <ul style="list-style-type: none"> <li>• Clean and simplified lines.</li> <li>• Basic shapes.</li> </ul>   |
| Colour                        | <ul style="list-style-type: none"> <li>• Light colour spectrum.</li> <li>• Monochromatic colour combination.</li> </ul>  | <ul style="list-style-type: none"> <li>• Striking Colours/Colourful</li> </ul>  | <ul style="list-style-type: none"> <li>• Monochromatic colour palette.</li> <li>• Primary colour palette.</li> </ul>   |

### **3. Methodology**

#### *3.1 Selection of Case Studies*

The first phase of the present study involves the identification of the potential case studies to undertake the façade design analysis through a visual survey of façade design elements. The method to select the case studies is adapted from the study by [12]. During this stage, the study begins by itemizing all the high-rise hotels located within the locality of Kuala Lumpur. The search of all the hotel names can be performed through the Malaysian Association of Hotels (MAH) website [31]. The MAH is an organization established in 1974 to monitor and enhance the quality of the hotels and more importantly the tourism industry [31]. This is achieved through integrating the hotel members across Malaysia standards to ensure the service quality as approved by the Malaysian government. Since its inception, MAH has registered over 900 members including both the private sectors and Government agencies. The list of hotel names is available in the official website of MAH and initial search garnered a total of 78 registered hotels in Kuala Lumpur [31].

The next phase in the selection is to choose the high-rise hotels from the all the hotels enlisted. According to [27] and [9] a high-rise building in Malaysia is categorized as a building constructed with a height of more than 21 metre. Therefore, methodology proceeds by narrowing the scope of the selection to fit the definition of high-rise hotels [6] in Kuala Lumpur accounting for a total of 71 high rise hotels. Accordingly, each of the high-rise hotels identified is categorized based on the year of construction and official launch which include three different periods encompassing 1970s to 1990s, 1990s to 2010s, and 2010s onwards. Overall there 12 high rise hotels built between the 1970s and 1990s, while the number of high-rise hotels built from 1990s to 2010s, and 2010s onwards accounted for 24 and 20 respectively. Table 2 itemizes the high-rise hotels based on different periods of construction from 1970s onwards.

The next stage is through mapping the location of the hotels to analyze the distribution and concentration of the high-rise hotels on the map of Kuala Lumpur. The underlying purpose of mapping the locations of the hotels ensures the selection of the location of the case studies has to be in the concentrated area where these case studies are located adjacent to each other. The present study employs the graphical mapping process of the high-rise hotel locations in Kuala Lumpur and it can be observed (as illustrated in Figure 1) that the Kuala Lumpur city centre, Chow Kit and Bukit Bintang are among the locations that accommodate the most concentrated number of hotels in the city. Therefore, scope of the study is limited within the specific locality between Bukit Bintang and Kuala Lumpur City Centre. The selection of this context for the scope of study is due to the variation in façade design of the high-rise hotels alongside the period of construction of the hotels. These are two important parameters in examining the development in architectural styles of high-rise hotels identified in the present study. The method in selecting the case studies is depicted as shown in Figure 3.



**Table 2**

High-rise hotels in Kuala Lumpur based on different periods of construction [31]

