

The Sustainable Architectural Values of Eclectic Style Shophouses

Case Study: Sun Yat Sen Museum Penang, Malaysia

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ABSTRACT

The Sun Yat Sen shophouse in Penang is a small private Museum, which was converted from a shophouse or townhouse situated in the Armenian Street heritage area of George Town. The building is an example of embraces of the architectural heritage of George Town which is an extra ordinarily beautiful example of Straits Settlements merchant's shophouse. Historically, it is associated with the global historical personality of Dr. Sun Yat Sen and his revolutionary movement. This city was added to the UNESCO's world heritage list in 2008 to acknowledge its rich cultural heritage that constitutes of unique architectural and cultural townscape along the Straits of Melaka. This paper investigates the architectural plan of a shophouse and the values of cultural heritage buildings, which eventually were converted into a Museum in George Town, Penang. Classified as an eclectic style shophouse, it is rich in design and art components featured in its architecture that are still sustaining until today. This building has an interesting mixture of architectural and cultural inspirations adapted from the Chinese origin, with the local Malay ethnicity and the European influences that colonised the region. The introduction of new non related architectural components into the southern Chinese style in shophouses in George Town has resulted in the disappearance of this unique style of architecture. This investigation employs a qualitative research approach by documenting evidence and understanding the architectural as well as cultural influences of the southern Chinese eclectic style by studying the Sun Yat Sen Museum as a case study. The findings of the research point towards an understanding of the architectural and cultural influences that govern the design of the shophouse and its architectural character.

Keywords: sustainable architectural values, George Town, eclectic style, shophouses

INTRODUCTION

The main objective of this paper is to examine the sustainable architectural values of the eclectic style of shophouses. The straits eclectic is the architectural manifestation of east meeting west. Elements of European architecture are incorporated into properties that usually belong to Asia and very likely Chinese owners. In fact, it is rich in design and art components featured in its architecture that are still sustaining to date.

The straits eclectic style came about

during a prosperous era in the history of George Town in between 1840s to 1910s. It was also during the period when George Town experienced an influx of Chinese immigrants. Most of the ornate clan shophouses in George Town were built during this period of time. Furthermore, this city was successfully added to the UNESCO's world heritage list to acknowledge its rich cultural heritage that constitutes of unique architectural and cultural Townscape along the Straits of Malacca.

METHODOLOGY

This study covers numerous methods in documenting about the beauty of Sun Yat Sun Museum shophouse architecture style. The Sun Yat Sen Museum, which is situated in the heart of the George Town city, Penang with the architectural and cultural influenced by *Baba-Nyonya* (Eclectic Style) has been chosen to become the case study in this paper. It is observed that there are many architectural aspects that could be explored in further details to be documented as part of research studies. The idea of this study is to zoom in to details on how the exploitation of heritage helps to educate people all over the world about the architectural and cultural. The combination of multiple traditional architectures such as Chinese, English colonial as well as Malay architecture has influenced the uniqueness of eclectic style, which could be distinguished from the local architecture.

There are many ways could be employed so as to understand the details of culture people and their heritage. One of the methods used in this study is through visual data collection. This method had been carried out by observing the entire architectural elements available in this Museum. This is important so as to fully understand about eclectic style architecture. Apart from that, interviews with the owner of this Museum had also been conducted to support the visual data collection. This has helped collecting most of the useful infor-

mation about eclectic style architecture and enhances the knowledge about the significance of commodification of eclectic style architecture so as to preserve its heritage.

DISCUSSION AND FINDINGS

Historical Background of George Town, Penang

George Town, Penang established in 1786 by the British thus, it has more than 200 years of urban history (Figure 1). Apart from colonial buildings, George Town has more than 5000 units of traditional shophouses with significant heritage values. Efforts taken to conserve George Town's urban heritage begun in the early 1970s, but the first formal public policy to protect heritage buildings was published in 1985. UNESCO has recognized George Town, Penang as one of its heritage areas on 7th July 2008. This status was awarded to George Town due to its uniqueness in architectural values as well as cultural landscapes within the town itself. This makes them so unique and special compared to any other places in the world (<http://whc.unesco.org>).

