





AicE-Bs2023Marrakech

https://www.amerabra.org

11th ABRA International Conference on Environment-Behaviour Studies Semiramis Hotel, Marrakech, Morocco, 01-07 Mar 2023

'Bergendang' and Its Spatial Use in Traditional Sarawak Malay House

Yon Syafni Samat^{1*, 2}, Syed Iskandar Ariffin¹, Nurakmal Abdullah Goh², John H.S. Ting³

* Corresponding Author

¹ Faculty of Built Environment and Surveying, Universiti Teknologi Malaysia, Johor Bahru, Malaysia ² Faculty of Built Environment, Universiti Malaysia Sarawak, Kota Samarahan, Malaysia ³ Faculty of Arts and Design, University of Canberra, Bruce, Australia

yonsyafni@graduate.utm.my; b-sahmad@utm.my; anurakmal@unimas.my; john.ting@canberra.edu.au Tel: +6019-6000316

Abstract

Bergendang is a uniquely Sarawak Malay traditional entertainment frequently held during social gatherings at home. This paper investigates the spatial use of bergendang activity in traditional Malay houses along the Sarawak River in Kuching. The research employed a qualitative case study design approach through field study observation and semi-structured interviews. Findings revealed different spatial use of bergendang for early and later model of Sarawak Malay houses, which is also associated with social status of house owners. Spatial study on traditional Malay houses in other parts of Sarawak is recommended for constructing northern Borneo region's vernacular Malay house framework.

Keywords: bergendang; Sarawak Malay; spatial use; traditional Malay house

eISSN: 2398-4287 © 2023. The Authors. Published for AMER ABRA cE-Bs by e-International Publishing House, Ltd., UK. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/). Peer–review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers), ABRA (Association of Behavioural Researchers on Asians/Africans/Arabians) and cE-Bs (Centre for Environment-Behaviour Studies), Faculty of Architecture, Planning & Surveying, Universiti Teknologi MARA, Malaysia. DOI: https://doi.org/10.21834/ebpj.v8i23.4489

1.0 Introduction

The Federation of Malaysia is divided into two regions with the Malay Peninsular in the west and Sarawak and Sabah in the east- on Borneo Island. The Malay is the ethnic majority of the country, living among other ethnic groups such as the Chinese, Indians, and various other indigenous people. Sarawak, located in northwest Borneo, comprises a heterogenous population with 27 ethnic groups living under its umbrella. The Malays encompassed 25% of the state population (Department of Statistics Malaysia, 2020), making them the second largest ethnic group in Sarawak after the Dayak. A common misconception, and often the main reason for the neglect of Sarawak Malay studies, is that Malays in Malaysia are "the same everywhere." Collins (2002) posits that "Bureaucratism, orientalism and exoticism made the study of the Malay language and culture a low priority in the hierarchy of colonial endeavours". He further asserts that the population of Borneo, as understood by nineteenth-century British and Dutch colonial officials, were either Malays or non-Malays. The non-Malay groups of Borneo were considered more 'exotic' and thus worthier of further investigation. Their earlier encounters with the Malay race throughout the archipelago, on the other hand, made the study of this ethnicity less fruitful. It is therefore not surprising that the architectural study of the Sarawak Malays still receives little attention even in present times.

eISSN: 2398-4287 © 2023. The Authors. Published for AMER ABRA cE-Bs by e-International Publishing House, Ltd., UK. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/). Peer–review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers), ABRA (Association of Behavioural Researchers on Asians/Africans/Arabians) and cE-Bs (Centre for Environment-Behaviour Studies), Faculty of Architecture, Planning & Surveying, Universiti Teknologi MARA, Malaysia. DOI: https://doi.org/10.21834/ebpj.v8i23.4489 The discourse of Malay architecture in Malaysia, particularly on the traditional Malay houses, often excludes that of the Sarawak Malay, indicating a serious gap that must be filled. In Malay Peninsular alone, variations of house form can be observed in different regions where the architectural style of each traditional Malay house represents the unique identity of that Malay group. However, the identity of traditional Sarawak Malay houses remains unclear. According to Rapoport (1969), the form and organization of a house are greatly influenced by sociocultural aspects, though physical aspects- which he considered as secondary or modifying forces- also play a part. Although similarly professing to the religion of Islam, differences in historical origin, social relations with other indigenous ethnic and colonial influences could have altered the sociocultural values of the Malay in Sarawak. Therefore, it is unlikely that Sarawak Malay houses share a similar architectural style to their western counterpart.