| 1970-1980   | 1980-1990   | 1990-2000   |  |
|---|---|---|--|
| <ul style="list-style-type: none"> <li>• Hotel Equatorial Kuala Lumpur</li> <li>• Kuala Lumpur International Hotel</li> <li>• Parkroyal Kuala Lumpur</li> </ul>   | <ul style="list-style-type: none"> <li>• The Plaza Hotel Kuala Lumpur</li> <li>• Corus Hotel Kuala Lumpur</li> <li>• Grand Continental Hotel</li> <li>• Grand Millennium Kuala Lumpur</li> <li>• Hilton Garden Inn</li> <li>• Melia Kuala Lumpur</li> <li>• Shangri-La Hotel Kuala Lumpur</li> <li>• Seri Pacific Hotel</li> <li>• Quality Hotel City Centre</li> </ul> | <ul style="list-style-type: none"> <li>• Ascott Kuala Lumpur</li> <li>• Dorsett Kuala Lumpur</li> <li>• Dynasty Hotel</li> <li>• Swiss Garden Hotel &amp; Residences Kuala Lumpur</li> <li>• Grand Seasons Hotel</li> <li>• Hotel Maya Kuala Lumpur</li> <li>• Hotel Royal Kuala Lumpur</li> <li>• Hotel Soleil</li> <li>• Intercontinental Kuala Lumpur</li> <li>• Istana Hotel</li> <li>• Mandarin Oriental Kuala Lumpur</li> <li>• Oakwood Hotel &amp; Residence Kuala Lumpur</li> </ul> | <ul style="list-style-type: none"> <li>• Renaissance Kuala Lumpur Hotel</li> <li>• The Royale Bintang Hotel</li> <li>• Sunway Putra Hotel</li> <li>• Capitol Hotel Kuala Lumpur</li> <li>• Crown Princess Kuala Lumpur</li> <li>• Lanson Place Ambassador Row Residences</li> <li>• The Pearl Kuala Lumpur</li> <li>• Vistana Hotel Kuala Lumpur</li> <li>• Zon-All Suites Residences On The Park</li> <li>• The Ritz-Carlton</li> <li>• Sheraton Imperial Kuala Lumpur Hotel</li> <li>• JW Marriott KL</li> </ul> |
| 2000-2010   | 2010 onwards  |   |  |
| <ul style="list-style-type: none"> <li>• Alpha Genesis Hotel</li> <li>• Cititel Mid Valley</li> <li>• Doubletree By Hilton</li> <li>• Gardens Hotel &amp; Residences</li> <li>• Gtower Hotel</li> <li>• Pnb Perdana Hotel &amp; Suites On The Park</li> </ul> | <ul style="list-style-type: none"> <li>• Hilton</li> <li>• Impiana KLCC Hotel</li> <li>• Le Meridien</li> <li>• Novotel KLCC</li> <li>• Pullman KL City Centre Hotel</li> <li>• The Westin</li> <li>• Traders Hotel</li> </ul>  | <ul style="list-style-type: none"> <li>• Alila Bangsar</li> <li>• Aloft Kuala Lumpur Sentral</li> <li>• Ascott Sentral Kuala Lumpur</li> <li>• Swiss-Garden Residences</li> <li>• Four Seasons Place</li> <li>• Furama Hotel Bukit Bintang</li> <li>• Grand Hyatt Kuala Lumpur</li> </ul>   | <ul style="list-style-type: none"> <li>• Hyatt House</li> <li>• Ibis Styles Sri Damansara</li> <li>• Mercure Shaw Parade</li> <li>• Parkroyal Serviced Suites</li> <li>• Fraser Place</li> <li>• Fraser Residence</li> <li>• Somerset Ampang</li> <li>• Pullman Bangsar</li> <li>• Silka Cheras</li> <li>• Sofitel Damansara</li> <li>• The St. Regis</li> <li>• W Kuala Lumpur</li> <li>• Vivatel</li> </ul>  |