Architectural Values of Shophouses

It is observed that the unique type of architectural values of structure in George Town clearly exhibits the influence of Chinese, Malay, Indian and European styles (Figure 2). All of this mixture found to be matured and merged in response to the local and the environment. From Chinese



Figure1: Map of Penang Island, Core and Buffer Zone of UNESCO World
Source: heritagegeorgetown.blogspot.my, 2008

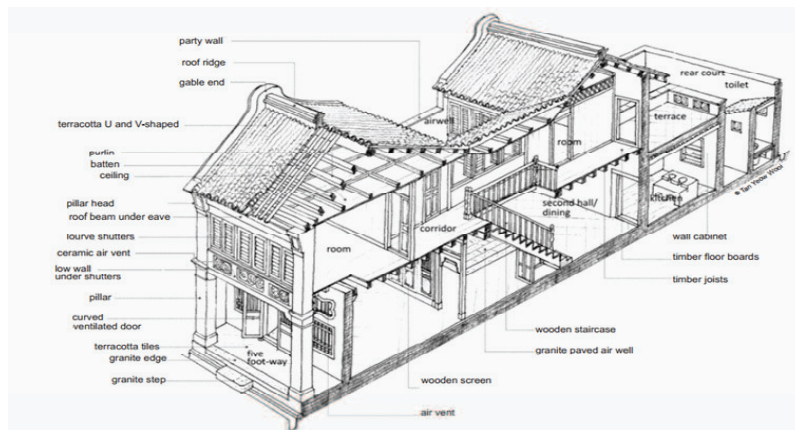


Figure 2: Heritage Shophouses Features
Source: <http://penangshophouse.com.my/>, 2016

came the elemental of the courtyard, the round gable ends and the fan-shaped air vents, from Malay came the elemental of the carved timber panels and timber fret-work whereas from the Indians came, the urban construction techniques, including a hard-wearing plasterwork. From Europeans French, windows and decorative plasterwork as well as *Kaki-Lima* (Five-Foot) were incorporated into it. With all of these values, the city arose, which is flourished along with the more ornate style and a group of craftsmen was developed. The arts and skills observed through the wood, stone, tiles, and plaster could be found everywhere in George Town city (Fels, 1994).

As mentioned earlier, most of the shophouses in George Town aged simply more than 200 years. Thus, one could see that there are many of the well-preserved and restored straits eclectic style of shophouses and townhouses in George Town stand as a sustainable architectural and cultural values. This has become part of Penang heritage when the city experienced abundant growth and prosperity.

Eclectic Style in George Town

During the western occupation, most of the Chinese community settled in the area along the Straits of Malacca. Having said that, one could see that most of the

predominant architectural characteristics are most likely originated from Chinese settlement. The adoption of Chinese elements in architecture and art patterns appeared on shophouses, especially in façade design structure. Any shophouses, which were built within this period of time is known as eclectic style or *Baba-Nyonya's* Shophouse (Chansen, 2014).

Furthermore, Ahmad emphasized that the development of architecture, which implies the straits eclectic style commenced sometimes in between 18th until early 20th century. The well blended elements of Eastern and Western style in the early 20th century has introduced ceramic artwork as well as the elaborated plaster renderings. Those architectural styles covers numerous types of shophouses situated in George Town, Penang (Ahmad, 1994). Unlike the early and traditional shophouses that have a continuous row of windows (Figure 3).

