

Research article

Architectural Historical Analysis for the Jasin, Malaysia Colonial Eclectic Shop houses

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Abstract

The town of Jasin in the state of Melaka, Malaysia was once known to be a small agricultural village which later expanded due to the influx of foreigners who were interested in the lucrative trades the village had to offer. Many Chinese and Indian-Muslim immigrants chose to settle down here as most of them found jobs as rubber tappers and tin miners. In the 1920's, rich Chinese and Indian-Muslim tycoons who owned these tin mines and estates started building shop houses along the junction of Jalan Besar, Jalan Kesang and Jalan Chin-Chin. These shop houses portrayed the same kind of architecture elements as they were built within the same decade. The difference was that these buildings each had their own assimilation of local and foreign elements based on the owner's cultural background.

This research discusses on architectural historical analysis perspective intended to introduce to all architecture history lovers to have them learn directly and indirectly on how old buildings work in the past and at present times. The paper is trying to reveal its historical value and is expected to study the architectural elements on the particular building or buildings.

This paper is also trying to introducing and considering some aspects of eclectic architectural image features as well as the tropical sustainable considerations which help to maintain and preserve the city's identity. Although many of these shop houses were passed on to different owners and undergone several renovations to suit with the changing times, the Jasin shop houses remain as ageless pieces of architecture need to be preserved for generations to come to appreciate. **Copyright © AJSSAL, all rights reserved**

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INTRODUCTION

History of Jasin

Once, the town of Jasin used to be a vast agricultural land with a disarray pattern of wooden houses and huts built by the locals stretched all over the area. The locals planted paddy, gambier, tapioca and rubber trees. The Kesang River was used mainly for the transportation of agricultural goods to Melaka town through Melaka Straits coastal link. Many small roads were also built to transport the cargo by bullock carts.

When the British intervened in the late 19th century, they seemed to have separated the town into a few main sections. From the town layout itself, the structure of the town seemed to be divided into 3 precincts which are the administration and government quarters, the commercial area and the residential area. The British built huge colonial buildings for district offices and housing to accommodate the government servants.

With the rising demand for rubber and tin in the early 20th century, Jasin town had lucrative returns for their vast plantation of rubber estates nearby and the opening of a tin mine in Kesang. This brought in many Chinese immigrants who worked in these estates and mines. Locals mentioned that Yap Ah Loy, the famous capitalist in Kuala Lumpur, used to work in the tin mines of Kesang. The road leading from Melaka town to Jasin town is known as Jalan Besar or Main Road. The road then branches out into two that is Jalan Kesang leading to Kesang and Jalan Chin-Chin which leads to Kampung Chin-Chin. As the years go by, these three roads slowly evolves from a simple T-junction into a more radial form from which the Jasin shop houses were built along.



Fig. 1: Aerial view of Jasin Town in the 70's.

The Chinese of Jasin town got richer and some could even rise up to have their own rubber plantation and tin mines. In the early 1920's, many villagers began requesting for housing lots along the junction of Jalan Besar, Jalan Kesang and Jalan Chin-Chin. These lots were obtained to build shop houses which were similar to the ones in Melaka town except the Melaka shop houses were centuries older. Rich Indian-Muslims from India too obtained these lots to build their own eclectic brand of shop houses and many of them worked as *Chettiars* or money-lenders. When the Japanese came in 1941, many occupants flee the town in fear but many returned a few years later when everything was calm again. The elders of the town still remember how harshly the Japanese had treated the villagers. The Japanese took over the administrative buildings the British had built and added a few offices of their own. They had a courthouse where traitors that helped the communists

were judged and were brought for execution nearby. However, some villagers were trusted enough to work with the Japanese. Many of the townsfolk returned after the Japanese occupation and life took off again where it had ended last time.



Fig. 2: Photograph of one of Jasin Town's building in the 70's (left).



Fig. 3: Photograph of part of Jasin Town as we know today (right).

Today, some shop houses still accommodate the following generations of the first shop house owners although many had already changed hands. There weren't many new trades as the old ones still exist and are doing well like tailoring, frame-making, grocery and coffee-shops. However, the generation of *Chettiars* ended when the Japanese came but a few remained especially along Jalan Besar but had different trades. As the shop houses were built in the 1920's right up to the late

20's and all have a 99-year lease agreement, these buildings will have to be given-up to the government when it reach the year 2020. It will then be listed under the heritage list and will have to be conserved.

