"Typical" Chinese Residences in Late Nineteenth-Century Singapore:
The Case Study of the 'Four Grand Mansions'

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Abstract. In late nineteenth-century colonial Singapore, four Chinese residences stood out among the rest. They were known as the *si*[3] *dua*[7] *cu*[3] 四大厝 or *four grand mansions* and were the residences of four Teochew tycoons involved in the pepper and gambier trade. The four houses were known to be "built in typical Chinese architectural design and style". All the houses, except for one, are no longer standing. In the absence of a detailed study into the social and architectural histories of these houses, it is unclear how they looked like or if they were indeed architecturally Chinese. This paper attempts to fill this gap through the close examination of historical materials. In addition, it considers the reasons for the incorporation of non-Chinese architectural elements and for singling out these four houses as *dua*[7] *cu*[3] 大厝 or *grand mansions* through a comparison with other late nineteenth-century traditional Chinese houses in Singapore.

Keywords: Singapore · Chinese architecture · Grand mansions

1 Introduction

In late nineteenth-century colonial Singapore, four Chinese residences stood out among the rest. They were the houses of Tan Seng Poh 陈成宝, Wee Ah Hood 黄亚佛, Seah Eu Chin 佘有进 and Tan Yeok Nee 陈旭年. The four were Teochew 潮州 businessmen. According to Song Ong Siang's *One Hundred Years' History of the Chinese in Singapore* published in 1923, "the four residences [were] built in typical Chinese architectural design and style" [1]. They were collectively known as the *si*[3] *dua*[7] *cu*[3] 四大厝 or four grand mansions. The first mention of this term in writing can be found in the 19 January 1961 Nanyang Siang Pau reproduction of a radio broadcast script by Hsu Yun Ts'iao 许云樵 [2].[1]

It would be natural for one to assume that the four houses were architecturally Chinese. However, only the house of Tan Yeok Nee is still standing and little is known about the other three houses. So far, there has been a lack of detailed studies on the social

[1] *Nanyang Siang Pau* was a Chinese language local daily. The radio broadcast took place on 18 January 1961.

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and architectural histories of the four houses, a lacunae that this paper seeks to address. We will examine historical materials including old maps, building plans, photographs, newspapers and land records to ascertain if the four houses were indeed architecturally Chinese. The paper will also explore the reasons for the incorporation of non-Chinese architectural elements in the houses, the reasons for singling out these four houses as *dua*^{7} *cu*^{3} 大厝 or *grand mansions* and what made them “grand” as compared to other Chinese houses in late nineteenth-century Singapore.

2 The Four Grand Mansions

2.1 House of Tan Seng Poh

The House of Tan Seng Poh was at 58 Hill Street in the Straits Settlements Town of Singapore. It stretches from Hill Street to Armenian Street and was located beside what was formerly the Albion Hotel (59 Hill Street) and the Zetland House (18 Armenian Street) [3, 4]. The Albion Hotel later became the Waverley Hotel.

Tan Seng Poh (1830–1879) was the son of the first Kapitan China of Perak, Tan Ah Hun [1]. He was also the brother-in-law of the Gambier King, Seah Eu Chin, and came to Singapore when his sister married Seah. For a period, Tan managed the Seah family business. He was a prominent pepper and gambier merchant as well as a chief revenue farmer for the Singapore and Johore opium and spirit farms [5]. It was through these businesses that he made a fortune. In addition, Tan was the first Chinese Municipal Commissioner of Singapore Town and enjoyed close relations with the Sultan of Johore [1].

Tan’s house sat on land measuring 21,512 square feet (1,998.53 square meters) [6]. According to Song’s *One Hundred Years’ History*, the house was built in 1869 [1]. It was accessible from both Hill Street and Armenian Street. The main entrance was located at Hill Street, as evidenced by the Hill Street address of the house and the fact that Armenian Street was colloquially known as “Seng Po [Poh] toa chhu [*dua*^{7} *cu*^{3}] au” 成宝大厝后 or *behind Seng Poh’s grand mansion* at the time [7]. If the main entrance was at Armenian Street, the street would have been known as *Seng Poh dua*^{7} *cu*^{3} *zoin*^{5} 成宝大厝前 or *in front of Seng Poh’s grand mansion.*

