

# THE HISTORY AND TRANSFORMATION OF PERAK MALAY TRADITIONAL HOUSE

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## ABSTRACT

*Apart from shelter, traditional houses were built to accommodate the spiritual factors such as religious, cultural values and way of life. Thus, it tends to evolve over time to reflect the environmental, cultural, technological and historical context in which it exists. This paper discusses the development of architectural style on the Malay traditional houses in Perak. It is based on data collectively gathered from KUTAI researchers conducted since 1997. More than 400 houses were observed. Architectural transformation found in the roof design, spatial organization, architectural elements and decorative elements within the period of 150 years. Findings of this study strengthening and establish the Perak Malay architectural style.*

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**Keywords:** *Perak, Traditional Architecture, Malay, Vernacular Architecture, Kutai*



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## **INTRODUCTION**

Geographically Perak is a state in the west coast of Malaysia Peninsula. With a total land area of 20,976 square kilometres (8,099 sq mi) Perak is the fourth largest in Malaysia. Dividing the state in the middle is Sungai Perak, the main river basin which flows along approximately 400km from the mountainous North Eastern part of the state of Perak or Hulu Perak until a place called Beting Beras Basah in Bagan Datuk before meeting the Straits of Malacca. The other principal rivers are the Sungai Krian and Sungai Bernam which form the northern and southern boundaries of the state. For hundreds of years Sungai Perak has been the seat of the traditional Malays of Perak. The river plays a prominent part as the main ‘highway’ during its heyday, it is seen as the economic, social and political seat of the Perak royals. Sungai Perak also forms the heart of the transportation and communication for the people of Perak particularly during the pre-merdeka or before the independent. The present Perak sultanate still embrace the lineage of the Malay sultanate since the Malacca Empire. The royal chapter, colonisation era, the pre-independent period, among others are the spine that form the history of Perak. The Royal town of Kuala Kangsar is situated here whilst along the river there are traditional Malay villages, vernacular houses, mosques, old fort and royal tombs that hold many mysteries on its long socio-cultural and economic history of the traditional Perak Malays. The elongated historical background and the existence of various types of building and architecture particularly along the riverbank of Sungai Perak indicates the richness of data that can be explored for architectural study.

This paper attempts to discuss the traditional architecture development of the Malay house in Perak. Historical, ethnography and cultural domain, become the main basis of the research and discussion in this study.

## **LITERATURE REVIEW**

Generally, Perak Architecture can be divided into three categories:

- i. Traditional architecture
- ii. Colonial architecture
- iii. Modern architecture

The traditional Malay architecture found along the riverbanks of Sungai Perak is mostly in the form of old Malay palaces, traditional houses and mosques. Colonial architecture buildings are mostly located in towns developed by the British such as Ipoh, Taiping, Batu Gajah and small towns such as Papan, Pusing, Gopeng that related to tin mining industry. Also, several towns along Sungai Perak such as Kuala Kangsar, Manong, Parit, Bota, Pasir Salak, Kampung Gajah and Teluk Intan where many houses, shop houses, schools, offices, rest houses, mosques and hospital still stand and in use to this day. The Modern architecture buildings mostly was built in the 1950s and post-independent era. A typological study on the Malay traditional architecture of Perak established at least two main categories or architectural styles namely:

- i. Rumah Kutai (RK)
- ii. Rumah Limas Bumbung Perak (RLBP)

### Rumah Kutai (RK)

Rumah Kutai is the residential architectural design which was built, before the 1900. In Perak. “Kutai” means old or ancient. Architecturally, Rumah Kutai can be referred as traditional Perak Malay house in which the house is defined by Rumah Ibu (the main house) using Bumbung Panjang (gale end roof) or Bumbung Melayu (Malay roof). Table 1 shows the summary of characteristics of Rumah Kutai from previous studies including from Gibbs (1987), Lim (1987), Halim Nasir (1988), Halim Nasir and Wan Hashim (1997), Anuar Talib (2004), Norhasandi Mat (2010), Sabrizaa Rashid (1997; 2005; 2017). Baharuddin et. al. (2019)