INITIAL DISCUSSION ON MALAYSIAN SHOP HOUSES CONCEPT

The definition of a shop house according to Chen Voon Fee's *Encyclopedia of Malaysian Architecture* is 'a two-storey urban house with a ground floor shop open to the road and living quarters upstairs'. In many cases in Malaysia though, the term 'shop house' may mean the same except that the whole shop house is simply residential; like a townhouse; is to the Europeans. Throughout the country, the era of each architectural brand of heritage shop houses is divided into 4 categories in the following order which is the Early Shop house Style, First Transitional Style, Late Transitional Style and Art Deco.



Fig. 4: Front elevation of the Early Shop house Style found in Jasin.

Early Shop house Style

The Early Shop house Style is a category of shop houses built in the 18th century. One of the earliest buildings is found situated near the Melaka River which was once dwelled by Chinese immigrants from China. These shop houses had a low and squat elevation and featured the typical one or two windows on the upper floor. The windows on the upper floor are the rail and stile windows built out of wooden planks seen commonly in China. Some windows may even have local influences with louvered windows similar to that of a Malay house which suits the tropical heat in Malaysia.

As for the lower floor allocated for business; i.e. the spice and rubber trades are conducted, openings had to be wide and large to bring in and store the goods and a side door that leads to the living quarters within. These openings consist mainly of callous planks placed vertically and are taken apart individually.



Fig. 5: Photograph of the five-foot-way used to display goods by the shop owners. The shop opens and placed back in at night and secured with a horizontal bar as found here at Jasin town.

The plan of the shop house is usually long as the Dutch calculated land taxes by width, not by length and many took advantage of the system by stretching the houses way to the back while retaining a small width of around 6 to 7 meters. Another reason the shop house is so narrow is because the materials used to construct the buildings are limited to hardwood for the floor joists to maximize the span up to certain length. Air wells were created within the length of the buildings to ventilate the whole stretch. Another highlight of the shop house is the five-foot-way created in front of the entrance that connects each shop house with another. Goods were displayed along the full width, leaving only a narrow central aisle. The gable walls of the shop house were shaped mostly in the style of '*partial cat crawling*', an influence brought in from China. Walls were built out of terracotta clay bricks with lime-wash over plaster.

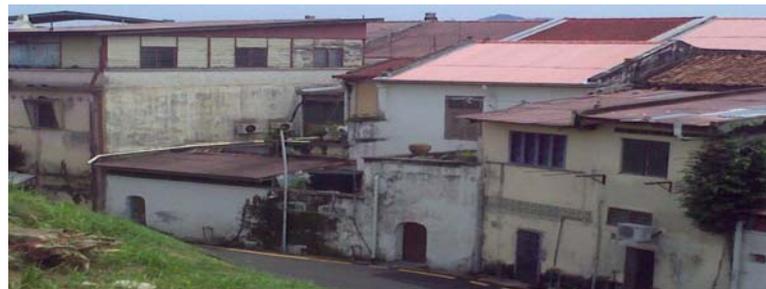


Fig. 6: Photograph of the party wall with *partial cat crawling* gable wall.

Beams, roof and floor joists were of hardwood and floors were laid with red terracotta tiles. Ironmongery was used in small details like door hinges and clasps as the Dutch utilized the material in their big and bulky buildings.

As most of the shop houses in Jasin Town were built in the 1920's, the Early Shop houses somehow still can be found in the town. Although the layout and the five-foot-way concept bear similarities to the mentioned style, the proportion of the buildings differs in height and elevation treatment.



Fig. 7: Front elevation of the First Transitional Shop house Style shown in this 70s photo (right).

First Transitional Shop house Style

The First Transitional Shop houses emerged in the 19th century when shop owners grew richer by their trades and wanted to invest more in the architecture of their homes as a symbol of their wealth. And so, the traditional early shop houses evolved from a low and squat elevation to that of a more vertical proportion and much care was taken to the detailing of the façade.

Windows especially the ones on the upper storey take up a more dominant form. They appear to have more than just full-length double-leaf shutter windows and had decorative elements like fan-shaped transoms above the lintel or merely decorative art-work bas-reliefs surrounding the windows. The shop owners were much attracted to the stylistic interpretations of European architecture and had assimilated many foreign elements with their own. Thus, such brand of shop house is also known as Neoclassical, Palladian, Chinese Baroque or Straits Eclectic.



Fig. 8: Façade of a townhouse in Heeren Street, Melaka City.