In this regard, this research looks into the sociocultural factor to gain insight into the values of traditional Sarawak Malay society and how their dwellings could be distinguished from the other Malay groups in the Malay Peninsula. The literature review on Sarawak Malay culture revealed a unique practice distinct to this Malay group. Every social gathering of the Malay in nineteenth and twentieth-century Sarawak has a recurring activity called 'bergendang', a traditional musical performance conducted at home. Much has been written about the uniqueness of bergendang to the Sarawak Malays, but only about the entertainment itself rather than the place or space where the performance occurs. Previous studies have yet to establish a link between this social activity and the spatial organization of the house where bergendang was conducted. As Rapoport (2005) further asserted in *Culture, Architecture and Design,* there needs to be a 'natural' definition in comparative research. Instead of comparing the physical attributes of houses, one must compare their system of settings, which is a question of 'what activities take place where' (Rapoport, 2005, p. 20). Hence, since bergendang is considered a domestic practice embedded into the traditional Malay lifestyle in Sarawak, how the spaces in the home accommodate this should be explored.

Therefore, the objective of this research is to investigate the use of space during *bergendang* in the houses of traditional Sarawak Malay society prior to the 1960s. Rapoport's 'dismantling of culture' theory formed the basis to investigate how the form of Sarawak Malay houses could be distinguished from their western counterparts by using culture as a mechanism between environment and behaviour. The research questions whether *bergendang* activity could be one of the reasons for the diversity in house form, especially on the roof height variation, which is a striking attribute of Sarawak Malay houses. The paper also mentions the complex interaction between culture, behaviour and built environment in Sarawak's stratified traditional Malay society by focusing on the Malay community living along the Sarawak River settlement in Kuching, the capital of Sarawak.

2.0 Literature Review

2.1 The importance of culture in Environment-Behaviour Studies (EBS)

There are three basic questions in EBS, according to Rapoport (2005). The first is, what human attributes influence the characteristics of the built environment? Secondly, the question of how the environment affects groups of people in a specified context. Lastly, what mechanisms link the two-way interaction between people and the environment? These three questions are illustrated in Figure 1 below:

ENVIRONMENT \rightarrow BEHAVIOUR BEHAVIOUR \rightarrow ENVIRONMENT (MECHANISMS)	Figure 1: The three basis questions of EPS		
ENVIRONMENT → BEHAVIOUR	BEHAVIOUR	,	ENVIRONMENT
	ENVIRONMENT	\rightarrow	BEHAVIOUR
BEHAVIOUR → ENVIRONMENT	BEHAVIOUR	\rightarrow	ENVIRONMENT

Figure 1: The three basic questions of EBS. (Source: Amos Rapoport, 2005)

Based on the above figure, the knowledge of how people and environments interact is fundamental, particularly in design and architecture. Rapoport (Ibid.) postulated that comprehension of human characteristics must be the basis for producing a design, be it buildings or the physical environments, and it must correspond to those needs. He further noted that there is distinct variability in the formation of space in his studies of numerous vernacular dwellings of indigenous groups. He noticed that culture, an essential element in EBS, plays its role in understanding specific groups, circumstances, and environments, and posed a question, "Why should there be such an extraordinary variety of built environments, especially houses and dwellings, and settlement forms?"

2.2 House as a subject of investigation

The house, in traditional societies, is the most common and culturally impacted vernacular product. The variability in house form is remarkable, as seen in the Malay Peninsula, where many variations of Malay houses exist, even though they were all sourced from one ethnic group. The house is not only a status symbol but a cultural assertion of a society. Hillier & Hanson (1984) posit that an obvious reflection of culture and a measure of society diversities can be found in the way the space (of a dwelling) is organized. This is further supported by Lucas (2020), who argues that it is in the home that our identities are manifested and constructed, and cultural standards

shape our lifestyles. What cultural aspect in society could have caused a variety of ways of doing things? This question invites the 'dismantling of culture' theory proposed by Rapoport (Ibid.), which dissects the abstractness of culture into observable forms.

As mentioned above, the "way of doing things" suggests that 'activity' may be the most conspicuous aspect of culture because it is an expression of lifestyle. As activity is often associated with other activities, when conducted at a certain space or setting, together they form an "activity system". Collectively, they are imbued with meaning which is the most latent aspect of the activity. An extract of the culture-dismantling theory formed the conceptual framework for this paper, as illustrated in Figure 2 below. *Bergendang* and its associated activities will be examined as the 'activity system' and unit of analysis in comparing different houses' spatial organization and in understanding Sarawak Malay's social structure.