**Table 1. The characteristics of Rumah Kutai (RK)**

Categories (typology)	Spatial organisation	Architectural Elements & Materials	Construction technology	Decorative elements
Rumah Kutai Asli (KA)	•Rumah Ibu (The main house)	•Roof -slight curve Long roof -nipah	•Stilts approx. 2m height from ground to floor	•Tebar layer •Lebah bergantung
Rumah Kutai Beranjung (KB)	•Rumah Anjung (The front house)	•Window -tingkap jenguk -tingkap labuh	•Full stilt Tiang penuh •Half stilt Tiang gantung	•Selak Cantik/ •Alas Bendul •Lubang angin

Rumah Kutai Anjung Beranda (KAB)	<ul style="list-style-type: none"> <li>•Rumah Tengah or Rumah Selang (The middle house)</li> <li>•Rumah Dapur (kitchen annex)</li> </ul>	<ul style="list-style-type: none"> <li>•Wall</li> <li>-timber</li> <li>-tepas</li> <li>-bertam</li> <li>•Floor</li> <li>-timber plank</li> <li>-bertam</li> <li>-tepas</li> </ul>	<ul style="list-style-type: none"> <li>•No nail</li> <li>•Tongue &amp; grooves</li> <li>•Mortise &amp; tenon</li> <li>•Papan sendeng technique</li> </ul>	<ul style="list-style-type: none"> <li>•Kepala pintu</li> <li>•Kepala tingkap</li> <li>•Gerbang pintu</li> </ul>
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Source:Rashid (2017)

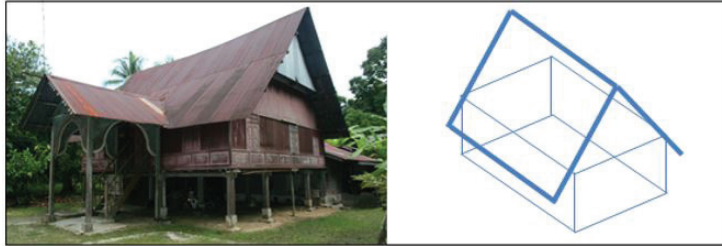


Figure 1. Rumah Kutai (RK) Roof Design

Source:Rashid (2017)

RK is modest with flexible interior space and usage as well as able to blend well with the religious, cultural practice and environment. For spatial organisation Rumah Ibu(RI) is located in the middle that is the main part of the building. This shows the significant emphasis by the builder as well as the house's owner from the aspects of design, material selection and construction technology. For KA, RI is the main area and is located at secondary space such as serambi luar and serambi dalam, ruang tengah, bedroom and main stairs. For KA and KAB rumah anjung is located at the front entrance and it hosts many important formal events such as merisik, solemnization ceremony, wedding reception and religious activities. Rumah selang or rumah tengah RT (the middle house) is a space that connects RI and RD (Rumah dapur) has a second stair which is usually used by the ladies. Rumah dapur (RD) is for female guests to assist the host in some formal and informal events. RD is located at the back of the house and has the third staircase. Roof materials and roof structures are very important element since it protects the house from climatic pressures. Early RK roof used nipah or rumbia leaves for the roof materials. With a slight curved in the middle the roof shape has durability, aesthetics, comfort and the ability to withstand climatic changes. RK wall can be divided into three types of wall, Tepas (split and woven bamboo) or bertam (woven bark from Bertam tree); Tepas or bertam with wooden planks.