Subsequently, the straits eclectic style developed with the breaking of the facade into two or three moulded openings. Such style became popular among the *Baba-Nyonya* (Peranakan Cina) eclectic style community in either Penang or Melaka. In some shophouses, the pilasters placed



Figure 3: Continuous Row of Windows
Source: <http://penangshophouse.com.my/>, 2016
Modified By Author



Figure 4: Physical Appearance of Shophouse in George Town, Penang

Source: <http://www.capturingpenang.com>, 2016

between openings, the spaces above the arched transom and below the openings were decorated with plaster renderings such as bouquets of flowers, fruits, mythical figures and geometrical shapes. In addition, some of the window or door panels were beautifully carved. These decorations among other things reflect not only the wealth of the owners or tenants, but also

their status or position in the local community. One of the main differences between an eclectic style shophouse and a pure Chinese shophouse is the presence of these highly intricate ornaments and carvings.

Definition of shophouses in George Town, Penang

The shophouse (Malay: *rumah kedai*) built in between 17th to early 20th century is one of the unique architecture found in South East Asia, particularly in George Town, Penang and Melaka (Chen, 2007 & Wan Ismail, 2005). The shophouse is usually utilized for commercial activities and it possesses a private structure. It is also known as row house, by which in general would have two or more levels (Figure 4).

However, the term shophouses in most of the countries in Southeast Asia refers to multiple levels building. Likewise, the ground level is especially reserved for commercial activities whereas the remaining floors are as a residential place. But this is not an ideal case in Penang whereby

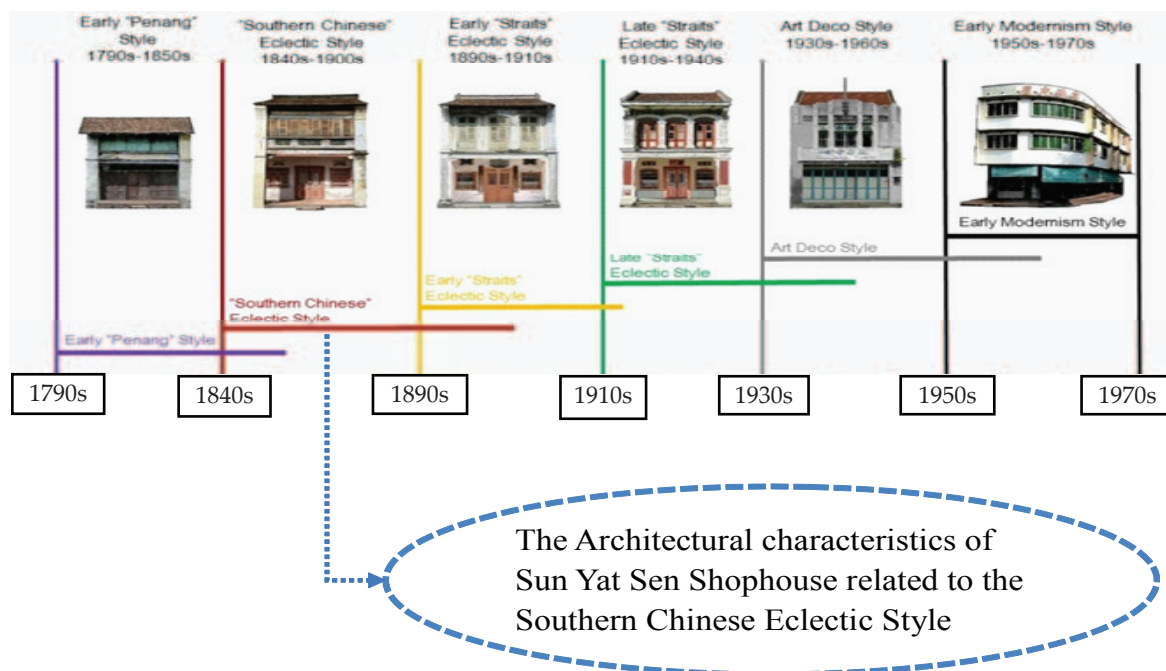


Figure 5: The period of shophouses were classified by Penang Heritage Trust
<http://penangshophouse.com>, 2015
 Modified by Author



Figure 6: The Façade of Sun Yat Sen along Arminian Street.