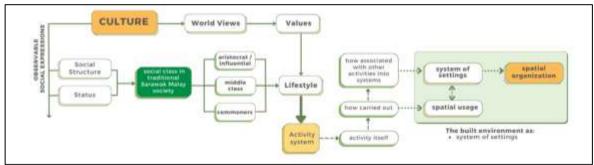


Figure 2: Conceptual framework on dismantling culture based on Rapoport (2005).

2.3 A brief review of traditional Sarawak Malay houses along the Sarawak River settlement

The Malay house in Sarawak conforms to the principles of Malay houses established elsewhere in Southeast Asia. It follows the Austronesian architectural tradition-houses were raised on piles, forming a tripartite arrangement reflected in section, with an undercroft for animals, a living platform for humans and a roof space for spirits (Waterson, 1990). The earliest form of a Malay house in Sarawak was studied by Ong Liang Bin (1983); where he identified three distinct architectural styles in the Kuching village namely, Class A- the rectangular form; Class B- the rectangular-with-appendage style; and Class C-Brooke or colonial Influenced style. Houses of the Class A type appeared to be the early model houses built around the 1860s until the 1920s, while the latter two are of the later model houses built between the 1930s and the 1960s. Yusuf (2015) then discovered that the appendage attached to Ong Liang Bin's Class B type house is locally called the *ruang teko*- a seating area for receiving guests.

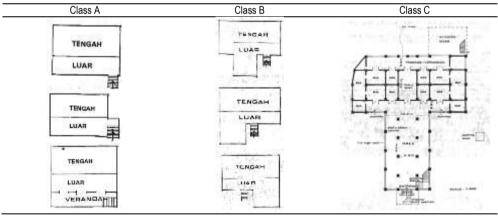


Figure 3: Architectural style of Malay house in Kuching. (Source: Edric Ong Liang Bin, 1983)

Generally, the spaces of Sarawak Malay houses are divided into three main areas- the *tengah*, the *luar* and the *dapor* (or *telok*). They are long rectangular spaces composed together, creating an almost square-form plan. *Luar* is a semi-open area with ample windows for ventilation, similar to the appearance and function of the *serambi* in Peninsula Malays' houses as the space to receive and entertain male guests. The *tengah* is the main house, synonymous with the *rumah ibu* in the Malay Peninsula. It functions as a multipurpose area during the day and sleeping space at night (Ong Liang Bin, 1983). The kitchen at the back of the house is called the *dapor*, connected to the *tengah* with a passageway or *rumah jalan* (Siti Delima, 2022). Unlike the Malay dwellings in the Peninsula, most of the *dapor* of Sarawak Malay houses along the Sarawak River were also built on stilts, like the rest of the *tengah* and *luar*. Some houses feature a verandah of varying sizes with lean-to roofs. Figure 3 above illustrates the three architectural styles based on his findings.

2.4 Bergendang party; an avenue for male and female encounter

The field of sociology describes traditional society as '...a society characterized by an orientation to the past, not the future, with a predominant role for custom and habit' (Langlois, 2001). In the Sarawak Malay traditional setting, i.e., before the 1960s, socializing freely between girls and boys unrelated by blood was restricted. Meeting the opposite sex in public or private was impossible unless a family member was present as a chaperone (Daud, 1999). Therefore, the only chance for an encounter was during sociocultural gatherings conducted at the houses of relatives, neighbours or acquaintances in the villages. Abang Yusuf Puteh (2005) wrote in his book, "The girls had no chance for socializing in the community, completely shut off from the boys, though they had the opportunity of looking at the boys from little chinks in their houses". The statement denotes the house as the place for a distant rendezvous between unmarried girls and boys- a clue for how a Sarawak Malay house permits this affair.

2.5 Bergendang, bermukun and bertandak; a communal musical performance at home

Bergendang comes from the word "gendang", a musical instrument made from hardwood such as merbau, meranti, belian and merdang (Hassan, 2012). Gendang in the form of entertainment is a gendang performance frequently carried out to enliven the atmosphere of social events, be it formal or informal. The Sarawak Malay gendang is said to be originated from Sambas, Indonesia, where it was brought by Islam clerics, merchants, and courtiers, along with other artistic activities such as the hadrah, ratib zikir and al-burdah (Kechot et al., 2017). There is still debate on how and when bergendang made its debut in the Sarawak Malay entertainment scene. Regardless, it has been embedded into the lives of the traditional Malay society so strongly that whenever there is a social gathering, bergendang is a must (Hassan, 2012).