## Rumah Limas Potong Perak (RLBP)

The architectural styles can be traced back as early as 1900 where most buildings feature the style Bumbung Potong Perak or Potong Belanda. It is also called Rumah Limas Bumbung Perak (RLBP) and it incorporates several decorative elements such as the Tunjuk Langit, Kepala Cicak, Papan Cantik, Kepala Tingkap, and Kepala Pintu which give its unique quality. The spatial design of the house is similar to RK which also consists of Rumah Ibu (RI) (main living room), Rumah Anjung (RA) in front, Rumah Selang or Rumah Tengah (RT) in the middle and Rumah Dapur (RD) (kitchen) at the back together with intermediary spaces such as Serambi, form a comprehensive architectural vocabulary that represents the traditional architecture of the Perak Malays. Based on the name “Potong Belanda” the roof design of RLBP believed to be influenced by the Dutch architecture style during the colonial era. It is believed that the used of zinc as a roofing material had contributed to the changing in roof design of Bumbung Limas type. This type of roof design is well known at the west coast of the peninsula of Malaysia. It is also believed that the origin of the word “limas” comes from the word “five” because the roof of this house type usually has five ridges (Halim Nasir (1996). The construction of RLBP is different from RK. RLBP used nail and apparently easier to construct compare to RK. At the beginning of early 20th century involvement of Chinese builder can be traced in Perak including RLBP. The used of sawn timber, zinc as roof materials, coloured glass window, louvred glass window grill are examples materials found at the second generation of RLBP built during 1940’s onwards believed to be brought in and introduced by the Chinese builders.

**Table 2.The characteristics of Rumah Limas Bumbung Perak (RLBP)**

Categories (typology)	Spatial organisation	Architectural Elements & Materials	Construction technology	Decorative elements
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RLBP 1st generation (!900 to 1030s)	<ul style="list-style-type: none"> <li>•Rumah Ibu (The main house)</li> <li>•Rumah Anjung (The front house)</li> <li>•Rumah Tengah or Rumah Selang (The middle house)</li> <li>•Rumah Dapur (kitchen annex)</li> </ul>	<ul style="list-style-type: none"> <li>•Roof - zinc</li> <li>•Window Door -tingkap labuh</li> <li>Unsawn Timber</li> </ul>	<ul style="list-style-type: none"> <li>•Stilts approx. 2m height</li> <li>•No nail</li> <li>•Tongue &amp; grooves</li> <li>•Mortise &amp; tenon</li> <li>•Papan sendeng technique</li> </ul>	<ul style="list-style-type: none"> <li>•Tunjuk langit</li> <li>•Papan cantik (carved)</li> <li>•Kepala cicak</li> <li>•Gerbang (arch)</li> <li>•Lubang angin (carved)</li> <li>•Carved Kepala pintu</li> <li>•Carved Kepala tingkap</li> </ul>
RLBP 2nd generation (1940s to 1960s)		<ul style="list-style-type: none"> <li>•Roof - zinc</li> <li>•Window - louvred</li> <li>Glass window</li> <li>•Wall -sawn timber</li> <li>•Floor -sawn timber</li> </ul>		<ul style="list-style-type: none"> <li>•Tunjuk langit (very rare)</li> <li>•Papan Cantik (simple)</li> <li>•Lubang angin (simple)</li> <li>•Kepala pintu (simple)</li> <li>•Kepala tingkap (simple)</li> <li>•Gerbang pintu (simple geometry)</li> </ul>

Source:Rashid (2017)

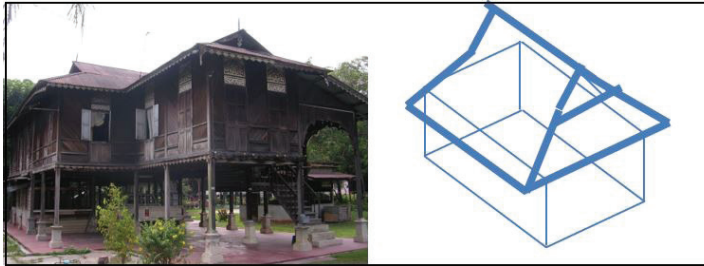


Figure 2. Rumah Limas Bumbung Perak (RLBP) Roof Design

Source : Rashid (2017)

## Colonialism Architecture in Perak

The colonialization chapter in this region began as early as 16th century after the conquering of Malacca took place in 1511. This was followed by Dutch VOC dominancy in 1641. The establishment of Straits Settlements in 1826 by the British East India Company and The Pangkor Treaty in 1874 illustrate the British extension of rule over some Malay states, including Perak, Selangor, Pahang and Negeri Sembilan. Each received a “British Resident” to advise on matters, especially economy. The evolvement of tin mining industry led to the development of new townships and commercial activities all over Perak.