Source: http://www.oocities.org/armenian_pg/history.htm 2015 - Modified by Author

a shophouse could purely be residential place and sometimes might be termed as a terrace house too (Knapp, 2010). Thus, as in the case of 120 Armenian Street, it was designed mainly for residential purpose. The unique Chinese form of shophouses was resulted from the local influences and colonial's modification in an attempt to adapt to tropical climates.

Shophouse Style in George Town, Penang

Penang Heritage Trust (heritage of Malaysia trust, 1990) has classified shophouse buildings in George Town into 6 main historical styles (Figure 5). Those are, Early "Penang" Style (1790s-1850s), Southern Chinese" Eclectic Style (1840s-1900s), Early "Straits" Eclectic Style (1890s-1910s), Late "Straits" Eclectic Style (1910s-1940s), Art Deco Style (1930s-1960s), Early Modernism Style (1950s-1970s).

The unique architectural and decorative features in each style represent the unique and exclusive history of George Town at different period of time. One could only say a building might have 'heritage value' if the shophouse is either maintained the distinct historical features or at least restores the features that might have been lost. Thus, one could find the original features and decorative elements of shophouse within the said building. Consequently, shophouses ought to revamp the presents of

conventional structure in order to enhance the building performance toward greener design in parallel to support the sustainable development. In short, the southern Chinese eclectic style observed in the Sun Yat Sen Museum shophouse based on the observation and studied the details of its architecture.

The Sustainable Architectural Values of Sun Yat Sen Museum

It is observed that most of the shophouses in Armenian Street, George Town, Penang would be either occupied as residential or just for business purpose. Along this 300 meter street, which is prominent with its street diversity is where the Sun Yat Sen Museum shophouse (Figure 6), situated along with the George Town Heritage Incorporate.

It is the base of many residential shophouses, Museums like Sun Yat Sen building and markets. Principally, the Armenian Street in George Town has a unique and memorable history of interest to those who occupied it. Sun Yet Sen shophouse was built around 1880 as a residential townhouse. Occasionally there was a significant activities being structured in there led by Dr Sun Yat Sen. These activities took place in the shophouse found at 120 Armenian Street which was associated with Dr Sun Yat Sen that was known as the father of the nation.

The shophouse served as a significant base for Sun Yat Sen's activities in George Town, Penang. It has become as one of the best example from the late 19th century association style whose significance has been enhanced by his personal association with it. The architecture and atmosphere of the building, the collection of household objects, and undoubtedly, the building's old legacy is a heritage that associate with the Penang *Baba-Nyonya* community (Khoo, 2010). The narrow double level building structure is a very good example of mer-



Figure 7: Kitchen with antiques (A) kitchen, (B) Firewood Stove and Kitchen Utensils.

Source: <http://sunyatsenpenang.com/>, 2016

chant's house in the Straits Settlements. The building comes with a covered walkway or at least complimented with five-foot way which would be linked to the neighbor shophouse. This is to ease the pedestrian move and to secure their safety. Some of the original features that are still available on this 130 feet (40 meters) height building are like a courtyard garden, timber made staircase, geometric tiling floor as well as its large beams spanning lime plaster walls. In spite of that, the old-fashioned *Nyonya* kitchen is still maintained and sustained the original firewood stove as well as its kitchen utensils (Figure 7).

The reception furnished with a table, stools, heavy wooden chairs as well as side tables are arranged symmetrically (Figure 8). However, today, the front hall displays

a pictorial exhibition on Dr. Sun Yat Sen in George Town, Penang.