In the early twentieth century, a *bergendang* party used to be the most awaited event for the younger generation to gather and meet each other from afar (Daud, 1999; Kechot et al., 2017; Abang Yusuf Puteh, 2008). Apart from weddings, *bergendang* is also a popular event during *majlis khatam al-Quran* (a celebration of completing the recitation of the Quran), *cukur rambut* ceremony (a celebration for a newborn), and even during *majlis berkhatan* (a circumcision ceremony symbolising the transition to manhood). Usually, the performance starts after the evening prayer at around 9 pm and lasts till the break of dawn just before the morning prayer (Abdul Wahid, 2014). This musical performance uplifts the house's ambience, while attracting neighbours and relatives to come and assist with the event preparation. It is also an act of appreciation for those who offered their help in making the event a success (Razali Haji Yu, 2010). Interestingly, anyone could come to a *bergendang* party regardless of whether you were related to the host.

This communal activity was held indoors or at the house's compound (Abdul Wahid, 2014). However, according to village folks interviewed about *bergendang*, Tuan Haji Kiprawi (2023) and Encik Hartoyo (2023), who are both sons to *seh gendang*, there was never an occasion in the past where *bergendang* was performed on the house compound. *Bergendang* has always been conducted indoors, which further fuels the speculative need for specific spaces in Sarawak Malay's home in accommodating this activity. Abdul Wahid (2014) must have been referring to a much later tradition of *bergendang* conducted at the *pangkin* (a low-raised platform of planks) at the house compound in the village.

Bergendang would only be complete with its two important elements; the *bermukun* and the *bertandak*. The *gendang* is beaten by the *seh gendang*, experienced female drummers who can spontaneously create and sing 'pantun'- the Malay verse poem. There is usually two *seh gendang* seated inside a makeshift partition made of thin sheer cloth or *kain batik*, called the *tabir*. The first *tabir* covers the floor until the eye level of the *seh gendang*, while another piece covers above the eye level to the top (refer to Figure 6), leaving only 1 to 2 inches of space for the eyes to see (Ali, 1994). Inside this partition too, were the lady maidens, who sit at the back of *seh gendang*. From here, the *seh gendang* beat the drums while exchanging *pantun* with the male dancers or *penandak*, who dance (*bertandak*) to the beat of the *gendang* fronting the makeshift partition. This *pantun* exchange, called *bermukun*, is a communication medium between the male *penandak* and the maidens, with *seh gendang* as the messenger (Razali Haji Yu, 2010). The *penandak* initiates the dance while singing a *pantun* containing a message to the maiden, while *seh gendang* delivers the maiden's response also in a *pantun* form. This two-way communication portrays how boys and girls get to know each other in an honourable manner, something that is strongly held by Malay families.

3.0 Methodology

The objective of this research is to investigate the use of space during *bergendang* in the houses of traditional Sarawak Malay society prior to the 1960s. It was conducted in three groups of villages along the Sarawak River near the present-day Kuching Waterfront. The research location was named Zone 1- Kampung Seberang Hilir, Zone 2- Kampung Seberang Hulu, and Zone 3-Kampung Datu. A qualitative case study design was adopted, where the data collection method involves fieldwork and semi-structured interviews.

3.1 Virtual Research

Reviews of journal articles, conference papers, unpublished theses and webpages were conducted to acquire what constitutes the architectural style of a traditional Sarawak Malay house. Research conducted by Ong Liang Bin (1983), Walker (2010), Yusuf et al. (2012), Yusuf (2015), Yusuf et al. (2018), and Ting (2018) also provided secondary data with house photographs, background information and floor plans that are very useful for analysis, especially on the houses that no longer exist. The literature analysis establishes the study's limitations where the selection criteria of house samples and an observation form were prepared for fieldwork.

Interview questions for the research's third phase were also constructed based on literature about *bergendang* entertainment structure and dynamics.

- The sample selection criteria established are as followed:
- (1) the minimum age of the house should be 60 years old or older
- (2) the façade and the main house (tengah) have not been modified
- (3) the first original owner of the house is a Malay

3.2 Fieldwork

The next phase of research involves acquiring primary data by observation during fieldwork. Figure 4 depicts the location of the three zones where the fieldwork was undertaken. The data was collected using photography, video recording, observation form, measured drawings and hand-drawn sketches. The observation form detailed the physical information of the house, such as elevations, spatial layout, the orientation of the house, and recording of any modification history, to name a few. This tool provided a summary of important attributes of the house, such as the placement of doors, windows and staircases; the location of the house in relation to its context and the ornamental details. From the observation, house samples that fulfil the criteria were then selected as case studies where floor plans and measurements of the house were recorded.