One interesting example taken from this particular era is the surfacing of the Straits-Chinese townhouse found in Melaka, Penang and Singapore. The rich Straits-born Chinese or more commonly known as the *peranakan* people built townhouses to house their families and probably had shop houses nearby to accommodate their cargo or merchandise. These townhouses are passed on from generation to generation till today. The *peranakans* were proud of their European education and had adopted many of the Composite order of architecture. Such elements can be seen at their Corinthian, Doric or Ionic columns as well as their decorative bas-reliefs. Even their furniture was imported from Holland or England.

However, local elements were incorporated with the construction of the townhouses. The entrance door or better known as *pintu besar* are huge molded double-leaf doors stained in black or red bearing Chinese characters carved in gold which is believed to bring prosperity and luck to the occupants of the house. Usually, a smaller swing-gate or *pintu pagar* is placed outside the main doors which are useful when the main door is left opened to let in air and sunlight into the entrance hall and the swing-gate provides partial screening. Two large casement windows flank symmetrically on both sides of the door and are similar in design with the *pintu besar* but have additional iron bars for security when the leafs are left open.

The house is laid out on a longitude axis, and is divided into a number of sections. A visitor is first greeted in the reception hall which is where the main altar is located too. The next room would be the sitting room where family members relax and socialize. The kitchen, dining area and the bathrooms are all placed at the other end of the building and one or two courtyards within the building (depending on the length of the townhouse) help admit light and air. Bedrooms are all placed on the first floor with the main bedroom being right above the main entrance.

Where ornamentation is concern, the *peranakan* do not hold back. Intricate bas-reliefs and carved wooden panels coated in gold adorn the walls, windows and doors of the townhouse, depicting characters and figurines that are symbolic to the Chinese. Imported glazed tiles, glazed plaster moldings and floral

plasterwork on pilasters and columns found on the façade are simply the representation of the owner's wealth. Sometimes, a rich merchant may build two to three townhouses in a row to house their family and extended family. Such townhouses can be seen similar in design but the owner's main townhouse being more generously decorated than the others. The First Transitional shop houses are a far cry from the plain early shop houses in the 18th century.



Fig. 9: Front elevation of the Late Transitional Shop house Style in Jasin.

Late Transitional Shop house Style

The Late Transitional shop house became apparent in the late 19th century and the early 1900's. This particular shop house design is more of a carry forward style from the First Transitional shop house but some had increase in levels. Rich merchants built shop houses up to three storeys' high to house their wares and to accommodate their family members.

The layout of the shop house is similar to the other two styles with a longitude plan and courtyards in between to light up and to ventilate the building. Most of the shop houses have an additional storey to its height probably to house a larger family or sometimes, rooms are known to be rented out and can accommodate up to 7 to 8 families at a time. High end gable walls also take up more unique patterns besides '*partial cat crawling*' like '*five peaks adoring heaven*', '*cat crawling*', '*ear of the cooking pan*', and so on. Many of the shop houses' roofs now spot jack roofs for ventilation and penetration of light into upper storey.



Fig. 10: Photograph of the shop houses in Armenian Street, Penang – north part of Malay peninsula (right).

As for the façade, new classical and baroque elements are found on the front elevation and the use of Grecian pediments, parapet walls with balustrades, classical columns, ornate window frames and stucco European designs of wreaths, festoons and swags embellish lavishly. This gave the Late Transitional shop house the look of power, grace and grandeur the owner wishes to symbolize for his household.

A good example of Late Transitional shop houses can be found along Jalan Tun Perak and Jalan Sultan in Kuala Lumpur as well as in Jasin Town itself. Some shop houses or townhouses built in this era like the ones in Armenian Street, Penang and Emerald Hill, Singapore which still have a small amount off land before the road have shared brick fences around the perimeter of their garden.



Fig. 11: Front elevation of the Art Deco Shop house Style in Jasin's Jalan Kesang.

Art Deco Shop house Style

The Art Deco period during the 1930's saw the streamlining of classical motifs such as column orders, the arch, keystones, parapet walls and pediments into a more geometric design. The Art Deco style concentrates on the proportional beauty and the transformation from the Late Transitional period to the 1930's displayed huge differences façade wise.