A photograph of the Waverley Hotel, taken around 1900, gives us a glimpse of what Tan’s house looked like (Fig. 1). It shows the main entrance gateway as a detached building built in a traditional Chinese style with one main doorway and possibly two smaller side doors. The main building had Chinese gable walls too. Unfortunately, the architectural features of the rest of the house are unclear as the main building’s front elevation is blocked by trees in the photograph. Based on an 1893 map showing the footprints of Tan’s house, it consists of a main building with two smaller buildings (从厝; otherwise known as 左右护厝) on either side separated by *fire alleys* (火巷; otherwise known as *flower alley* or 花巷).[2] These alleys created a break between buildings and prevented the rapid spread of fire to the main enclosure. The smaller buildings were connected to the main building at the rear of the house. No air-wells are drawn on the map and it is unclear if any were present. If surveyors did not have access to the house, they might have excluded these details (Fig. 2).

[2] Potted plants often lined these alleys; therefore they were often known as flower alleys.

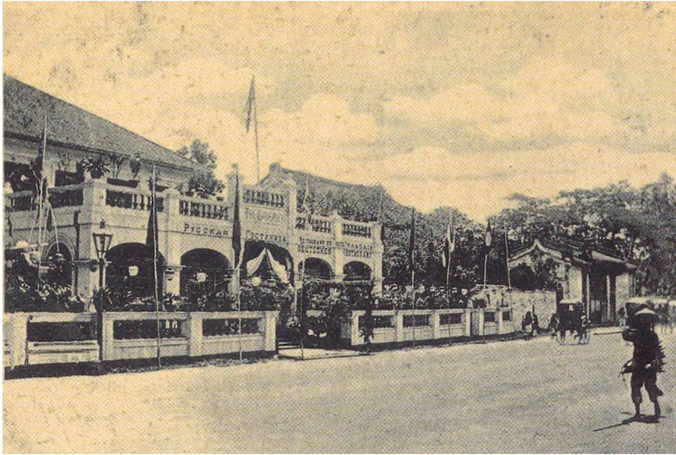

Fig. 1. Postcard showing part of Tan Seng Poh's house beside Waverley Hotel (public domain).

Fig. 2. 1893 map showing the footprints of Tan Seng Poh's house (Hon Sui Sen collection, courtesy of the National Archives of Singapore).

It is uncertain when Tan built the house. A portion of the land was reissued by the Government in 1848 to another person [8]. This shows that Tan only bought the land after 1848 and his house could not have been built earlier than that. After Tan's death, the ownership of the house was transferred to Yeo Goh Neo, Tan Keng Swee and Tan Keng Wah. The latter two are sons of Tan Seng Poh and Yeo Goh Neo is presumably his wife [1]. On 28 May 1883, Yeo and the two junior Tans mortgaged the property for $150,000 at a rate of ten percent per annum [8]. The mortgagee in turn sub-mortgaged the house to other parties. As the Tans were unable to repay the remaining $49,262.14

of debt, the property was taken over by the sub-mortgagee, The Eastern Mortgage Bank, by an Order of Court in 1893 [9]. It subsequently changed hands a few times before being gradually bought over by Loke Yew on 7 December 1901 and 19 December 1903 [10].

In October 1902, Loke Yew commissioned the construction of seventeen shophouses and a street at the location of the former Tan's house; a building plan was submitted to the Municipal Engineer's Office for this purpose [11]. Tan's house was most likely demolished in late 1902 to 1903 as the shophouses were erected by early 1904 [12]. This would have made Tan's house the first of the four grand mansions to be demolished.

2.2 House of Wee Ah Hood

Diagonally opposite Tan Seng Poh's mansion stood the house of Wee Ah Hood. It was located at 49 Hill Street (presently 47 Hill Street) and the site is currently occupied by the Singapore Chinese Chamber of Commerce and Industry. The site measures 26,602 square feet (2,471.41 m^2) in 1912 [13].

Wee Ah Hood (1828–1875) was the son of Wee Ah Heng, a trader who plied the Selangor-Singapore route. Having lost his father when he was only six months old, Wee Ah Hood worked his way up beginning as an assistant in a cloth-dealer's shop along Telok Ayer Street and eventually became a prominent pepper and gambier trader [14]. He was the father of Wee Kim Yam 黄金炎, a very successful businessman who was highly active in Chinese public affairs in Singapore [14].

