

Stylistic Classification of Shophouses in Chinese Settlement Area in George Town, Penang, Malaysia

Ahmad Sanusi Hassan*

Professor, School of Housing Building and Planning, Universiti Sains Malaysia, Penang.

Asif Ali

Ph.D candidate, School of Housing Building and Planning, Universiti Sains Malaysia, Penang.

Fatemeh Khozaei

Assistant professor, Department of Architecture, Kerman Branch, Islamic Azad University, Kerman, Iran.

Abstract | Shophouse is a famous building type in cities of Malaysia with its commercial usage on the ground floor and residence on the upper floor. The earliest shophouses were influenced by the indigenous Malay house style. Later, the styles were popular with the western influences due to the application of brick and plaster, construction technique and regulation of building by-laws. The syncretic nature of its style has incited scholars to be disagreeing on a single and precise classification. However, some styles like 'Attap' type and Art Deco due to their distinguishing characteristics had an easy recognition. Several scholars have classified these styles of shophouses in Malaysia into different categories. This paper reviews six stylistic classifications of shophouse facades in Malaysia and further refines its genres by focusing it on a small region in George Town, Penang. The study examines 403 shophouses built in various periods along the seven parallel streets in George Town. It embarked with twenty-eight visual elements under the category of five architectural elements of the shophouse façades. The survey applied documentation, observation and visual method for the study of the façade elements. The findings suggest a fine tuned stylistic classification of shophouses based on a previous study of Hassan & Yahaya (2012) which is considered more pertinent in context of Malaysia.

Keywords | Shophouses, colonial architecture, stylistic study, façade analysis, George Town.

Introduction | A shophouse is a two or three-storey building built on a narrow strip of a land plot. It consists of residence on upper floors and commercial area on the ground floor with covered arcade towards the street. The ground floor may have various functions like shop, warehouse, servant's quarter or office. A shophouse is a multipurpose building with a business area on the front building and a residence on the rear building. It is a combination of the residential and commercial building type. However, it had also been used sometimes purely for residential purposes. Recently many shophouses have adaptive reuse into their new function like hotels, banks and restaurants (Chang & Teo, 2009; Yung, Langston, & Chan, 2014). Shophouse units are in a row design layout type with other adjoining units. They constitute a block with

a frontage road for the pedestrian walkway and with a back lane for service road on the rear side.

A shophouse is one of the popular building types in South-east Asia. Its earliest form was introduced in a strait maritime settlement of Melaka, Penang and Singapore during the colonial period (Chun, Hassan, & Noordin, 2005; Han & Beisi, 2015). The researchers suggest their origin in the Southern Province of China based on their narrow layout and air well (Li, 2007; Tjoa-Bonatz, 1998). In the eighteenth century, Chinese tribes like Hokkien, Cantonese, Teochew and Hakka were brought to Southeast Asia by British rulers as labourers in the tin mining industry. Their involvement in the shipping activities and mining industry resulted in various Chinese settlements in the region. Many Chinese had shifted their work to family owned-enterprise activities to cater to the daily needs of the population in the port-city. This family business-enterprise was a common feature of the

*Corresponding Author: sanusi.usm@gmail.com
+6046532844

Chinese community in the mainland. Later five feet walkway was introduced by Stamford Raffles, a British colonial official, to protect the shoppers from the frequent rain in the region (Mohit & Sulaiman, 2006). From the functional point of view, a row of shophouses shows its association with South-east Asian dwelling and marketplace along the road, for example, floating and on the land market in Bangkok. Georgetown is the first British settlement in Southeast Asia, founded by Francis Light in 1786 (Hassan, 2009). It had been a trade centre from its inception, and it is still serving an active city centre (Ali & Hassan, 2018). The city is under UNESCO's World Heritage Site due to the presence of various colonial buildings (Ismail & Mohd-Ali, 2011; Mohamad Pauzi et al., 2018). Georgetown provides a wide range of shophouses for a case study of its evolution from the nineteenth century. This research reviews various pieces of literature available on the subject and investigates in detail six out of them. Shophouses located along seven parallel streets were analysed based on their facade elements. The visual survey shows how the facade and its elements had been transformed over time. Hassan & Yahaya (2012) explained that the facades and their elements were associated with the time in which they were built. This research further supports and refines the previous work of Hassan and Yahaya by recognising the sub-classification.