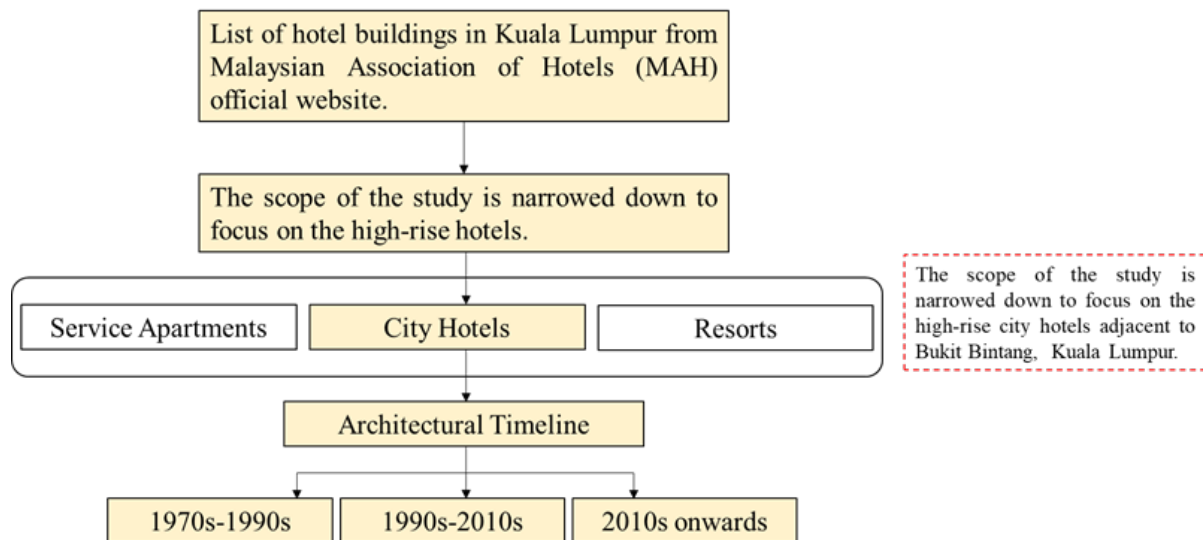


Fig. 3. Method of selection of case studies

#### 4. Result and Discussion

In general, the hotel façade architectural design can be divided into three major periods from the 1970s to 2010s. The present study employs an analysis based on visual survey of each of the selected case studies identified in Kuala Lumpur. In order to understand gradual development of architectural styles based on the timeline, each of the selected hotels will be examined according to the façade design elements. Among the design elements included in the visual survey include the wall and window materials, passive design elements, and external surface colour.

##### 4.1 Façade design from 1970s to 1990s

The Park Royal Hotel previously known as the Regent of Kuala Lumpur is located at the intersection off Jalan Imbi and Jalan Sultan Ismail is among the earliest high rise city hotels in built in the capital. The building which was constructed in 1974 is designed by Leung Ching Fan Chartered architects is 24-storey multipurpose hotel complex accommodating guest suites, meeting and conference venues, indoor gymnasium, and dining rooms. The hotel immediate design composition is atypical to the Modernist style building typology where the standard podium and tower form the foundation to many buildings in Kuala Lumpur built in the same period. The overall melange is an amalgamation of two components; the horizontal podium and the vertical tower block. The podium executes stability onto which a simple cubic block of the hotel tower raised high featuring a streamline of small square windows outlining the exterior. Aside from the Park Royal Hotel, hotels of podium/tower design built in the similar period include Seri Pacific Hotel, Hilton Garden Inn and Melia Kuala Lumpur. The podium is clad in horizontally aligned rows of glazing and clean unornamented white concrete finishes elevating its spectacularly minimalist appearance characteristically prominent to the Modernist style buildings. The simple tower volume which houses the guest suites are wrapped in seemingly continuous streamline glazing accentuating references of the typical high-rise buildings belonging to the International style.



**Fig. 4.** Park Royal Hotel Kuala Lumpur built in 1976

In principle, this style expresses the essence of purity in basic geometric design of the Modern architectural style known by its typical traits of using glass for the facade (usually a curtain wall) wall and windows [28]. The façade is left completely unornamented, where the textural quality of the façade is represented only by the thin mullions that vertically run up the between the structural columns indicating each guestroom units at the perimeter of the tower. The alternate between the tinted glazing and the clean white structural columns creating a subtle, ordered minimally decorative interplay of light and shades. Overall, the composition of the complex is seen as a simple tower inserted onto a simple cubic block raised high on a podium and punctuated by small square windows. The streamline glazing units are arranged to be symmetrically dispersed on the façade with each glazing units are equally and alternately spaced with the concrete wall.