According to Song's *One Hundred Years' History*, the house was built in 1878. However, Wee Ah Hood passed away in the house on 12 March 1875 and it could not have been built after that [15]. Wee's great-granddaughter, Dr Wee Phek Neo, clarified in a 1964 article that the house was built in 1873 instead of 1878 [16]. Her claims were based on the family album written "more than sixty years" before she spoke [16].

With Wee Ah Hood's death, the ownership of the house was transferred to his wife, Khoo Chwee Neo, and sons. The house was in turn given to their three surviving sons in equal shares when Koh passed away on 31 July 1892 [15]. The two younger surviving sons, Wee Kim Eng and Wee Cheng Whatt, sued Wee Kim Yam, the sole executor of Koh's will in 1895. They wanted the estates of Wee Ah Hood and Khoo Chwee Neo administered [17, 18]. It seems that even before the passing of Koh, the Wee family had already moved out of the house. It was rented out to Knight & Co., a furniture-maker, from late 1889 to April 1892 as a factory and showroom [19, 20]. On 30 December 1899, the Wee brothers sold the house to Syed Mohamed bin Ahmed al-Sagoff for $22,000 [21]. However, Wee Kim Yam leased back the house from al-Sagoff on the same day at the monthly rent of $131 [22]. He in turn rented out the house to St Mary's College (otherwise known as St Mary's Home), a boarding home and kindergarten for girls from January 1900 to April 1905 [23–25]. The college subsequently moved into the House of Tan Yeok Nee. On 11 April 1912, the house was sold to the Singapore Chinese Chamber of Commerce (SCCC) for $55,000 and the site has served as its office since then [26].

Wee's house was structurally a blend of Chinese and Western architectural elements. Despite it being known as a traditional Chinese house, the only traditional Chinese structural elements were its main entrance gateway, the corbels and internal gateways leading to the fire alleys. Nevertheless, its spatial arrangements and motifs, such as

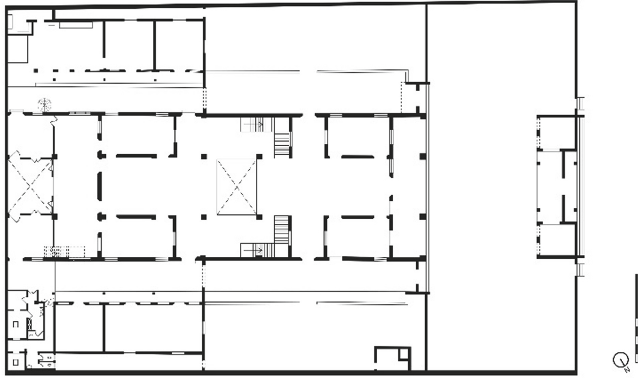

Fig. 3. Plan of former Wee Ah Hood's house in 1934. Personal collection.

column detailing and signages above windows of the main building, were essentially traditional Chinese ones. Based on a set of 1934 alteration plans, the symmetrical layout of Wee's house is of a *sidianjin* 四点金 configuration. This configuration refers to "the four double-pitched gable ends that recall the Chinese character for gold" [27]. The spatial arrangements within the house reflected the cultural ideals of "familial hierarchy, harmony, continuity, and order" with Confucian underpinnings [27]. The allocation of rooms would have been in accordance with each member's relative rank in the family.

The house's main entrance is a detached building with a recessed gateway. The main roof ridge and the sloping ridge terminals were ornamented with cut porcelains known as *qianci* 嵌瓷. Between the entrance gateway and the two-story main building stood a front courtyard. Fire alleys lined both sides of the main building and separated the two side wings from the main enclosure. Each fire alley had a gateway which segregated it from the front courtyard. In place of cement or lime concrete floors which were more commonplace, the alleys' floors were tiled. The main building had two openings to the sky; one was at the building's center and another at the rear. A cantilever canopy stretched from the main building's front elevation to the two gateways fronting the fire alleys; this creates a visual impression of a five-bay building, even though it spanned only three bays 三开间. Two sets of linkways 过水 connected the side wings to the main building in the rear half of the house. Originally, there were four sets of staircases which led to the second level. Two were in the main hall, one at the rear of the building and a final set of spiral staircase at the fire alley. The layout of level two is like that of level one. Side wings spanned the entire length of the main building and their rear halves were made up of three rooms on each side. At the front sections of the house's side wings were open-air turf plots (Figs. 3 and 4).