Historical background

In the past, most primitive responses to building construction and styles in any region were indigenous, majorly governed by climate and available materials. The indigenous character of buildings remained intact unless any immigration or invasion from outside took place. Later with the influence of several foreign styles, an amalgamated architecture evolved. It is very similar to their mingled culture, which syncretised when people from different civilisations merged into one society (Ali, 2013). This process helped to transform the communities as well as their architecture and sometimes evolve a new building genre as well (Hassan & Abdul Nasir, 2018). In the evolution of shophouses in Southeast Asia, the earliest response to their form was similar to the indigenous architecture that was 'Attap' dwelling, prevailed in the region. 'Attap' types are the earliest forms of shophouses built by migrated Chinese in the Eighteenth century, generally near the tin mines. The purpose of these shophouses was to make available the commodities to the labour involved in the mines. The building skeleton was prominently wooden structures in the form of posts, beams and rafters. The half-hipped and half gable roofs were covered with palm leaves, and the whole building had an indigenous Malay character. The only difference was that the floor was on the ground instead of at a stilt level. No example of this style is available in its pure form presently, as the wood was their primary material. Because wood is likely to decay due to insects and micro-organisms under warm and humid conditions (Matthiesen, Jensen, Gregory, Hollesen, & Elberling, 2014).

In the late nineteenth century, due to the fire incidences, more permanent materials like bricks and tiles were used to

protect the building from disaster. It started a new era of development in the history of shophouses; however, these early structures were more functional and less ornamented. With the Dutch, Portuguese and British invasions in the region, the transitional phase could be observed with more vivid decoration and ornamentation. Upper stories were adorned with partitions of the facade into segments by arched windows. By the 1920s, European style was fully adopted in shophouse design similar to colonial villa's style, especially for ornamentation (Abdul Nasir & Hassan, 2018).

Literature review

Shophouse, being a typical feature of Southeast Asian urban fabric, became the attention of scholars as a cultural product of communities settled in the region (Savage, 2001; Wakita & Shiraishi, 2010; Yung et al., 2014). Many scholars looked into its design adjustment to the local climate as a sustainable paradigm (Al-Obaidi, Wei, Ismail, & Kam, 2017; Aranha, 2013; Elnokaly & Wong, 2015). Abundant literature is also available on documentation and conservation of shophouses as a heritage building (Baroldin & Din, 2012; Ismail & Shamsuddin, 2005; Lee, Lim, & Nor'Aini, 2008). Literature associated with the style of shophouses has opened a discourse and provided a reason for disagreement among scholars due to its eclectic nature. Hence several scholars have suggested different styles for the shophouses in Malaysia (Ahmad, 1994; Hassan & Yahaya, 2012; Mansor, Mydin, Sani, Rahim, Roosli & Hassan, 2012).

Numerous studies are available on the classification of a style of shophouses in Malaysia; six studies have been critically reviewed for this research. The earlier studies on the subject were Ahmad (1994) and Idid (1995), Ahmad categorised shophouses into early shophouses, traditional shophouses, straits eclectic and Art Deco style. The straits eclectic is an architectural style established by migrated Chinese who settled in Melaka from the fifteenth century onwards. It is a fusion of Chinese, Malay and European style mainly reflected on the facade of buildings. Idid (1995, 194-195) broadly classified the style of shophouses in Kuala Lumpur into Pre-1884 and Post-1884. The former is simple 'Attap' huts style and latter was categorised into Utilitarian, Neo-classical and Art Deco. In a study of Ipoh's shophouses, Ali, Hadi & RizallindaIshak (2015) classified them into the transitional, eclectic, neo-classical, Art Deco, early modern and modern. Hassan & Yahaya (2012, 137) classified into four styles, the 'Attap' type, early permanent, transitional facade and fully European. Some scholars classified the shophouses into nine categories (Mansor et al., 2012). This study does not project very distinct characteristics of each style as majorly the eclectic style dominates among them. They presume that the earliest examples of shophouse were in Dutch style and Dutch were the first who built the shophouse in Melaka. It contradicts the other theories of the evolution of shophouses by Chinese in the Malay world.

Tan (2015) classifies the Penang shophouses into five cat-

egories viz. Early Penang style, Southern Chinese Eclectic style, early straits eclectic style, late straits eclectic style, Art Deco style and early Modern style. Tan suggested a significant Chinese influence from mid of the nineteenth century to the first quarter of the twentieth century with the European style. He stated that Southern Chinese architectural elements like carved timber doors, air vents, gable end and air well were popularly built as parts of the shophouse design except for early Penang style, which had a simple facade. In a study of shophouses at Ipoh, Ali et al. (2015) classify them into transitional, eclectic, Neo-classical, Art Deco, early modern and Modern. Table 1 shows the classification of styles of shophouses by different scholars.