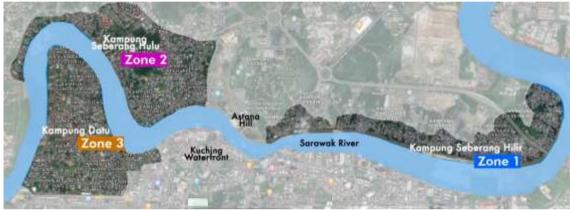


Figure 4: Location of all three zones of village groups along the Sarawak River (Source: Researcher's fieldwork)

3.3 Verbal Data

During this third phase, the criteria of house occupants to be interviewed were also considered prior to the interview session. As the houses chosen were mostly 60 years and older, the respondents must also be at an age where he or she has experienced living in the house for more than 50 years. This is to allow for higher data validity, where their own experiences or the oral history of the house as told by their parents or older relatives can also be taken as data to construct a narrative of how the spaces in the house were used during *bergendang*. However, not all of the house occupants are willing to be interviewed. Some houses shortlisted for case studies no longer have occupants of 50 years or older, while some have very limited memory of how *bergendang* was conducted at the house. These limitations led to the selection of only three houses from the early model (Class A) and another three from the later model (Class B). Two semi-structured interview sessions were conducted to ensure the reliability and correlation of verbal data between the first and second interview sessions.

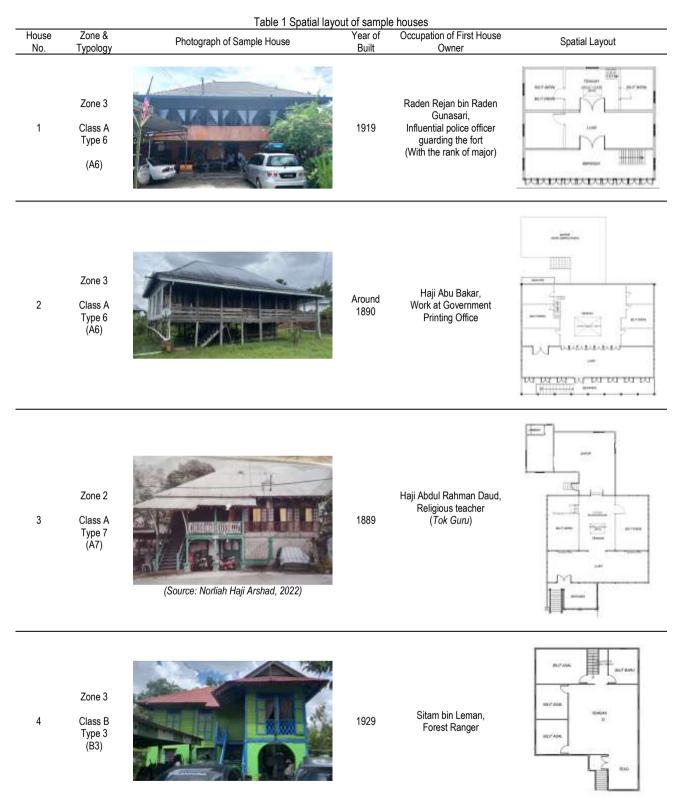
3.4 Digital Reconstructions

Data collected during fieldwork in the observation form and measured drawings were utilized for digital reconstruction. The sketches of floor plans were redrawn using AutoCAD software to produce scale drawings for comparison and data analysis. Verbal data obtained earlier were transcribed and tabulated into themes to see any significant pattern indicating evidence of *bergendang* within the spatial configuration of the houses.

4.0 Findings

The research has yielded unexpected findings concerning *bergendang*, social structure, and spatial configuration within the house of Sarawak Malays (further discussed in Section 5.0). Out of the three zones, 60 houses were documented in the observation form. However, only 30 sample houses were further examined as the other half has undergone major modification, particularly on the interior. As explained in Section 3.3, only six houses will be discussed to corroborate the correlation of *bergendang* with spatial organization.

Floor plans of sample houses were arranged into architectural style classifications using Ong Liang Bin's (1983) typology in Table 1 below.