The thick lines and written indications on building plans suggest that the walls of Wee's house were built of cement concrete and plastered bricks instead of timber. The 1934 section drawings showed the presence of ceiling boards, which suggests the use of a Western truss system. If Chinese roof truss systems were used, there would have been no need to hide the trusses with ceiling boards. Another set of alteration drawings indicated that, by 1941, the building used king post and queen post trusses for its roof.

Fig. 4. Section of former Wee Ah Hood's house in 1934. Personal collection.

The Western roofing system was probably used in Wee's house right from the beginning. It made no financial sense to change the house's roofing system halfway through as this entails a major exercise of removing all roof tiles and reconstructing the ridge. The use of western truss systems would also have been more economical. The Chinese truss systems require solid timber of greater length and bigger girth. Although more timber members are needed in western truss systems, they are smaller in size and less volume of timber is required. Moreover, the western roofing system required less skill to construct and can be built without skilled craftsmen.

By 1958, the building was in a dilapidated state with cracks found on the eaves. There were calls by SCCC's committee members to build a new building [28]. Although there was recognition of the house's historical value, the final decision was to demolish it to make way for a taller building [29, 30]. The demolition started in June 1961 [31].

2.3 House of Seah Eu Chin

The house of Seah Eu Chin was located at 13 North Boat Quay along the Singapore River and occupied a land area of 18,677 square feet (1,735.15 m^2) [32]. It was otherwise known as "Chin-heng toa chhu [*dua*^{7} *cu*^{3}]" 振兴大厝 or Chin Heng grand mansion [7]; Chin Heng was the name of Seah's business. Song Ong Siang mentioned that Seah's house was built in 1872 [1]. While no other evidence has yet been found to corroborate the 1872 date, old photographs of North Boat Quay taken no earlier than 1868 show a row of two-storied shophouses occupying the site of Seah's house, suggesting that construction of the latter could not have begun before 1868 [33].[3]

Like the previous two personalities, Seah Eu Chin (1805–1883) was also involved in the pepper and gambier trade. He was born in Swatow in 1805 and began work as a clerk on a vessel plying between Riau and Singapore in 1823 [33]. He later became a commission agent in 1830 before going into agriculture in 1835 [5]. After experimenting with different crops, he eventually settled with planting pepper and gambier [5]. Seah

[3] The top photograph in pages 52 and 53 of Gretchen Liu's *Singapore: A Pictorial History, 1819–2000* shows North Boat Quay along the Singapore River before Seah's house was built. The photograph could not have been taken before 1868 as it shows the completed Former Empress Place building which was built between 1864 and 1867. Shophouses stood at the location where Seah's house would later be situated.

and his children went on to become the largest pepper and gambier traders in Singapore and made a fortune out of it [5]. His dominance of the gambier economy was to the extent that he became known as the Gambier King. Seah was also the first Chinese to be made Justice of Peace in Singapore and often assisted the Straits Settlements judicial courts with legal hearings pertaining to the Chinese population.

Before Seah Eu Chin passed away on 23 September 1883, he appointed his two elder sons as executors of his will. However, his eldest son, Seah Cheo Seah 佘石城, died on 25 November 1885 before having truly administered his will [34]. His second son, Seah Liang Seah 佘连城, a prominent Chinese businessman and member of the Legislative Council, became the sole executor of the will. In 1904, a Court Order was issued stating that Seah Cheo Seah's legitimate sons were equally entitled to the immoveable properties of Seah Eu Chin's estate alongside the three surviving sons of Seah Eu Chin [34]. Seah Eu Chin's 13 North Boat Quay house was thus transferred to two sons of Seah Cheo Seah, namely Seah Eng Kiat and Seah Eng Kun, on 12 June 1906 [34]. The brothers lived in the house and eventually sold it on 30 December 1918 to Guthrie and Company Limited for $392,217 [35]. The house was then rented out to other parties. Among the tenants was Lim Teck Lee (Private) Ltd. 林德利 (私人) 有限公司, an import and export firm of furniture and industrial raw materials [36]. Between 1938 and 1941, building plans were submitted to the Municipal authorities proposing new godowns for Guthrie and Company to be built at 13 North Boat Quay [37]. It was around this time that the former Seah's house was demolished. The land was acquired by the state on 30 September 1971 and now forms part of the plot on which the Parliament House sits [32] (Figs. 5 and 6).