Methodology

The shophouses for this research are selected along the seven parallel streets, including Jalan Magazine in George Town, Penang. In this study, 403 shophouses were considered to be included along with all the seven streets, in which maximum 95 are from Lebuhr Presgrave and minimum 38 from Lebuhr Cecil. Newly constructed shophouses are not considered in this study as they do not reflect an appropriate style because of a drastic change in technology. However, restored and conserved shophouses with minor modifications like a replacement of wooden panelled doors with metal shutters are included. Direct observation is used to recognise the occurrences of standard features on the façade of shophouses based on an earlier study by Hassan & Yahaya (2012). Table 2 shows the classification of style and their details by Hassan and Yahaya.

Five essential architectural elements of shophouses facade viz. segmental division of upper floor, roof-style, lintel and arch, ornamentation and openings were recognised. They were further divided into 28 visual elements. By standard fea-

tures of facades, all selected shophouses divided into groups were analysed by their similarities and differences. The features of each group were categorised under early permanent shophouse, transitional facade shophouse and fully European shophouse styles. The number of features of each style determined the degree of a group's style.

Analysis and discussion

The style is a concept of classifying the character from their period, geographic region, features, culture, or traditions (Ahmad & Chase, 2012). Its style has emerged with a set of repeated characteristics. These repeated features may be any pattern, physical form and treatments, texture and colour (Wang, Vergeest, Wiegers, van der Pant, & van den Berg, 2003). Numbers of standard features in a product determine the degree of style. If a product shares more numbers of common characteristics, the style is expressed and recognised easily (Chan, 2001). Hence for categorising the style a set of a common feature in the product is the basic unit of style measurement (Chan, 2000). There are also some challenges to recognise the style, such as how many common features should be identically in an object perceived as a style. Chan (1994), in a study, indicates that to recognise a style minimum, three common features should appear in a product. He asserted that the quality of the feature is essential with its quantity, which depends on the size of the feature of the object and its location.

Shophouses along seven streets parallel to Jalan magazine include Magazine road viz. Lebuhr Noordin, Lebuhr Presgrave, Lebuhr Tye Sin, Lebuhr Macallum, Lebuhr Katz and Lebuhr Cecil at George Town in Penang have been selected for study (Fig. 1). The area has a diverse variety of styles in shophouses; however, one block of shophouses usually has a

Table 1 : Comparative analysis of all selected studies. Source : Authors.

S. No.	Authors	Title	Document type	Classification
1	Ahmad (1994)	The architectural style of the Peranakan Cina	Conference Paper	Early shophouses, traditional shop houses, straits eclectic and Art Deco style.
2	Idid (1995)	<i>Pemeliharaan Warisan Rupa Bandar</i>	Book	Pre-1884 and Post-1884 (Utilitarian, Neo-classical and Art Deco).
3	Hassan & Yahaya (2012)	Architecture and Heritage Buildings in George Town, Penang	Book	The Attap, early permanent, transitional facade and fully European.
4	Mansor et al. (2012)	Classification of Inheritance Shop Houses in George Town, Penang-UNESCO World Heritage Site	Journal article	Dutch Style, Southern China style, early shop house, early transitional style, early straits eclectic style, late straits eclectic style, Neo-Classical style, Art-Deco style, early modern style.
5	Tan (2015)	Penang Shophouses: A Handbook of Features and Materials	Book	Early Penang style, Southern Chinese eclectic style, early straits eclectic style, late straits eclectic style, Art Deco Style and early modern style.
6	Ali et al. (2015)	An Overview on the Typology of Shophouses' Façade at the Heritage Area in Ipoh City	Conference Paper	Transitional, eclectic, Neo-Classical, Art Deco, early modern and modern.

Table 2 : Features of each style. Source: suggested by Hassan & Yahaya, 2012, 137-142.

Style	Characteristics
'Attap' type	Timber as structural materials such as post beams and rafters, no stilt floor (floor on the ground, soft-wood to envelop and palm leaves to cover, half-hipped and half gable roof.
Early Permanent Shophouse	Bricks and tiles as construction materials, sometimes triple and four stories, lack of ornamentation, upper storey façade without any intermediate partition, opening filled with fitted panels of wood and secured with horizontal bars.
Transitional Facade Shophouse	Constructed with brick masonry, upper facade divided into two or three equally sized window openings set into a masonry wall, more ornamented surface, 'jack roof' and verandah, additional shade and ventilation.
Fully European Shophouse	Influence of the European architecture, eclectic style, dutch gable, Venetian arches, ionic columns, segmental arches, balustrades and parapet, fan shape vent, rounded gable end, punched holes.

similar manner. It shows that the construction of one block took place at the same time. For example, a block on Jalan Magazine has nine shops, and all of them are similar in their style. The width of the shops ranges from four meters to six meters, and the number of shops in one block varies from two to eleven.