This scenario gives a huge impact to the architectural development in this region. The British intervention in the state administration had produced new buildings both in function and architectural characteristics. Public buildings such as administrative buildings, schools, trains stations, religious, commercial building and including residential were among the buildings that created new architectural development called the colonialism architecture. The colonists had adopted their architectural styles from the mother land into building modified to the local climatic context which is warm and humid. These colonial buildings in Malaysia also have combinations of the styles from other cultures particularly the local Malay traditions and also other culture and traditions such as Indian and Chinese. The adaptation can be seen on architectural design, building elements, building materials and finishes. The hybrid between foreign and the locals have led to new development of Malay house particularly in Perak.

## **METHODOLOGY**

Since 1997 researchers from the Center of Knowledge & Understanding of Tropical Architecture & Interior (KUTAI), a research group from Universiti Teknologi MARA Perak Branch, have carried out various research on Malay traditional architecture particularly in Perak. Verbal data and visual data were collected through site observations, photos, illustrations, interviews and measured drawings. For these particular study, six houses were selected as multiple case studies. Selection were made based on its typology and the era it was built. Chronological and typological analysis were conducted on all the six (6) houses to identify the process of transformation occurred in Perak traditional houses. Four aspects were analysed which were :

- i. Roof design
- ii. Spatial organisation
- iii. Architectural elements
- iv. Decorative elements

### **Multiple Case Studies**

The selection of architectural typology is the main basis of the discussion and was based on the typological analysis carried out from literature review and previous research by Rashid (1997 ; 2005), Talib





(2004), Mat (2010; 2012) .

The architectural typology was divided into:

- i.Rumah Kutai type Kutai Asli (RK (KA)
- ii.Rumah Kutai type Kutai Beranjung (RKA)
- iii.Rumah Limas Bumbung Perak 1st Gen.(RLBP/01)
- iv.Rumah Limas Bumbung Perak Colonial (RLBP/C)
- v.Rumah Limas Bumbung Perak 2nd Gen (RLBP/02)
- vi.Rumah Kuaters Kerajaan (RKK)

The selected houses were based on its authenticity, strong iconic characteristics and its current condition. Each house represents architectural attributes from its own categorisation and period of time. Summary of multiple case studies can be determined as follows:

**Table 3. Multiple Case Studies**

No	Code no	Case study	Architectural type	Built
1	RKA/01		Rumah Kutai Asli	1830's
2	RKB/02		Rumah Kutai Beranjung	1880's
3	RLBP/01		Rumah Li-mas Bum-bung Perak 1st generation	1920's
4	RLBP/C		Rumah Li-mas Bum-bung Perak colonial	1930's



5	RLBP/02		Rumah Li-mas Bum-bung Perak 2nd genera-tion	1940's
6	RKK/01		Government quarters	1950's

Source:Rashid (2017)

## RESULTS AND DISCUSSIONS

The focus of this study is to analyse and discuss about the architectural development of the Malay house in Perak from the traditional to the modern era in the period between 1830s to 1960s.