5.0 Discussion

5.1 Distinctive feature in Class A (early model) in relation to spatial use of bergendang

The verbal data obtained from occupants of Class A type houses highlights a key feature of the early model houses in relation to *bergendang*. Floor plans of House No. 1, 2 and 3, which were built between the 1880s and the 1920s, indicate a 'passage to attic', which is a narrow step to the attic space above. Called *padong* in Sarawak Malay, this space is unexpectedly large, covering the length and width of the *tengah* and *luar* below. The floor-to-ceiling height is equivalent to the height of a common living area, ranging from 9 to 11 feet. The findings also uncover that all three early model houses have an occupiable padong, which was used as sleeping space for the maidens in the household. These data supported Ong Liang Bin's finding on the multipurpose nature of *padong* in the household of Sarawak Malay aristocratic and influential families, which he also described as a sleeping space for the unmarried girls in the household.



Figure 5: Variation of peeping gallery and screen (a) the peeping gallery of House No. 1 viewed from the *padong.* (b) the peeping gallery of House No. 2, viewed from *tengah*, now has been sealed. (c) the peeping screen of House No. 3 viewed from *tengah*. (Source: Researcher's fieldwork)

Interestingly, further interview data reveals that the *padong* was also utilized as a living space, dedicated as a sitting chamber for the maidens during the *bergendang*. Detailed inspection of House No. 1 and 2 uncovers that both houses possess a "peeping gallery", as Ong Liang Bin (1983) called it. Architectural features of this peeping gallery, such as the atrium enclosed by carved balustrades on the *padong* floor, permit the maidens to look down to the *tengah* space below where *bergendang* was conducted. The size and shape of the peeping gallery vary from house to house. This unique feature perhaps is developed from the 'peeping window' from an older

version of the rectangular form house, which was built much earlier in 1860. The function is the same regardless- it is a visual link, a medium for exchanging romantic glances between unmarried girls and the male *penandak* during *bergendang*. However, the same feature, but of House No. 3, differs from the former two by design. Instead of an atrium with a balustrade, the feature on the *padong* floor of House No. 3 is merely a screen made of carved timber with tiny openings. This is probably because the original house owner was an influential religious teacher not keen on *bergendang* activity; therefore, the peeping screen was not as elaborate as the peeping galleries. The peeping gallery and peeping screen of House No. 1, 2 and 3 are illustrated in Figure 5.

As for House No. 4, 5 and 6, the function of *padong* as a sitting area during *bergendang* was never mentioned. According to the occupants, the *padong* was solely used as storage space. Examination of spatial layout during the fieldwork supports this verbal data, where no indication of a passageway to the attic was observed in any of the three houses. As these houses were built much later, the social system in the traditional setting where the maidens needed to be separated was no longer followed. This is one possible reason for the discontinued use of *padong* as a sitting chamber and the disappearance of the peeping gallery and screen in later model house type.

5.2 Gender segregation of space during bergendang

According to the occupants of the early model houses, although *bergendang* is a social event, limitations on mixing boys and girls were still being implemented. A Malay Muslim's *adab*, or orderly manner, was given the utmost importance in traditional Malay society's values. This can be seen in how *bergendang* was conducted and the way the seating for guests was segregated by gender. Abdul Wahid (2014) mentioned that the position of female *seh gendang* and male *penandak* was separated by the *tabir*, and there was no mixing of gender in both divisions. This literature was supported by the data obtained, where early model house occupants denote specific spaces for male and female guests, maidens and the *penandak*.

When bergendang was conducted in the tengah, the seating arrangements for guests were also divided into specific spaces. The maidens sat behind the seh gendang in the tabir, and other female guests were at the dapor. Meanwhile, the boys who would like to bertandak would gather at the *luar*, while the other male guests were at the compound of the house. Evidently, the social organization in the house is shaped by Malay sociocultural norms and further accommodated by the house's spatial configuration. The spatial use during bergendang is illustrated in Figure 6, where the padong and peeping gallery play an important role in protecting the maidens from view, but at the same time, provide them with the view.

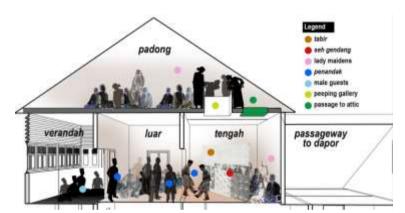


Figure 6: Section cut through the peeping gallery of House No. 4, showing an example of spatial usage of a bergendang party. (Source: Researcher's illustration)

5.3 Changes of social relationship reflected in spatial organization

Around the 1930s, this early tradition of bergendang, commonly known as Gendang Melayu lama, ended. Along with the development of *wayang gambar* (cinema) and *kugiran* (musical band), a new form of *gendang* was detected. In this *Gendang Melayu baru*, the function is more for socializing, where female dancers could join the *bertandak*. The *tabir* opening increased to about a *hasta* (18 inches) from the original 1 to 2 inches (Ali, 1994). Changes in *bergendang* resulted from the social relationship development in Sarawak Malay society, which has become more open and less restricted. Foreign influence brought by colonial officials is one of the possible causes. This transformation could also be observed in the ordering of spaces of the houses built around the 1930s until the 1960s, which were House No. 4, 5 and 6.