By twenty-eight features recognised under five categories of architectural elements, six distinct groups were formed with a common feature. Table 3 shows the presence of features in a particular group. Group one, with a single-window on the upper floor, shows all characteristics of early permanent shophouses like small roof projection, roof tiles and less ornamentation. However, their wooden windows might have been decayed. These elements would have been replaced with glass and horizontal steel bars, but still, the style is perceptible (Fig. 2). On the other hand, group five and group six are chiefly characterised by three segments on the upper floor, deep roof projection and heavily ornamented facade. These two groups differ in their arches, and the former has a segmental arch while the latter is adorned with semicircular arch (Fig. 3). The wooden doors and windows are still surviving with this style as the structures were built only after the 1920s. The transitional style is reflected in group two, three and four. Group three is similar to the early permanent style except its two segments on the upper floor with segmental arches and geometrical ornamentation (Fig. 4). Group three and four are similar with their three segments on the upper level and less ornamentation but vary in the depth of roof projection and lintel arches.

Table 4 indicates that group one is showing more features of an early permanent shophouse, while group 5 and 6 are more towards a fully European style. It shows a broader band of a transition phase as the features count of Group 2, 3 and 4 are more for Transitional facade shophouse style. It indicates that the transition was slow and was continued until it completely transformed into a fully European style. It explicitly provides a base for splitting the transitional facade shophouse into early and late phase. From the table, it can be inferred that the early transitional shophouses were characterised by two segments of the window on the upper floor and less ornamentation on columns and facade. However, these features were

found enhanced in the late transitional phase with the continuity of other common feature in both styles. The presence of a few elements of other style marks the blurred line between different styles. It also shows that the nomenclature given by Hassan and Yahaya is primarily from dominated features reflected in a particular style.

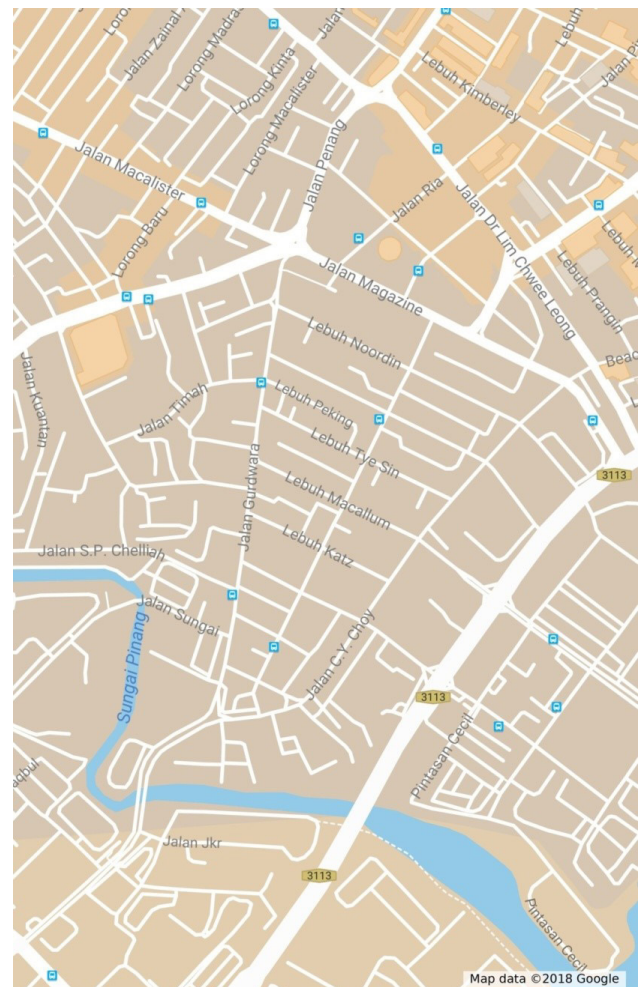


Fig. 1 : A layout of the selected study area. Source: <https://www.google.com/maps/>

Table 3 : Features of each group. Source : Authors. EPS=Early Permanent ShopHouse, FES=Fully European ShopHouse, TFS= Transitional facade shophouse, MOD=Modified.