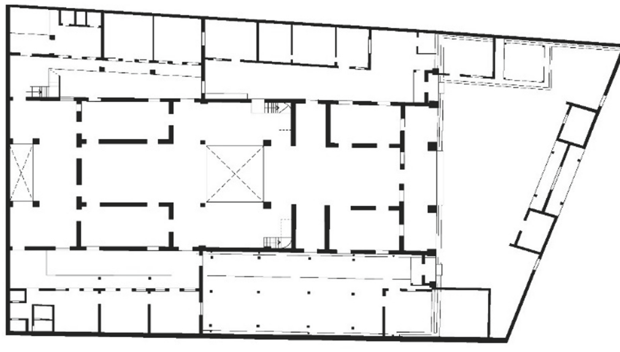

Fig. 5. Plan of former Seah Eu Chin's house in 1931. Personal collection.

Seah's house probably had the same original configuration as Wee's house, except for its slanted main entrance gateway and boundary wall. The front half of its side wings would similarly have been turf and the rooms shown on the 1931 alteration plan were likely later additions. This would explain why these rooms were not aligned with the ones on the rear half of the side wings. Photographs of the house's exterior seem to indicate that it was architecturally Chinese. The architecturally-Teochew detached main entranceway was fronted by timber balustrades and its roof decorated with *qianci*. Two side doors were found on either side of the main entrance.

Fig. 6. 1913 photograph showing entrance gateway of Seah Eu Chin's house (Bels Collection, courtesy of National Archives of Singapore)

The triangular lot of land on which the detached main entranceway is located, known as Lease No. 926, was only issued by the Governor of the Straits Settlements to Seah Eu Chin in 1880 [38]. In contrast, the land on which the main building was built was issued in 1827 to Syed Allie Junied and Bhaya; the land was eventually bought over by Seah [34]. If Seah's house was indeed built in 1872, the entrance gateway might have been a later addition or built before Seah formally acquired the triangular plot of land.

A closer examination of building plans and photographs reveals that the architectural style of Seah's house was not entirely traditional Chinese. As in Wee's house, the presence of ceiling boards and thick walls as indicated in the building plans suggest the use of a Western roofing system and walls built of plastered bricks or cement concrete respectively. Like the houses in its immediate surroundings, the main building's floor-to-ceiling windows facing the Singapore River were French louvre casement windows.[4]

2.4 House of Tan Yeok Nee

The House of Tan Yeok Nee (otherwise known as Tan Hiok Nee) is located at 101 Penang Road (formerly 85 Tank Road or 207 Clemenceau Avenue). It is the only one of the four grand mansions still standing today. The house is also known as *Zizheng Di* 资政第 as Tan was bestowed the rank of *zizheng dafu* 资政大夫 (an official of the second rank) by the Qing government after having contributed generously to starvation relief efforts in Shaanxi Province 陕西省 [27]. His house was built around 1882 to 1885 [39, 40].

Tan Yeok Nee (1827–1902) was born in the Teochew prefecture 潮州府 of China in 1827 and left his hometown for Singapore at an early age. He started off as a cloth peddler and became acquainted with the Temenggong's family who was living at Telok Blangah [1]. The Temenggong's son, Abu Bakar, later became the Sultan of Johor. From the 1840s, the Temenggong sought to expand commercial agriculture in Johor and began issuing *surat sungai* or *concession-granting river documents*. These documents granted

[4] An 1890s photograph showing the main entrance and floor-to-ceiling windows of Seah's house can be found in page 10 of Gretchen Liu's *Singapore: A Pictorial History, 1819–2000*.

the right to "open plantations on a certain river", collect taxes and exercise other functions of government [5]. Tan ventured into Johor in the 1850s and became the largest holder of *surat sungai* by the 1860s [5]. The land was used for the cultivation of pepper and gambier. Tan also became the Chinese Major of Johor and was the biggest opium revenue farmer [5]. In this process, he garnered immense wealth and power. This allowed him to build lavish, traditional-style houses both in his Teochew hometown and in Singapore. *Congxi Gongci* 从熙公祠, Tan's hometown mansion, is famous for its intricate stone carvings. In his old age, he returned to his hometown where he passed away on 21 May 1902 at the age of 75 [1].