#### *4.2 Façade design from 1990s to 2010s*

The architectural approach of the high-rise buildings in Malaysia in the late 1980's were influenced predominantly by the Post-Modern style. In Kuala Lumpur, a myriad of Post-Modern high rise hotels can be easily identified through the discernible characteristics of the façade design and the overall amalgamation of the building design composition. The Post Modern high-rise hotel example can be seen in the design of Mandarin Oriental Hotel Kuala Lumpur. Built in 1998, the melange of the hotel clearly adapted several Classical elements emphasized through symmetrical massing which creates a fundamentally classical composition, achieved with minimal use of classical motifs and details. The repetitive glazing divided into vertical bays indicate classical origins. The spandrels between storeys is used minimally to emphasize verticality of the hotel tower. Another feature of Post-Modern architecture on the hotel façade is the subtle injection of classical details including the use entablature, large columns, and massive centralized entrance. Apart from classical elements, the style of Art Deco can be identified on the façade.



**Fig. 5.** Mandarin Oriental Hotel Kuala Lumpur built in 1998

In some cases, the high-rise hotel buildings were designed with passive design elements to respond to the effects of the tropical climate. During the mid-1990s, some of the hotel buildings were designed to convey a Malaysian identity through incorporation of structures and elements which have affinities to the elements of local traditional architecture. The façades of the high-rise city hotels in Kuala Lumpur built during this period have distinctive characteristics from the previous style. In the design of these hotels, significant features of Postmodernism which are mostly accentuated by the articulation of bright colours, playful interplay of eye-catching and whimsical building elements, and subtle incorporation of classical architecture. Similarly, the design of the hotel façades in Kuala Lumpur built during this period is eclectic, colourful in style and apparent use of classical decorative elements. The aforesaid elements can be seen in the design of the Istana Hotel, the Grand Seasons, Intercontinental Hotel and the Mandarin Oriental Hotel. Additionally, among the notable examples of hotels built in the beginning of 2000s include the Westin hotel, the Doubletree by Hilton, the Pullman Kuala Lumpur City Centre.

Another example of high-rise hotel built from 1990s to 2010s is the Westin Hotel (Figure 6), which is a five-star hotel in the heart of Kuala Lumpur. In general, the overall composition of the hotel showcases a corporate building design architecture with two discernible features. These styles can be include functionalist style executed through simple curvilinear forms which are purely for function and experiential Post-Modernist elements through complex aesthetic elements and materials which serve as creative expression of the hotel facade. Unlike the high-rise hotels adjacent to the area, the curvilinear shape of principal mass of the hotel building alongside three dimensional (non-planar) façade treatment further amplified the Post-Modern references of the building, acting as a landmark in the city. The curved horizontal spandrel between the hotel units on the façade is reminiscent of the elements of early modern architecture and Art Nouveau. References to classical building elements like cornice is indirectly expressed in the form of a modern twist. Finally, the striking colour contrast between the reflective glazing and the opaque walls is also a rendition of the Post-Modern architectural element.



**Fig. 6.** The Westin Kuala Lumpur Hotel built in 2004

#### *4.3 Facade design from 2010s onwards*

The building design of this period is the subsequent product following the Post-modern architectural developments. In some of the hotel façade design represents the quintessential simplistic Neo-minimalist beauty of the hotel function. The Neo-Minimalist design attributes can be traced based on the employment of clean lines and simple geometric forms which is clearly notable in the façade design of the W Hotel Kuala Lumpur as depicted in Figure 7.