	Elements	Style	Group-1	Group-2	Group-3	Group-4	Group-5	Group-6
Segmental division on the upper floor	No segment on the upper floor	EPS	x					
	Two segments on the upper floor	TFS		x				
	Three segments on the upper floor	TFS			x	x	x	x
Roof Style	Rounded gable end	EPS						
	Small projected roof	EPS	x	x	x			
	Deep projected roof	FES				x	x	x
	Roof covered with tiles	EPS	x			x	x	
	Roof covered with a metal sheet	MOD		x	x			x
Lintel and arch	Stilt Lintel	TFS			x			
	Segmental arch with crown	FES		x		x		x
	Semi-circular arch with decorated crown	FES					x	
Ornamentation	Ionic capital	FES					x	x
	Corinthian capital	FES						
	Column without ornamentation	EPS	x					
	Column with less ornamentation	TFS		x		x		
	Fluted columns	FES			x		x	x
	Columns with horizontal grooves	FES					x	
	Cornice	TFS/FES		x	x	x	x	x
	Heavily ornamented façade (Floral pattern)	FES					x	x
	Less ornamented façade (Geometric patterns)	TFS	x	x	x	x		
	Circular punched holes	FES				x	x	
Openings	Slit punched holes	FES						x
	Fan-shaped vents	TFS		x		x	x	x
	Glass paneled shutter	MOD	x		x			
	Horizontal bar	MAL	x					
	Wooden louvred shutters	EPS		x	x	x	x	x
	Wooden paneled door	EPS		x		x	x	x
	Steel shutter	MOD	x		x			



Fig. 2 : Early permanent shophouse style is perceptible even after modification. Photo : Asif Ali, 2018.



Fig. 3 : Fully European style with semi-circular arches. Photo : Asif Ali, 2018.

Conclusion

The earliest responses to an architectural style of any region were indigenous primarily governed by climatic conditions and availability of materials. This phenomenon could be observed in the case of the evolution of shophouses in Malaysia. The early shophouses were indigenous, characterised by timber as the primary material similar to 'Attap' dwellings. Although it is impossible to find 'Attap' type shophouse in the present study, its literature has shreds of evidence the presence of this style in the past. With the influence and amalgamation of foreign elements and a need for a more permanent structure which could protect buildings from disaster in the region, the style of shophouses was transformed much. Consequently, the masonry structures were evolved and an amalgamating process of features in shophouses continued with various elements from the

past and borrowed new foreign features. The blurred line between different styles of shop houses developed chaos among the scholars in recognising the distinctive styles. The findings of the study show that only two styles could be observed as purely distinctive, the 'Attap' type and Art Deco style (Fig. 5). Most of the scholars have placed them at the two extreme ends of linear periodisation of their classification, i.e. late nineteenth century and mid-twentieth century (Widodo, 2011). Because of their eclectic approach, it prompts scholars to differ in their classification. The findings show that the stylistic classification given by Hassan and Yahaya is entirely appropriate for the George Town Penang. However, the transition period seems more extensive, which can be further divided into early and late phase. The Art Deco style could be added following periodically the fully European style (Table 5).



Fig. 4 : Shophouse with two segmental arches on the first floor. Photo: Asif Ali, 2018.









Fig. 5 : Art Deco style. Photo : Asif Ali, 2018.

Table 4 : Feature count of each group. Source : Authors.

Style	Group-1	Group-2	Group-3	Group-4	Group-5	Group-6
Early permanent shophouse (EPS)	xxxxxx	xxx	xx	xxx	xxx	xx
Transitional facade shophouse (TFS)	xx	xxxxx	xxxx	xxxxx	xxx	xxx
Fully European shophouse (FES)		xx	xx	xxxx	xxxxxxx	xxxxxxx

Table 5 : Classification of shophouses style. Photo : Asif Ali , 2018.

'Attap' type	Early permanent style	Transitional facade style		Fully European style	Art Deco style
		Early transitional	Late transitional		
					
Wooden construction, palm leaves as roof covering.	The single segment on an upper floor, less ornamentation, small roof projection and roof tiles.	Two segments on an upper floor, less ornamentation.	Three segments on an upper floor, less ornamentation.	Three segments on an upper floor, heavy ornamentation.	Distinctive features of Art Deco-like linear appearance and ornamentation

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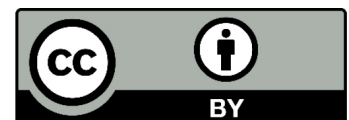
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