Tan's house was acquired by the government during the construction of the Singapore Railway Line between April 1900 and January 1903 [14]. The railway line ran behind Tan's house which was occupied by the manager of the Singapore & Kranji Railway, Mr. W. Tearle, until 1905 [41, 42]. It was subsequently rented out to St. Mary's College, and was home to school-going girls, those employed in business houses, orphans and destitute children up to 1938 [14]. From 1938 to 1942, the house was used as the headquarters of the Salvation Army, a Christian establishment active in social and welfare works. During the Japanese Occupation between February 1942 and September 1945, the Japanese military took over the house for their own use. As it had been badly damaged, the house could not be put to immediate use after the war ended. It was only in 1951 that it once again became the headquarters of the Salvation Army after extensive repairs [27]. In 1991, the Salvation Army moved out and the house was sold and subsequently used for other commercial and educational purposes.

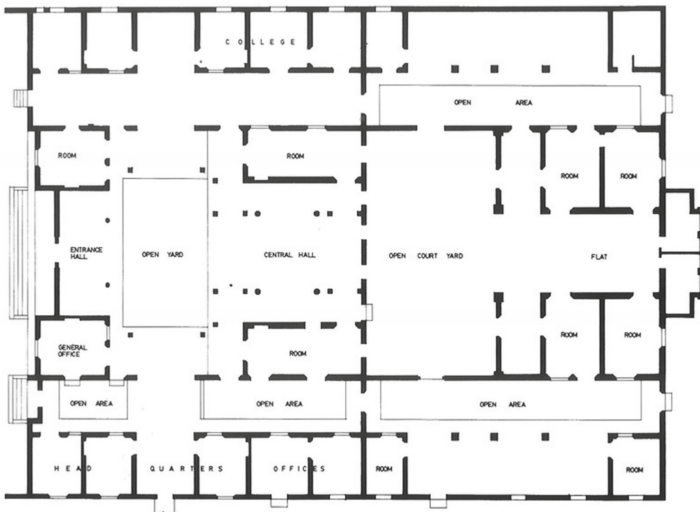

Fig. 7. Plan of Tan Yeok Nee's house. Personal collection.

Like the previous two houses, Tan's house is of a *sidianjin* configuration. It consists of a main building and two side wings separated by a pair of fire alleys. Two sets of side doors adjacent to the main entrance gateway lead directly to the fire alleys. The side

wings were entirely made up of rooms and are connected to the main building by *inverted hull-roofed* 反背船屋顶 linkways. The inverted-hull roof is a distinctive characteristic of Teochew architecture. Its complete absence of a horizontal surface ensures rapid water runoff from the roof (Fig. 7).

Fig. 8. Postcard of St. Mary's Home (c. 1920) shows that its main entrance's front elevation had no window opening to the exterior (public domain).

The entrance and central halls are separated by an internal courtyard, while another bigger courtyard segregates the central and rear halls of the main building. Like other traditional Teochew architecture, the house was an inward-looking one and did not originally have windows opening to the exterior on its main entrance's front elevation (Fig. 8). The present windows were later additions. In the rear hall, louvre casement windows are utilized. A traditional Chinese *tailiang* 抬梁roof truss system is found in the central hall. Each triangular timber framework is made up of three gold-gilded black-lacquered beams, five pumpkin-shape struts and twelve carved components 三載五瓜 十二块. The motifs and color scheme of these components are also distinctively Teochew. In contrast, a Western roofing system is used in the two-story rear hall. The roof ridges throughout the house were ornamented with *qianci*.

In 1906, a building plan was submitted to the Municipal authorities proposing to alter a single story building at the front half of one of the side wings to become a two-story dormitory; the building was originally a single-story one [43]. A Western roof truss system was employed in the new dormitory; interestingly, the gable walls were decorated with traditional Teochew motifs to make it appear stylistically similar to the rest of the house (Figs. 9 and 10). When the Salvation Army took over the house in 1938, a garage was added in front of the house's main entrance [44]. This was later removed. After World War II, extensive reinstatement repairs were carried out from 1948 to 1951 [45]. This round of repairs did not significantly alter the architectural character of the house. The last major restoration took place in 2000. The house was repainted in yellow, which was its color when it became St. Mary's Home [27].