The Municipal Commissioners of Penang State have come up with a new regulation for those who want to build a new shophouse. The purpose is more towards safety cautious due to the past massive firing incident over shophouse. The new mandates from the Municipal Commissioners of Penang for the new shophouses have been detailed out, but briefly mentioned here as follows by which the shophouses must be built with bricks, plaster coat and roofed with fire proof tiles instead of wood or *attap* that which was commonly used before (Figure 9). This mandate was officially executed immediately after a tragic fire happened in the shophouse in 1814. Generally, the second level of shop-



Figure 8: A hall after The Entrance Backlit by Courtyard

Source: Private Collection, 2015



Figure 9: (A) Early Penang Style with timber and *attap* (B) Sun YatSen/ Southern Chinese Eclectic /Source: penangshophouse.com.my, 2015

Modified By Author

house building would have over-hanged veranda to protect the underneath walkway from sunshine or even heavy downpours. As for the shophouse five-foot way, usually it comes with square and rectangular glazed tiles with floral and colorful geometric patterns to cover the surface as well as the walls under the paired windows of the veranda. This was commonly found during the settlement of Peranakan Chinese (*Baba-Nyonya*).

Apart from that, a symmetrical ventilation port, which is a lobed opening featured with butterfly or bat shape with lateral stretch, could always be seen at the top of ground floor windows. It is always complimented by a series of protective iron bars. The next feature that could be seen from this shophouse is that, a painted wooden made inserts is equipped in each of these lobed openings to serve as ornamental as well as for the other functional purpose. A stylized *shou* (means "longevity") character, which is surrounded by four bats, could be seen from the insert molded feature. As could be seen from (Figure 10), the air ventilation and light would be sheathed from a series of wooden louvered shutters which is located at the upper floor of full faced. However, nowadays the shophouses are equipped with two layers of glass windows, but the wooden made shutters is said yet to be installed. It could also be seen from a series of ornamental ventilation ports from the bottom of the shutters. This ventilation port is made of ceramic tiles that comes along with some carved openings as well as painted in light blue color (Yvonne & Alvin, 2013).

An elongated building with the width



Figure 11: Skywell of SuenYat Sen Museum Shophouse

Source: <http://sunnyatsenpenang.com/> 2016

of about 5.50 meters and 40 meters in height would create a shady and dark internally. Usually, this area comes without a spatial component known as skywell. Sometimes, airwell or lightwell are actually refers to skywell (Figure 11), in the south of China, skywell is commonly found and used in urban shophouses or even in country homes. The skywell helps to provide a passive mechanism for internal ventilation as well as light through an

attenuated structure.

There's just another interesting feature of shophouse wherein one could find a corner with an atrium-like indoor outdoor room with some kind of the grand-winder staircase that leads to the family's rooms in the upstairs level (Figure 12). The

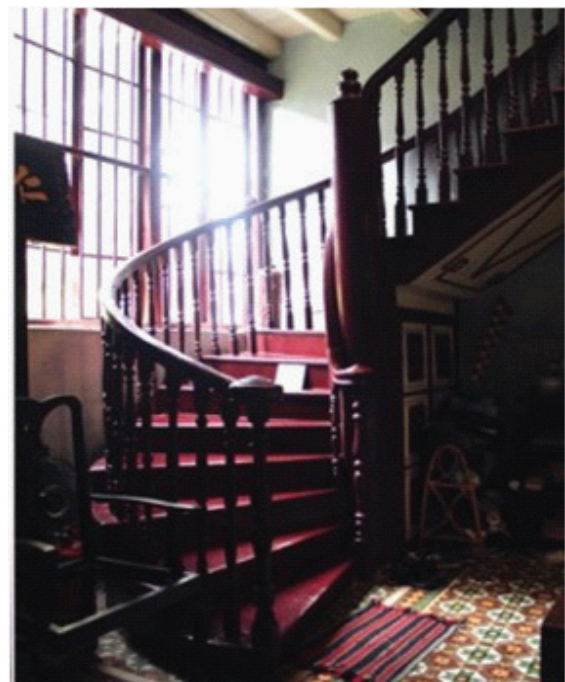


Figure 12: Timber Winder Staircase of Sun Yat Sen Museum

Source: Private Collection, 2015

light and wind source might come through the wooden louvered panels that surround the skywell, which then would go to the bedrooms and storerooms on second floor. Talking about the master bedroom, in general, it will be located at the front of the house, which is full of shuttered walls and louvered windows (Yvonner & Alvin, 2013).