There are number of views with regards to the term vernacular architecture and traditional architecture. It is quite difficult to distinguish between these two main concept of architecture coined by scholars from all over the world. Some other terminologies include Regionalism, Folk architecture and Indigenous style. Rudofsky (1964), Rapoport (1969), Oliver (1997; 2006) are among the main international scholars discuss the issue about architecture without architects; issue related to their environmental context and available resources; house forms are a result of long term modification and adaptation; shared experience and innovation that is approved by the community and built with local materials and techniques, in which an owner can participate and connect the relationship between culture and architecture Thus, those ideas do not make much different from what had been said and discussed in the area of traditional architecture particularly from local scholars such as Halim Nasir (1984;1997), Rasdi (2006), Ariffin (2001), Norhasandi (2010), Jahn (2017) and Harun (2018).

## **Roof design**

Roof design is the main architectural attribute in determining the typology of Perak house. At least two types of roofs were popularly used in Perak traditional house in two different period. The Bumbung Panjang or the Bumbung Melayu translated as gable end roof were widely used before 1900 and become the determination factor of RK. In contrary Bumbung Perak roof design is used to determine RLBP which were found built after 1900.

## **Spatial organisation**

Almost all the Malay traditional houses in Malaysia, the spatial organisation is practically similar. Rumah Melayu or the Malay house is divided into three main spaces which are Anjung (RA) in front, Rumah Ibu (RI) is the main house in the middle and Dapur (RD) the kitchen at the back. Rumah Selang or Rumah Tengah (RT) is a small unit or space connecting between RI and RD. Another important unit or space is the Serambi (RS) a semi open space normally attached to RA. RKA does not have the frontal compartment which are RA and RS. It also differentiates between RKA and RKB. There is not much transformation occurred in the spatial organisation for Perak traditional house and even other states as well. Perhaps it is an indication of maturity with regards to architecture, space and culture.

## **Architectural elements and materials**





Openings are important for Malay traditional architecture due to certain reasons such as climatic and privacy. Openings for RK are windows and tebar layar or gable. Small openings at tebar layar and usage of patterned bertam leaves or kelarai provide cooling effect at the top portion of the house. Tingkap jenguk (small horizontal window) only can be found at RK. Tingkap labuh or long window can be found at RKA, RKB and RLBP/01. Later version of RLBP which are RLBP/02 and RLBP/C use short window that is louvred glass window. Nipah leaves (*Nypa fruticans*) and rumbia leaves are widely used on RK roof. Zinc, a light metal and more fire resistant became more popular beginning 1900 and widely used on RLBP. Thus, clay tiles roof brought in by the British is the roff materials for RLBP/C and other colonial buildings. Solid chengal wood is common for traditional Malay house structure. Both full stilt and half stilt are solid chengal wood contribute to its traditional characteristics. Masonry stilt become the main




characteristics of RLBP/C and RKK with 2 different heights; approximately 2 meters from ground or lower version, which are approximately 1 meter from ground level.

### Decorative elements

In traditional Malay architecture, decorative elements act as additional members that contribute to aesthetic and functional aspects of the building. Decorative elements are the determination factor that signified the characteristics of its architectural style. Its existence symbolised the status of the owner. This study found that decorative elements for the Perak house is slightly simple in RK compared to RLBP. Certain decorative elements such as Lebah bergantung, Selak cantik, Kelarai at Tebar layar and carvings at Papan sendeng Gerbang pintu, only can be found in RK, whilst Kepala cicak, Tunjuk langit, exist only in RLBP. Kepala Tingkap, Kepala pintu, can be found both in RK and RLBP. Early RLBP or the first generation RLBP/01 decorative elements are more intricate and ornamented compared to the RLBP/02 and RLBP/C. Imitation but more simpler motifs and ornamentation are found at RKK. This is an example of hybrid between modern architecture with modified traditional decorative elements (Rashid, 2013).