Located in the heart of the Golden Triangle, the W Hotel Kuala Lumpur, expresses a simple geometric block comprising of a rectangular podium and a stacked vertical tower. The façade of the building is comprised with extensive glazing, external shading devices and mesh façade. Another element of Neo-Minimalist architectural style which can be identified on W Hotel is the use of mesh façade as cladding on the podium of the hotel. The mesh façade serves as external shading device to filter against direct solar radiation while letting in diffused natural light into the internal spaces. The tall, slender proportion of the tower rising above the podium is wrapped in a dynamic mix of bronze metal fins and glazed panels. The glazed façade of the tower emphasizes the verticality and elegance of the building form, brings contrast in tone and texture. The steel construction that holds the curtain wall are arranged in a repetitive and rectilinear matrix of vertical extruded aluminum mullions and horizontal rails. The glaze façade consists of bronze louvred screens in repetitive configurations that accentuate minimalist aesthetic dating back to the International Style of Modernism alongside architectural sophistication to the overall form.

Accordingly, the commercial style high-rise architecture is also prominent among the high-rise hotels built in the period. These types of hotels defined through extensive use of curtain wall, reflects the advances in construction technology that permitted the creation of very tall buildings. A notable example of hotel built in this fashion is the Grand Hyatt hotel Kuala Lumpur as shown in Figure 8.

Built in 2012, the architectural design showcases simple geometric design elements, without ornamentation or passive design elements. The large curtain wall with maximum window-to wall ratio is expressive of the clean lines and minimalism of the International Style architecture of the Modern architectural period. Another feature of the building's greatest expression of Minimalism can be seen in the use of simple monochromatic materials including glass and steel structure spanning between the external façade grid which runs continuously without spandrel. The overall melange of the hotel is made up of a glass and panel system embodying large reflective curtain wall and steel structure. The façade composition exhibits lightweight building construction similar to the modernist architectural period. The top part of the hotel is embellished with chamfered edge forming an arch which demonstrates Post-Modern expression of local architectural elements.

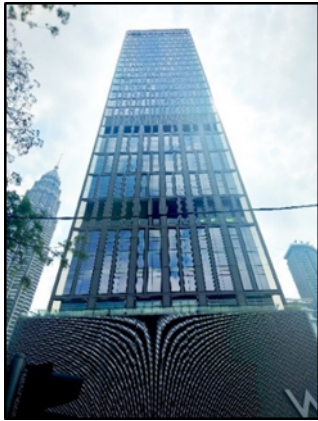


Fig. 7. W Hotel Kuala Lumpur built in 2018



Fig. 8. Grand Hyatt Kuala Lumpur

**Table 3**

Summary of high-rise city hotel architectural styles and characteristics in Kuala Lumpur

| Architectural timeline/period | 1970s to 1990s  | 1990s to 2010s   | 2010s onwards  |
|-------------------------------|---|--|--|
| High-rise hotel examples      | <ul style="list-style-type: none"> <li>• Park Royal Hotel Kuala Lumpur</li> </ul>   | <ul style="list-style-type: none"> <li>• The Westin Kuala Lumpur Hotel</li> <li>• Mandarin Oriental Hotel Kuala Lumpur</li> </ul>          | <ul style="list-style-type: none"> <li>• Grand Hyatt Kuala Lumpur</li> <li>• W Hotel Kuala Lumpur</li> </ul>                                     |
| Style                         | <ul style="list-style-type: none"> <li>• Modern Architecture</li> <li>• International Style</li> </ul>  | <ul style="list-style-type: none"> <li>• Post-Modern Architecture</li> <li>• Regionalist Style</li> </ul>                                  | <ul style="list-style-type: none"> <li>• Neo-minimalist</li> <li>• Commercial (International Style)</li> </ul>                                   |
| Broad Characteristics         | <ul style="list-style-type: none"> <li>• Façade unornamented</li> <li>• The streamline glazing</li> <li>• Rectilinear form and shapes</li> <li>• Large podium and tower form</li> </ul> | <ul style="list-style-type: none"> <li>• Multidimensional forms and shapes</li> <li>• Indirect references to classical elements</li> </ul> | <ul style="list-style-type: none"> <li>• Vertical emphasis</li> <li>• Flat roofs</li> <li>• Steel and beam construction</li> </ul>               |
| Style indicators              | <ul style="list-style-type: none"> <li>• Clean lines.</li> <li>• simple, white, box-like building.</li> <li>• Façade unornamented.</li> <li>• Flat roof.</li> </ul>                     | <ul style="list-style-type: none"> <li>• Spandrel in between the windows</li> <li>• Three dimensional façade treatment</li> </ul>          | <ul style="list-style-type: none"> <li>• Steel-framed,</li> <li>• Minimally ornate</li> <li>• Large curtain wall</li> <li>• Flat roof</li> </ul> |
| Colour                        | <ul style="list-style-type: none"> <li>• Simple colour palette</li> <li>• Monochromatic colour combination</li> </ul>   | <ul style="list-style-type: none"> <li>• Variation in colour combination employed through various material selection.</li> </ul>           | <ul style="list-style-type: none"> <li>• Simple monochromatic colour to express the simplistic and minimal styles.</li> </ul>                    |