Even though the layout of the shop house is the same, gone are the lavish embellishments of ornamental elements especially on the façade. Probably the most out-standing attribute of the Art Deco building is the parapet wall. Whilst the Late Transitional shop house had balustrades with decorative festoons, the Art Deco shop house adopted a much simpler motif with a staggered parapet wall with its peak at the center. At the peak, the shop house spots a high metal rod which looks like a lightning rod. Flat overhangs above the windows on the upper storey usually enhance the horizontality of the building. Almost every Art Deco shop house around Malaysia had the date of its erection written on the parapet wall in the form of plaster bas-relief.



Fig. 12: Photograph of the shop houses in Alor Gajah, another major city in the state of Melaka.

One of the most prominent sites of Art Deco shop houses can be found in nearby Alor Gajah Town of Melaka. In Jasin Town itself, an old theatre situated among the shop houses seems to be the most prominent example of Art Deco buildings within the area.

BUILDING ANALYSIS

There are at least 88 units of pre-war shop houses that were built in the 1920's as written on the facades of these buildings along Jalan Besar, Jalan Kesang and Jalan Chin-Chin. As these shop houses were built at the same era, they are summed up to be of Late Transitional Shop house style. The eclecticism of the elements found on the facades of these buildings proof a unique blend of European, Chinese, Indian and Malay architecture.

Three unique shop houses have been chosen for topical research from the lot which best portray the architectural style of Jasin shop houses. The following are the chosen shop houses: i) No. 16, Jalan Besar ii) No. 5, Jalan Besar and iii) No. 26-27, Jalan Kesang.



Fig. 13 : Photograph of No. 16 and its neighbors.

Building Background

No. 16, Jalan Besar (Main Road)

No. 16, Jalan Besar was built in 1927 along with the few lots next to it by an Indian-Muslim who came from India. Not much history is known about this building as the shop houses had been changing ownership and rented out to many but it was believed to be originally the shops of Chettiars or better known as Indian-Muslim money-lenders. As a matter of fact, Jalan Besar had the most Indian-Muslim community then but many had left the vicinity when the Japanese arrived in 1941. Only a few Indian-Muslim families stayed behind and the generation of money-lenders has waned to a few as the rest found profit in other trades.

No. 16 is now the possession of a Chinese coffee shop owner, who wishes his name withheld, while he and his family reside on the floor above. The coffee shop was passed down to him by his father and it has been operating for up to 30 years now.



Fig. 14: Photograph of No. 16 shop as what used to be a coffee shop. Now it's a hardware store.

This coffee shop seems to be the social and relief center for old-timers who love lounging there in the evenings while exchanging news and gossips.



Fig.15: Photograph of No. 4, 5 and 6, Jalan Besar (right).

No. 5, Jalan Besar

No. 5, Jalan Besar is probably the only townhouse found around this area. The abode resembles that of a *peranakan* townhouse except it houses a pure Chinese family. No. 4, 5 and 6 was built in 1926 by a rich rubber estate merchant named Gan Lap to house his family members and extended family members. However, according to his grandson, who declines to be named, those three shop houses did not belong to any of the family members but to Gan Lap's rubber estate company, Kan Seng Company. The main house where Gan Lap's generation have been staying till now is No. 5, the obvious being that it is the grandest shop house among the three and No. 4 was probably used as a warehouse for his rubber material. No. 6 accommodated his brother, Gan Long Lian's family and his generation too, still resides there.

The Gan family was one of the most influential families around Jasin town as they were very rich because of the rubber boom in the 1920's. Gan Lap contributed a lot for the town like building a community park and schools. Today, you may find many of his family members residing in shop houses all over the town.



Fig. 16: Photograph of No. 23-27, Jalan Kesang.

No. 26-27, Jalan Kesang

No. 23-27, Jalan Kesang was one of the later buildings constructed in that town as it was built in 1927. Like No. 16, Jalan Besar, the whole stretch of shop houses was built by Indian-Muslims and was used by *Chettiars*. Many people wanted to buy those shop houses lot-by-lot but the Indian-Muslim owner wanted to sell the whole building at once as they wanted to go back to his hometown in India before the Japanese came.

The Malacca Omnibus Service; M.O.S., bought over the building in the 1930's and that building was used as the main office and bus terminal to Melaka town. When the bus company shifted out, the building was sold to various owners by individual lots. The shop houses picked for this research among the row are No.26-27 as they now belonged to the K'ueng Chew Association and went through several renovations.

BUILDING LAYOUT

No. 16, Jalan Besar

The layout of No. 16 is rather unusual compared to No. 5 and No. 26-27. From the five-foot way, it may seem like the whole building is straight right to the back but in reality, the party walls of the shop house were built at the angle to the five-foot-way. Maybe this happened because of the odd twist of the row of shop houses as the main road radiates from the roundabout and the land lots were divided as such.