Compared to the early model, the later model houses have their bergendang activity held at the ruang teko, the appendage attached to the frontal part of the tengah. However, according to Hajah Latipah Bojeng (2023), house owners needed to ensure that the structure of the ruang teko was strong enough to withstand the intensity of the penandak dances. Therefore, bergendang at her house (House

No. 4) took place at the undercroft to be safe. As restrictions on mixing girls and boys during this period were lighter than in the early twentieth century, the boundaries of gender segregation in the domestic space had also become increasingly blurred.

5.4 House form and roof height

These findings explained a possible reason behind the variation in roof height among the houses in these three zones. Only the houses belonging to the upper class in the stratified traditional Sarawak Malay society have exaggeratedly high-hipped roofs in which underneath is an occupiable *padong* (House No. 1, 2 and 3). The roof height is further elevated when a peeping gallery exists at the *padong* (House No. 1 and 2). It is reasonable to say that the early model houses needed a much higher space to accommodate the peeping gallery's field of view. If the floor-to-ceiling height were reduced, the visual of the *bergendang* spectators on the *padong* would be limited. The changing function of *padong* in the later model houses displays stark differences in roof height, as illustrated by Figure 7. In essence, the exaggeration of roof pitch in some traditional Sarawak Malay houses is more than just a response to Kuching's hot and humid climate, or a portrayal of Malay architectural tradition, as earlier described by Walker (2010).

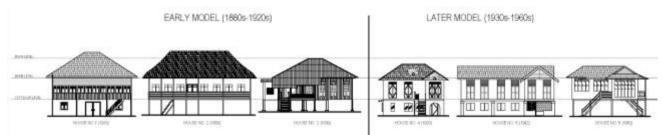


Figure 7 Comparison of early and later model houses, showing differences in roof height. (Source: Researcher's fieldwork)

6.0 Conclusion and Recommendations

To conclude, the spatial organization of traditional Sarawak Malay houses depicts a strong relationship with sociocultural influences of *bergendang*. The monumental form of Sarawak Malay early model houses, enhanced by the exaggeratedly high-hipped roof could be owing to the need of *bergendang* spatial use. Although *bergendang* is not to be said the sole reason behind the unique features of peeping gallery and occupiable *padong*, it is unlikely that these features were used for other purposes. It is also possible that the height of the roof symbolically represents the social status of Sarawak Malay high-ranking society in the early twentieth century, which could be another agenda for future research.

Bergendang continues to evolve in tandem with the development of social relations in Sarawak Malay society. Spatial layout transformation from the early model houses to the later model indicates the changing need and lifestyle of house occupants- from a life with limited communication between the opposite gender to one that is not as restricted. However, along with this transformation, the distinctive identity of traditional Sarawak Malay houses has simultaneously and gradually dissolved. The exaggerated high-hipped roof is no longer a prominent feature in the panorama of traditional villages along the Sarawak River since the peeping gallery is superfluous in contemporary settings. Today, *bergendang* is still being conducted by wedding hosts and government agencies for cultural and tourism events. However, its significance is lesser than at the beginning of the twentieth century. *Bergendang* and traditional houses, two fundamental cultural heritage of Sarawak, need to be safeguarded urgently before they permanently disappear. Therefore, spatial studies of traditional Malay houses in Sarawak riverine settlements are highly recommended to establish a framework for vernacular Malay house of the northern Borneo region.

Acknowledgements

We would like to express our utmost gratitude to Dr. Aiman bin Mohd Rashid of Universiti Teknologi Malaysia, Johor, for his enormous help in reviewing this paper. We would also like to thank the Community College in Kuching, Sarawak, for a very fruitful collaboration; the house owners and their relatives in Kampung Datu, Kampung Seberang Hilir, and Kampung Seberang Hulu for welcoming us to their beautiful traditional homes; *Penghulu* and *Ketua Kaum* especially Encik Othman Jitam, Haji Jamain Ojet, Encik Yusuf Buang, Penghulu Haji Mustapha and Pemancha Haji Roshidi Junai for their assistance in approaching house owners; and finally, YB Fazzrudin Abdul Rahman for supporting this research.