## 5. Conclusion

The development of high-rise city hotel architecture in Malaysia has undergone significant changes in the façade design since its early establishment from the post-war hotel typology. A general relationship coexists between the city hotel architecture, façade design and tourism activity to accommodate the rising needs for hospitality services. Through descriptive historical analysis of relevant literature on the discourse coupled with the visual survey of the identified case studies in Kuala Lumpur, a shift in hotel façade design based on Malaysia's tourism and architectural development is documented in the present study.

It is clear from the analysis that many of the early design of high-rise hotels built during the 1970s were dependent on the styles imported from the Western models featuring little consideration towards the local context and tropical climatic conditions. The style continues until the end of 1980s where the shift in design towards Post-Modern and Regionalist architecture, demonstrating a greater confidence in experimenting with visual aesthetic of high-rise hotels. Additionally, the hotels built during this period began to incorporate elements attributed to the local identity. This is achieved primarily through adoption of Post-Modern style architecture, employing ornamentation to visualize as sense of identity and wealth due to the growth in the tourism industry alongside economic boom.

Currently, tourism is moving towards sustainable tourism due to rising awareness of the negative implications of the industry on the environment. The implication results in the changing design attitudes towards green hotel design which becomes an emerging trend in Malaysia [22]. This can be reflected in the design of the façade of city hotels incorporated with passive design elements, including external shading designs and careful selection of window sizes and materials to meet the external environment of the tropics. As large commercial hotels consume intense amount of energy on air-conditioning annually [33], the passive design strategies of the façade can reduce the cooling demand and improve energy efficiency of hotel operations. While the previous hotel façade designs tend to be purely aesthetics, the prevailing trends in hotel design began to include a subtle injection of passive design elements, demonstrating a shift in attitudes towards green architecture in Malaysia. However, the incorporation of passive design elements in the façade is still insufficient to meet the environmental conditions in the tropics.

Eventually, the study underscores the importance of identifying the hotel facade design developments considering the lack of prevailing studies on façade design for high-rise hotel buildings in Malaysia. The configuration in design elements of façades for high-rise hotels was designed differently than the high-rise residential and commercial offices. Insufficient passive design elements in the façade design can trigger intense energy consumption for cooling the indoor spaces especially in the guestrooms which are located on the perimeter of the building. Understanding the façade design of different hotel typologies provides significant insights for future studies on hotel façade energy and thermal performance [28]. Emerging studies on façade thermal performance and energy efficiency of hotels can benefit from the present study as it provides a systematic method of identification of different hotel façade designs, and ultimately the parameters affecting the hotel energy efficiency performance [16]. Besides, future research on hotel façade design can be considered to investigate the characteristics of façades for different typologies of temporary accommodations in Malaysia, including the resorts and service apartments.

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