The shop house is roughly 26 metres long and 6 meters wide because the timber floor joists can only span so much. The front portion of the ground floor is used for the coffee shop where old marble round tables are laid. The inner portion of the house is the living quarters of the coffee-shop owner and his family. A single flight of stairs leads to living room and bedrooms upstairs.



Fig. 17: Shop house at No. 16, Jalan Besar seen from about 100 meters away.

There are two air wells within the shop house. The first one light up and ventilates the middle section of the building and the windows of the master bedroom and middle bedroom open out to it at the upper storey. Currently, this air well is also used by the owner as a wet kitchenette. The second air well is placed behind the shop house where the back entrance is and it ventilates the kitchen, bathroom and toilets. On the first floor, a balcony overlooks the air well and the back

lane of the shop house. Usually, the master bedroom of the shop house takes up the whole front portion of the upper storey but in this case, the bedroom had been made to 1/3 the size and the living room replaces the other 2/3 and overlooks the main road.

The shop house seems to be broken into three main segments and each segment is secured by doors on either side. This enables the owner to close up any section when the particular portion is not in use. The length of the shop house proves a disadvantage to the owner, as he may not know if intruders broke into the front portion while he is at the back or upstairs. Even the top of the stairs is secured with a timber swing door that closes at night when the owner and his family retire to the bedrooms upstairs.

No. 5, Jalan Besar

The layout of No. 5, Jalan Besar is close to the layout of a typical *peranakan* home in Melaka town except many rooms is cut short due to its smaller length compared to the Melaka townhouse. However, its entrance statement is the same where visitors are greeted in the reception hall where black wood furniture inlaid with mother-of-pearl and marble are placed. An intricately carved timber partition with two openings on both ends separates the deity hall or the *tiah gelap* with the reception hall. The living quarters of the townhouse at the back and upstairs are the same as No. 16 except that the living room is now where the reception hall is and the master bedroom dominates the whole front portion of the upper storey. However, the master bedroom does not overlook the air well but is separated by a small family social area. One flight of stairs leads to the first floor but is not spiral like the *peranakan* townhouse.

There are also two air wells within the shop house. The first one being directly after the deity hall which brings light and air into the dining hall as well as the middle bedroom and family social area upstairs. It has a little water tank store water for washing. The second air well is also placed at the back where the kitchen and toilets are and the upstairs balcony looks into it. There is also a bathroom on the balcony which is ventilated via a chimney like structure.

Like No. 16, the townhouse is also divided into three segments, as the length and width of the townhouse are almost the same. However, there is an extra door through the party wall to No. 4 on both levels for the shop house too belongs to him who accommodates his relatives and the ground floor was probably used as a warehouse for his rubber. Not much renovation was done on the building except for the installation of new tiles for the kitchen and toilets and a zinc roof was placed above the balcony to shield it from the rain.



Fig. 18: Detail photograph of the original air well in No. 5, Jalan Besar.



Fig. 19: Photograph of the balcony at the back of the shop house of No.5.

No. 26-27, Jalan Kesang

The reason No. 26 and No. 27 was chosen together for the study is that the two shop houses had a slightly different planning from each other and the plans of the 2 lots replicate alternately for the next few shop houses under the same building. Another reason why is because both shop houses are joined under the K'ueg Chew Association and the walls that separated the two were broken down on both storey's and the timber floor joists were replaced with concrete and held up by columns.

From the front, No.26 has two entrances where the main entrance leads into the ground floor and the other are a flight of stairs leading to the first storey while No. 27 has only one main entrance and its single flight of stairs is within the building itself. The reason for these differences is probably the ground floor of No. 26 was merely meant for retail or storage while the living quarters are upstairs and occupants may go up freely to their quarters without having to go through the shop itself. No. 27, like No. 16 and No. 5 was meant more for retail in front and living quarters at the back as well as upstairs.

A larger hall was made in front on the ground floor by combining the front portion of both shop houses. This hall is used by the association for social gatherings such as association meetings, karaoke competitions and games. The rest of the ground floor rooms seem vacant that suggests no particular activity except when there are social gatherings. However, a deity hall is placed at the back portion of No. 27 in a temple like structure where Buddhists may pray and worship.