Paper Contribution to Related Field of Study

Investigation of Sarawak Malay house spatial organization is uncommon in northern Borneo region's vernacular architecture field. This paper is the first of its kind that attempts to link a sociocultural activity in Sarawak Malay culture to the spaces in the traditional house, which not only provides a piece of new knowledge to this field but also fills in the serious gap in Malaysia's Malay architecture studies.

References

Abang Yusuf Puteh. (2005). A Profile of Sarawak Malays. Universiti Pendidikan Sultan Idris.

Abang Yusuf Puteh. (2008). Adat perkahwinan orang Melayu Sarawak (2nd ed.). Dewan Bahasa dan Pustaka.

Abdul Wahid, N. (2014). The Performance Development and Changes of the Structure in Traditional Gendang Melayu Sarawak. Jurnal Antarabangsa Dunia Melayu, 7(2), 137–151.

Ali, J. K. (1994). Gendang Melayu Sarawak: Perbandingan Dulu dan Kini.

Collins, J. T. (2002). The study of Sarawak Malay in context. In K. A. and B. R. Adelaar (Ed.), Between Worlds: Linguistic papers in memory of David John Prentice. (pp. 65–76). Pacific Linguistics, The Australian National University. https://doi.org/10.15144/PL-529.65

Daud, M. (1999). Glimpses of Malay Life in Sarawak. Yayasan Budaya Melayu Sarawak.

Hassan, S. (2012). Gendang Melayu Sarawak: Satu kajian Atas Proses Pembuatan, Fungsi dan Konteks Bergendang. 18, 131–150.

Hillier, B., & Hanson, J. (1984). The Social Logic of Space. https://doi.org/10.1017/cbo9780511597237

Kechot, A. S., Aman, R., & A.H. Shahidi. (2017). Komunikasi Sosial dalam Kalangan Etnik di Lembangan Sadong: Gendang Melayu Sarawak. Jurnal Komunikasi Malaysian Journal of Communication Jilid, 33(1), 158–172.

Langlois, S. (2001). Traditions: Social. In International Encyclopedia of the Social & Behavioral Sciences (pp. 15829–15833). Elsevier. https://doi.org/10.1016/B0-08-043076-7/02028-3

Lucas, R. (2020). Anthropology for Architects. Bloomsbury Publishing Plc.

Ong Liang Bin, E. (1983). Malay Houses of Kuching, Sarawak. The Sarawak Museum Journal, 32(53), 97–132.

Rapoport, A. (1969). House Form and Culture. Prentice-Hall.

Rapoport, A. (2005). Culture, Architecture, and Design. In Architectural and planning research book series.

Razali Haji Yu. (2010). Kajian Budaya Bergendang di Kalangan Orang Melayu Sarawak. Institut Perguruan Batu Lintang, Kuching.

Ting, J. H. S., & Pertubuhan Akitek Malaysia. (2018). The History of Architecture in Sarawak before Malaysia. Sarawak: Pertubuhan Akitek Malaysia.

Walker, J. H. (2010). Culture, power and the meaning of built forms in Sarawak, 1841-1868. Review of Indonesian and Malaysian Affairs, 44(2), 89–128.

Waterson, R. (1990). The Living House: An Anthropology of Architecture in South-East Asia. Oxford University Press.

Yusuf, A. (2015). Identiti dan Reka Bentuk Fizikal Rumah Tradisional Melayu Sarawak. Universiti Malaysia Sarawak.

Yusuf, A., Abd Rahman, K. A. A., & Mohd Rafee, Y. (2012). Identity for Traditional Sarawak Malay House-Preliminary Research Findings in the Roof Design. 1st InternationalConference on Design and Innovation.

Yusuf, A., Aidil, K., Rahman, A. A., & Mohammed, A. A. (2018). Analysis of Design Character and Typology of Sarawak Traditional Malay House. International Journal of Academic Research in Business and Social Sciences, 8(12), 2478–2497. https://doi.org/10.6007/IJARBSS/v8-i12/7347

Interviews

1) Siti Delima, 22nd September 2022, Kampung Sinjan, 93050 Kuching, Sarawak

2) Tuan Haji Kiprawi bin Haji Sahari, 9th January 2023, Kampung Nombor 6, 93400 Kuching, Sarawak

3) Encik Hartoyo Kartapati bin Oerip Marsono, 11th January 2023, Kampung Astana Lot, 93050 Kuching, Sarawak

4) Hajah Latipah binti Bojeng, 30th January 2023, Taman Sukma, 93050 Kuching, Sarawak