**Table 4. Chronology Analysis**

No	Architectural elements	Earlier	Later
1	window		
2	roof		

3	stilt		
4	gerbang		

Source: Author

**Table 5. Summary of Data Analysis**

No	Code no	Roof Design	Spatial organ-isation	Architectural elements & mate-rials	Decorative elements
1	RKA/01	Bumbung Panjang  Gable end roof	<ul style="list-style-type: none"> <li>•Serambi dalam</li> <li>•Rumah ibu</li> <li>•Rumah tengah</li> <li>•Rumah dapur</li> </ul>	WINDOWS •long window •tingkap jenguk •timber ROOF •nipah •rumbia STILT Timber stilt	<ul style="list-style-type: none"> <li>•lebah bergan-tung</li> <li>•gerbang pintu tebar layar</li> <li>•selak cantik</li> <li>•kepala tingkap</li> </ul>
2	RKB/02	Bumbung Panjang  Gable end roof	<ul style="list-style-type: none"> <li>•Anjung</li> <li>•Serambi luar</li> <li>•Rumah ibu</li> <li>•Rumah tengah</li> <li>•Rumah dapur</li> </ul>	WINDOWS •long window •timber ROOF •nipah •rumbia STILT Timber stilt	<ul style="list-style-type: none"> <li>•lebah bergan-tung</li> <li>•gerbang pintu tebar layar</li> <li>•selak cantik</li> <li>•kepala tingkap</li> </ul>
3	RLBP/01	Bumbung Perak  Perak roof	<ul style="list-style-type: none"> <li>•Anjung</li> <li>•Serambi luar</li> <li>•Rumah ibu</li> <li>•Rumah tengah</li> <li>•Rumah dapur</li> </ul>	WINDOWS •long window •timber ROOF •zink STILT Timber stilt	<ul style="list-style-type: none"> <li>•kepala cicak</li> <li>•gerbang</li> <li>•papan cantik</li> <li>•tunjuk langit</li> <li>•kepala tingkap</li> <li>•kepala pintu</li> </ul>
4	RLBP/C	Bumbung Perak  Perak roof	<ul style="list-style-type: none"> <li>•Anjung</li> <li>•Serambi luar</li> <li>•Rumah ibu</li> <li>•Rumah tengah</li> <li>•Rumah dapur</li> </ul>	WINDOWS •long window •timber ROOF •zinc STILT masonry stilt	<ul style="list-style-type: none"> <li>•kepala cicak</li> <li>•gerbang</li> <li>•papan cantik</li> <li>•tunjuk langit</li> <li>•kepala tingkap</li> <li>•kepala pintu</li> </ul>

5	RLBP/02	Bumbung Perak Perak roof	<ul style="list-style-type: none"> <li>•Anjung</li> <li>•Serambi luar</li> <li>•Rumah ibu</li> <li>•Rumah tengah</li> <li>•Rumah dapur</li> </ul>	WINDOWS •short window •louvred glass ROOF •zinc STILT Timber sitlit	<ul style="list-style-type: none"> <li>•kepala cicak</li> <li>•gerbang</li> <li>•papan cantik</li> <li>•tunjuk langit</li> <li>•kepala tingkap</li> <li>•kepala pintu</li> </ul>
6	RKK/01	Bumbung Perak Perak roof	<ul style="list-style-type: none"> <li>•Anjung</li> <li>•Serambi luar</li> <li>•Rumah ibu</li> <li>•Rumah tengah (ground)</li> <li>•Rumah dapur (ground)</li> </ul>	WINDOWS •short window •louvred glass ROOF •clay tiles STILT Timber sitlit	<ul style="list-style-type: none"> <li>•kepala cicak</li> <li>•gerbang</li> <li>•papan cantik</li> <li>•tunjuk langit</li> <li>•kepala tingkap</li> <li>•kepala pintu</li> </ul>

Source: Author

## CONCLUSION

This study concludes that the Perak Malay traditional house has evolved and transformed within the 150 years period of time. The first major transformations are from RK to RLBP during the traditional era. Second is from RLBP/01 to RLBP02 and the third is from to RKK during colonial era to the independence and early part post-independence era. Strong characteristics of traditional architecture are the manifestation of their world-view, and it is also influenced by internal understanding of religion, culture and the way of life. Adaptation of “foreign elements” is as a result of interactions between different cultures led to evolvement and transformation.

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