Members of the association seem to frequent the upper floor as there is a mahjong room at the front section of No. 26 and a boardroom at No. 27. The back portion is mostly unused except for the toilet built on the balcony. You can even here the clicking of mahjong chips and the happy hoots of the association members from the main road.



Fig. 20: Close-up photograph of the air well as it's is today within the No.5 shop house (left).

There is only one air well within No. 26 and 27. It is bigger than the other shop houses because it consists of the combination of both shop houses' air wells. Formerly, there were also air wells at the back portion of the buildings but No. 26's balcony was extended over its air well and the back section of No. 27 was demolished and renovated into a deity hall.



Fig. 21: Photograph of the façade of No. 16, Jalan Besar and its neighbors (left).

FACADE TREATMENT

No. 16, Jalan Besar

The whole façade of No. 16 is relatively plain compared to shop houses in Melaka town except for its breath-taking parapet wall. The building is two storey's high (approximately 10 metres) and has two bays. The first floor, that is where the living room is, sits on top of two rectangular columns with Doric capital and a plain entablature, creating the five-foot-way beneath it.. Three pilasters with the same design frame the upper storey windows.

The entrance to the coffee shop on the ground floor is secured by metal folding doors but the original door of the shop is believed to be that of vertical timber planks that were removed and replaced individually side-by-side and secured by a horizontal bar. Above these doors were timber lattice screens that stretched across the entrance to help ventilate the shop when the doors were closed but it is now replaced by wire mesh.



Fig. 22: Casement windows on the first floor façade of No. 16.

The double-leaf casement windows on the upper level appear full length with two panels. The window leaf has shutters for its top panel and a solid panel underneath. The shutters are connected with a vertical timber bar that opens and closes the shutters. As the window is full-length, it is secured by timber railing with floral patterns similar to that of the Malay house. Above the lintel are rectangular jalousies but its original form was an arched transom. Above the windows, stretched across the upper storey, is a corrugated metal overhang with a timber fascia board and held up by iron-cast rods. This prevents rain from splashing onto the first floor when the full-length windows are left open.

The parapet wall gives an illusion of a flat roof but in reality, the height covers the gable roof. The parapet wall extends across No. 16 and its neighbours and is probably the most spectacular parapet wall among all the shop-houses found in Jasin.



Fig. 23: Photograph of the first floor's timber floor on No. 16, Jalan Besar (left).



Fig. 24: Picture of the El Escorial in Madrid, Spain (right).

The wall consists of intricately carved plaster motifs, sculptures and bas-reliefs and glazed green ceramic balustrades. The motifs and sculptures on the parapet wall suggest that it had influences from British-India which gave the first clue of the owner being from India. Figurines of horses and lions symbolize the courage and integrity of the British while the ogee-arched motifs and onion-shaped domes are similar to the character of Indian-Muslim architecture. In the middle of the wall is the inscription of the year the shop house was completed as well as the initials *A.A.L.R.M.* which could be the initials of the owner or his company. Perhaps a fine example of parapet wall could be seen on the El Escorial in Madrid built in 1562 that reflects Renaissance Classicism.



Fig. 25: Photograph of the façade of No. 5, Jalan Besar.

No. 5, Jalan Besar

The façade of No. 16 is an archetypal façade of the *peranakan* or Straits-born Chinese townhouse. The townhouse is two-storey's high and consists of two bays. The upper storey, where the master bedroom is, is held up by two rectangular columns on both sides with Doric capitals. The pilasters that sit on top of these columns and entablature are Pseudo-Corinthian with floral motifs.

The entrance statement of No. 16 consists of one main door and two windows flanking on both sides of the door. The main door, or better known as *pintu besar* by the locals, consists of large double-leaf six-paneled doors made out of polished hardwood stained in black. Chinese calligraphy gilded in gold was inscribed on the door and arranged vertically on both upper panels of the door. It is unknown whether the entrance once had a swing gate or *pintu pagar* but the outer layer now consists of collapsible iron gates for security when the *pintu besar* is left open for ventilation.



Fig. 26: Photograph of the main entrance of the townhouse (right).

The casement windows on the ground floor comprises of three layers. The innermost shutter is made out of timber frames carved in typical Chinese octagon motifs and glass for transparency. The second layer is secured with vertical iron grill bars when the shutters are left open. The outermost shutter consists of double-leaf timber panel shutters stained in black. Like the main door, the top panels were inscribed with Chinese characters in gold. Above these openings are glazed plaster moldings of scrolls bearing Chinese characters and paintings of mystical animals like swallows and carps that are symbolic to the Chinese and believed to bring luck and prosperity to the household. Above the main door is a glaze plaster bas-relief of the *Jee Hoe* which tells us the province in China from where the owner's ancestors originated. The piece of wall between the floor and the windows are covered with glazed ceramic tiles with bamboo and lotus motifs.