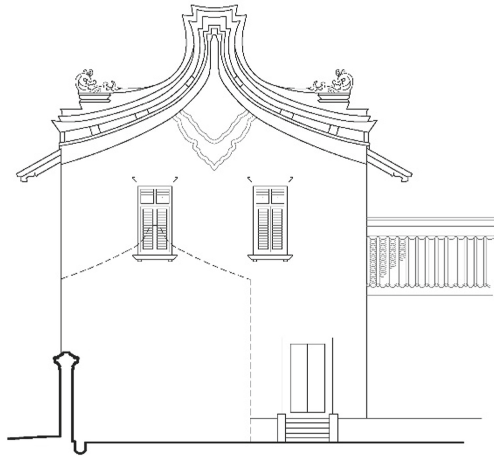

Fig. 9. Side elevation of the newly-altered two-story dormitory in 1906 showing a Teochew-style gable wall. Personal collection.

Fig. 10. Section of the newly-altered two-story dormitory in 1906 showing the use of a Western roof truss system. Personal collection.

3 Other Late Nineteenth-Century Traditional Chinese Houses

The four mansions were not the only traditional Chinese-styled houses in late nineteenth-century Singapore. Other such houses include the house of Goh Sin Koh 吴新科 located off Kallang Road and *Lianyixuan* (涟漪轩; otherwise known as River House) along Clarke Quay. Goh Sin Koh was a businessman in the shipping line trade [39] and *Lianyixuan* was first owned by Lee Ah Hoey 李亚会, Choa Moh Choon 蔡茂春 and Neo Ah Loy [46]. Lee Ah Hoey and Choa Moh Choon were the headmen of Ghee Hok Society 义福公司, a powerful anti-Qing secret society in Singapore [47]. Lee was banished from Singapore and deported back to China in 1887 and again in 1892 for instigating the

1887 attempted murder of William A. Pickering, the first Chinese Protector of Singapore [48–50]. Goh's house was built from 1896 onwards and *Lianyixuan* was constructed sometime between the 1870s and 1883 [46, 51] (Figs. 11 and 12).

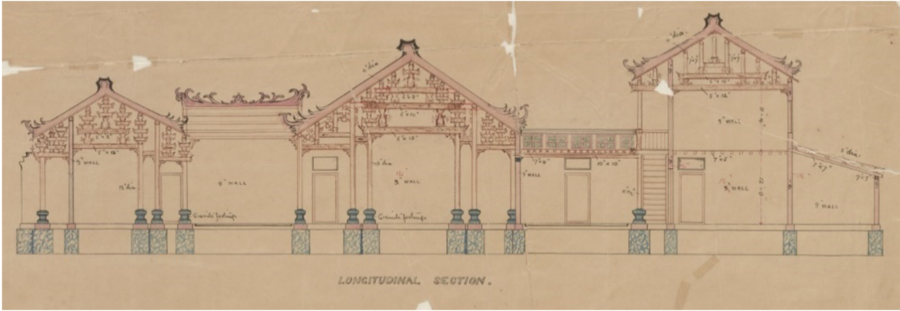

Fig. 11. Longitudinal section of Goh Sin Koh's house showing its *tailiang* roof truss system (Building Control Division, courtesy of National Archives of Singapore).

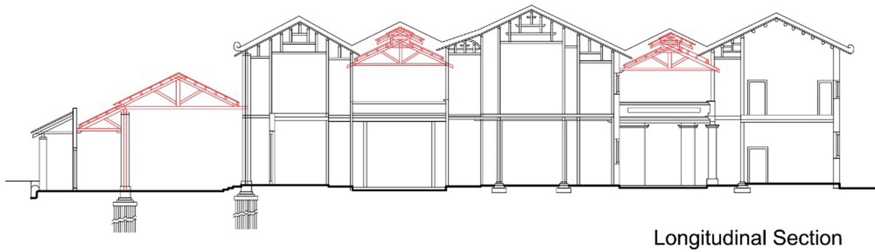

Fig. 12. 1919 Section of *Lianyixuan* showing the original *tailiang* roof truss system and a proposed alteration to cover up the air-wells. Personal collection.