SUMMARY

One could say the shophouses buildings might have 'heritage value' only if they still retain the distinct historical features or at least restore the features that might have been lost. The Sun Yat Sen Museum in Penang, which has been presented in this paper is a converted shophouse in the heritage area of George Town, Penang. We can find the original features and decorative elements of the shophouse in this area. The building is an example of the architectural heritage of George Town. No doubt, it is a superb example of Straits Settlements merchant's shophouse. The research findings of this study has brought the author towards a significant understanding of the sustainable architectural values and cultural influences that govern the design of the shophouse that characterizes the *Baba-Nyonya* architecture. The genuinely extraordinary culture expresses the uniqueness, beauty, grace and passion of lifestyles synthesized by two major groups of people. They are the Chinese and the Malay. Based on the discussion, it is revealed that each style has its distinctive architectural and decorative features which represent the sustainable historical values of George Town's at different period of time. These shophouses are perfect example of architecture that fully utilized materials which are locally available such as lime, claystone and timber. There are similarities observed between shophouses in which the Sun Yat Sen Museum architectural features also possesses

such as air vents and air well that help to provide the building with natural cooling and its ventilation within the building itself. However, the massive urbanization has led towards the destruction of the constructed cultural heritage building that in the hand also creating new challenges for the intangible cultural heritage. A shophouse ought to be revamped its presents of conventional structure in order to enhance the building performance toward greener design in parallel to support the sustainable development. As it comes to the concerns arose on the sustainable architectural values and as equally important as the implication of dwindling number of shophouses, it is vital for the sustainable architectural values and the cultural impact of these shophouse buildings to be thoroughly discussed. This is to ensure that the presence of shophouse and its distinct architecture would be well preserved in the future. Apart from that, this could also be secured with the protection of World Heritage Site, UNESCO.

References

- Bahauddin, A., & Abdullah, A.
 2012 The *Baba-Nyonya* Architecture of Malacca-Exploration of Interior Space Planning and Embellishments.
- Book, Khoo Salma Nasution
 2010 'Curating the Sun Yat Sen Penang Base', in Leo Suryadinata (editor), *Peranakan Chinese in a Globalizing Southeast Asia*. Singapore: Chinese Heritage Centre, pp. 170-184.
- Chansen, N.
 2014 "Sino-Portuguese": The significance of the Shophouse definition in Southern peninsula, Thailand. In *Vernacular heritage and earthen architecture: Contribution for sustainable development* (pp. 93-98).

- Fatland, F.
2013 The Influence of a Multicultural Society on Penang's Architecture. Retrieved August 29, 2014, from <http://www.expatsmalaysia.com/article/1255/the-influence-of-a-multicultural-society-on-penang-architecture>.
- Fels, P.T.
1994 Penang, Malaysia--Penang's Shophouse Culture. *Places*, 9(1).
- Ghaffar Ahmad
1994 The Architectural Style of The Peranakan Cina. Paper presented at the *Minggu Warisan Baba dan Nyonya*, Universiti Sains Malaysia, Penang.
- Knapp, R.G.
2010 *Chinese Houses of Southeast Asia: The Eclectic Architecture of Sojourners and Settlers*. Tuttle Publishing.
- West, Barbara A.
2009 *Encyclopedia of The Peoples of Asia and Oceania*. Facts On File (pp. 657).
- Yvonne, L., Alvin, W.
2013 Architecture Restoration Sun Yat Sen Museum. Retrieved August 13, from <http://sunyatsenpenang.com/en/architecture-restoration/>