Fig. 27: Photograph of the ornamentation on the walls of the main entrance from the five-foot-way.

The façade on the first floor is by far plainer the ground floor. Like No. 16, the two casement windows are also full-length but the double-leaf shutters consist of 6 panels. The middle panel has horizontal shutters controlled by a vertical timber bar to let air and light into the room. The top and bottom panels are solid timber planks. The ventilator above the window lintel has a better jalousie design compared to No. 16 and plaster bas-reliefs of floral motifs frame these openings. Intricately carved timber railings prevent occupants from falling over. The date of erection is inscribed between the windows and painted in red.

The townhouse has no parapet wall to hide its gable roof and the roof overhangs slightly with its gutter fastened at the end. Rainwater is transferred from the gutter to the pipes running down the columns and pilasters on both sides.



Fig. 28: Photograph of the façade of No. 26, Jalan Kesang (right/see arrow).

No. 26-27, Jalan Kesang

No. 26 and No. 27 can be summarized as the combination of both No. 16 and No. 5, Jalan Besar but in a plainer context. The two shop houses are also two-storey high with two bay modules. The upper storey above the five-foot-way was built on top of rectangular columns with Doric capitals while pilasters with the similar design separate the windows on the first floor.

The doors on the ground floor façade of No. 26 differ from No. 27. The shop house has two doors. The wider door and the side door that leads to the stairs, consist of collapsible metal doors. The original doors were made out of timber planks and the wire mesh vents above these doors were once wooden lattice screens as suggested for No. 16. The entry of No. 27, however, is similar to the design of No. 5 which comprises of one main door and two casement windows on both sides of the door. The openings are simpler in design. The main door or *pintu besar* is a double-leaf six-panel door made out of hardwood and painted in red.



Fig. 29: Photograph of the façade of No. 27, Jalan Kesang.

A smaller swing gate was fixed outside the main door and an added collapsible iron grill gate on the outmost layer secures the entry when the main doors are left open for ventilation. The windows are double-leaf 4-panel shutters but both leafs are joined by hinges and hung on one side of the window. Vertical iron grill bars provide security when the shutters are open. Formerly, above the lintel, were ventilators but in replace are square cuts of stain glass. A huge and heavy timber panel with the association's name inscribed in gold is placed on top of the main doors and the association's mottos written on timber panels too are hung on both sides of the door.

The façade of the first floor has been renovated from its original form to suit present times. The façade was believed to bear resemblance to the façade treatment of No. 16. The two bay windows are now glass casement windows with small rectangular ventilator holes above them which are similar to the 70's design. Like No. 16, corrugated metal overhang with timber fascia board held up by iron-cast rods prevent rain and sunlight from penetrating directly into the first floor.



Fig. 30: Photograph of the parapet wall found on No. 26-27, Jalan Kesang (left).

The design of the parapet wall above the whole stretch of No. 23 until No. 27 is similar No. 16's building except it is simplified and has more Indian-Muslim motifs than European. The most obvious European influence is probably seen on the green glazed ceramic balustrades and the design of the pediment-like structures above the balustrades. The floral bas-reliefs and the pointed dome-like sculptures are more similar to the character of Indian-Muslim art. The date of the buildings completion was is emblazoned on the central pediment above No. 25.



Fig. 31: Photograph of the hardwood floor joists crossing the span of the party walls at the walkway of No.26.

CONSTRUCTION AND MATERIALS

All four shop houses were built on shallow strip foundation that runs along the party walls. Main walls and columns were constructed using standard British baked-clay bricks which were laid in a running bond. As cement wasn't available during that era, lime plaster was used to coat over these bricks. Lime plaster is more porous than today's plastered and actually helped the walls to 'breathe'.

Hardwood floor joists were made out of local timber and rests across the span of the party walls. The joists are exposed to the ground floor and are repeated all along the party wall right to the back of the shop house. The dimensions of the floor joists are roughly 5cm x 10cm and can span up to 7 meters across the party walls. Floor joists are laid close to one another and flat timber planks were nailed across these joists as flooring. Staircase leading up to the first floor was constructed out of timber too and a timber plank door hung at the top of the stairs is used to shut the first floor from the ground floor.