The size of *Lianyixuan*, at 11,058 square feet (1,027.32 m), is slightly smaller than the four grand mansions [52]. With a built-up area of 15,335 square feet (1,424.67 m^2) [51], Goh's house was similar in size or even larger than the four mansions. Goh's house and *Lianyixuan* were architecturally Hokkien and Teochew respectively. In both houses, the traditional Chinese *tailiang* roof truss system was originally used throughout. In the case of *Lianyixuan*, a Western roofing system was only implemented when its air-wells were covered up in 1919 [53]. It seems therefore that both Goh's house and *Lianyixuan* had more traditional Chinese architectural elements than the four grand mansions. Despite being no less ornate, the house of Goh Sin Koh and *Lianyixuan* did not appear to have been known as *dua*^{7} *cu*^{3} or 'grand mansions'.

4 Conclusion

It is clear from the above close examination of historical materials that the four grand mansions, which were viewed as "typical Chinese" by contemporaries, were not necessarily so. While their layout and some architectural and ornamental elements may

be Chinese, techniques and styles from the Western tradition were employed in less publicly-visible parts of the houses. Examples of the latter include the use of Western roof truss systems hidden above ceiling boards, and louvre casement windows in less publicly-noticeable parts. In contrast, publicly-visible segments like the entrance gateways and roof ridges were unmistakably Chinese. This is probably why contemporaries of the four grand mansions perceive them to be "typical Chinese". It seems that the owners of the four houses felt the need to appear Chinese even if they were beginning to have other preferences. This might well be due to their roles as leaders of the local Chinese communities, as well as a need to maintain a distinctive ethnic identity in an environment where colonial categorization of race and ethnicity was highly pronounced.

More Western architectural elements were employed in the houses of Wee Ah Hood and Seah Eu Chin as compared to the houses of Tan Yeok Nee, Goh Sin Koh and *Lianyixuan*. The latter two houses' original architectural forms were entirely Chinese. As we may recall, the houses of Tan Seng Poh, Wee Ah Hood and Seah Eu Chin were built in the 1870s or earlier. In contrast, *Lianyixuan* and the houses of Tan Yeok Nee and Goh Sin Koh were only built in the 1880s and 1890s. The latter group had more Chinese architectural elements.

There are at least two probable reasons for the difference in the degree of incorporation of non-Chinese architectural elements in the houses. The first reason might have been the increase in affluence of the local Chinese communities' leading members over time. Certain non-Chinese architectural features were more economical to build than Chinese ones. An example, as explained above in the case study of Wee Ah Hood's house, is the lesser volume of timber needed in the Western truss system than in Chinese ones. If earlier businessmen were less wealthy, they might prefer more economical construction methods. The second reason, which is more probable given the wealth of the four tycoons, is the availability of skilled craftsmen. During the 1880s, there was a reversal in the Qing imperial government's earlier policy of banning emigrants from leaving China to earn a living. Coupled with the worsening economic situation in China's south-eastern coastal provinces at the time, more skilled craftsmen were probably travelling to Southeast Asia alongside hundreds of thousands of Chinese. This would explain the use of more Chinese architectural elements in Singapore Chinese residences in the 1880s and 1890s as compared to an earlier period.

Given that the house of Goh Sin Koh and *Lianyixuan* were no less elaborate than the four mansions, the latter's ornateness does not appear to be the primary reason for being singled out as *dua*^{7} *cu*^{3} or grand mansions. The size of the houses is likewise not the primary factor even though it might be a secondary one. While *Lianyixuan* is smaller than the four mansions, the house of Goh Sin Koh was of a comparable or even bigger size. It appears that the four houses were singled out as *dua*^{7} *cu*^{3} or grand mansions primarily due to the status of their owners. The four houses belonged to leading Teochew businessmen who were all, incidentally, pepper and gambier traders. From 1836 to the 1890s, "gambier was the most important element of Singapore's local economy" in terms of the number of people it employed [5]. Being at the apex of the gambier economy, the four men's social status stemmed not only from their wealth but also from the significant amount of control they had over the local economy and livelihoods of the population. In addition, these men enjoyed close personal ties with the political elites—the British

colonial masters and Sultans of Johor. Their influence in the local society and even in the region cannot be underestimated.

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