Fig. 32: Photograph of the roof and chimney found on No. 5, Jalan Besar.

Voids were created within the shop houses as air wells to let natural sunlight and air into the buildings. Bedroom walls on the upper storey are mostly made out of timber planks with timber lattice vents stretching along the top of the walls to ventilate the rooms. A bathroom is constructed on the balcony at the back and ventilated by means of small vents and No. 16 had a little brick chimney for the function.

The roof beams of the shop house, like the floor joists, span across the party walls and along the gable walls at a 22° to 25° slope. Some roofs have an additional jack roof to ventilate the upper storey. Baked clay shingles are laid across the roof in a ridge and furrow pattern but nowadays, these shingles are replaced by corrugated metal sheets. Baked clay shingles do not absorb as much heat as metal roofing and is much cooler for the occupant within.

As for ground floor material, most of the floors of the shop houses are cement-rendered now or inlaid with modern ceramic tiles. No. 5 had its original floor retained till now which are granite floor slabs laid with imported European ceramic tiles especially at the reception hall and the five- foot way. The back portion, however, have changed to cement rendered floor but its original floor was believed to be red late rite tiles.



Fig. 33: Photograph of the European ceramic tiles used on the floors of No. 5, Jalan Besar.

All doors and windows in its original form was made out of timber and constructed using the tongue and groove method. Shutters enabled air and light to penetrate into the building.



Fig. 34: Shop house in Emerald Hill, Singapore (right).

CONCLUSION

The shop houses of Jasin town are unique both in urban planning because of its radial formation and in the architectural approach. These buildings symbolize the start of a modern town during the rubber boom in the early 1920's and were the pride of Chinese and Indian-Muslim merchants.

It is amazing how the originality of the shop houses in the architectural aspect still remains although minor renovations were made to suit present times. It is important to know that these shop houses, although modern technology has made construction and living more comfortable and aesthetic, can be used for adaptive reuse by injecting new trades or new forms of living without having to disturb the structure and the outlook of the shop house. Such effort can be seen in some of the shop houses in Heeren Street in Melaka; Georgetown in Penang and Emerald Hill in Singapore where the interior of the shop house had been designed for upbeat economy and modern living lifestyle whilst still remaining the original façade and main structures.

Today, many efforts have been carried out by the Heritage of Malaysia Trust as well as PERZIM (Melaka Museum Board) to conserve heritage buildings and to prevent any further damage from happening unto these magnificent structures but it cannot be done without the support of the community to preserve the architectural Heritage of Malaysia for generations to come.

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REFERENCES

- [1] Arbi, E. Talib, R. Brief history of the development of the Malay towns. Presented at PERZIM Melaka Malay Architectural Workshop, 2001
- [2] Eberhard, Wolfram. A Dictionary of Chinese Symbols: Hidden Symbols in Chinese Life and Thought. New York: Routledge, 1986
- [3] Edwards, Norman. The Singapore House and Residential Life (1819-1939). London: Oxford U Press, 1990
- [4] Gurstein, Penny. Malaysian Architectural Heritage Survey: A Handbook. Kuala Lumpur: Badan Warisan Malaysia, 1990
- [5] Kohl, David G. Chinese Architecture in the Straits Settlement and Western Malaya: Temples, Kongsis and Houses. Kuala Lumpur: Heinemann Asia, 1984
- [6] Kok Yow, Lim. The Architectural Heritage of Kuala Lumpur Conservation and Adaptive Reuse of Historic Building. Kuala Lumpur: School of Architectural Engineering, Federal College of Technology, 1989
- [7] Malacca, Straits of Enchantment. Kuala Lumpur: Olympia Land Berhad, 1997

[8] Rural Board of Jasin (1910, 1912-1932, 1935-1937). Kuala Lumpur: National Archives

[9] Talib, R. What can we learn from the British Colonial Public Building?. Presented at Univ. of Calif. Berkeley's IASTE, American Univ of Sharjah, UAE, 2004

[10] Talib, R. Modern housing with traditional local values in Malaysia new city. Presented at IMCL conference on European Squares, Alpbach, Austria, 2002

[11] Voon Fee, Chen. Encyclopedia of Malaysian Architecture. Kuala Lumpur, Archipelago Press, 1998

[12] Yeang, Ken. The Architecture of Malaysia. Amsterdam: The Pepin Press, 1992