THE ALTERATION ON THE SPATIAL ELEMENTS OF TRADITIONAL MALAY HOUSE AT HERITAGE VILLAGE OF MALACCA

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Abstract

Traditional Malay house (TMH) known as a vernacular architecture, which is designed harmoniously based on the socioeconomic, cultural and environmental needs. However, rapid development has influenced and modernized the original architecture of TMH and affected the styles, characters and functions of the TMH. The change of spatial element has caused the changes in living conditions that requires the alteration of original construction of the house. This paper aims to clarify the internal spatial elements of spaces and functions of TMH at heritage village in Malaysia and to explore the factors of alteration done. The significance of this research is to highlight the problems that occurred in TMH and to preserve the architectural of TMH from disappear in the future. Field investigations and observations were conducted at selected eight traditional Malay houses in Kampung Sidang Seman. Findings showed the existing spatial elements of *rumah ibu* or *rumah dapur* still can be seen at the most of the houses either the structures on stilts or on ground level. Furthermore, most of these spaces have altered their functions into private area and extend their house based on their basic need.

Keywords: Alteration, traditional malay house, heritage village, rumah ibu, rumah dapur

1.0 INTRODUCTION / BACKGROUND OF THE STUDY

In Malaysia, there are many types of TMH placed in every state that shown its own uniqueness and aesthetic value of architectural and culture of society life (Hassan &Harun, 2013). TMH is an important source of architectural as the creation of a Malaysian identity that reflects and expresses the way of users' life and evolved by the Malays (Kamal et al., 2004). The objectives of this study is to evaluate the alteration on the size and functions of TMH which new spatial elements are emerged. This paper also emphasized on the factors that influenced on the alteration done towards the TMH.

TMH in Malaysia are involved in an evolutionary process and slowly extinction due to influence from the urbanization and modernization that caused the original materials and architectural styles hardly seen(Ismail & Sani2002).In Malaysia, the rural landscape are facing intense development pressure from the fastest growing urban development in nearby areas (Rahman et al., 2015). Since then, the TMH is undergoing many changes and facing with constant threats against its continued existence (Kamal et al., 2004). The sustainability of TMH is gradually diminishing where some changes affected the function, form, construction, structure and spatial structure of the house (Noviarti et al., 2013).

Besides that, there is inadequate legislation on conservation due to lack of attention and awareness where it is not strictly enforced that resulted most of the Malay kampung and houses were stays in its original character, undeveloped or left behind (Ramele et al., 2010). Effect from that, there are houses have been modified beyond recognition (Kamarudin, 2015). As examples, in Malacca, the TMH at

e – Academia Special Issue GraCe, 2018

Kampung Morten have affected by deterioration even the village are gazetted as a heritage village and considered as conservation zone and protected area (Kavanagh &Whitton, 2015).

There are a lot of alteration done on TMH where Malay peoples prefer their house to look more modern and follow the passage of time (Ramele et al., 2010). Thus, the status of TMH is being lowered and replaced by modern housing (Kamal et al., 2004). The traditional architecture was modernized and altered into more complex and exclusive forms such as the changes of it techniques and it uses (Kamaruddin, 2015). The creation and changes of physical and spatial characteristics of TMH is influenced by the needs and customs of purity in the Malays (Hosseini et al., 2012).

2.0 LITERATURE STUDY

2.1 Overview and Features of the Malay house

A Malay house is defined as 'a traditional house, which is occupied by Malays who live in the rural village, and a house that is built according to terms of lifestyle and custom of Malays (Nasir and Teh, 1996). According to Lim (1987), TMH are described from its typical characteristics of the external environments as shown in Figure 1. The Malay house is divided into two areas: the "*rumahibu*" (main house) and the "*rumah dapur*" (kitchen area). In some states, both of these houses are connected by a "selang" (corridor) where the internal usages of the TMH (Figure 2). The well and toilet are built separated and far from the house.

According to Gibbs (1987), the internal usage in a Malay house is influenced by the Islam religion, which discourages relationship between female and male outside the family. The male of family members and guests usually use the entrance in front of the "*rumah ibu*" which is called "*anjung*" (verandah). Meanwhile, the "*rumah dapur*" is used for female members in the family and children who is used the entrance that is located adjacent to "*rumah dapur*" which is sometimes located at the "*selang*". The multifunctional spaces of Malay house and the separated built system of "*rumah ibu*" and "*rumah dapur*" allows house to be expended at any part of the house. According to Lim (1987), the traditional additional system of the TMH gives various choices to the user who intends to extend their house where it can be enlarged in accordance with the variation of size and quality (Figure 3).

According to Ahmad (1998), the usage of space is defined by the floor height where the "*rumah ibu*" is considered as the most important part of a Malay house where women normally spent their time and carries out the household duties in this house when men are working outside. The openness of the internal space, the compound and the floor culture of Malays allow the inhabitants to held "*kenduri*" for wedding ceremony and other religious events in the house.



Figure 1. The External Environment (Source: Lim, 1987)



Figure 2. The Internal Usage of Traditional Malay house (Source: Gibbs, 1987)



Figure 3. The Additional Traditional Malay House System (Source: Lim, 1987)

2.2 Alteration of Traditional Malay House

Alteration projects for housing involve preparation of basic design, demolition work, relocation and new installation of building structures and materials (Isnin et al., 2012). According to Gibbs (1987), the modernization on the Malay house began during the British colonial period when modern facilities of the new building materials and living equipment are imported. Zinc is introduced as the material for the new roof, brick and cement has become new building material that replacing timber, and modern furniture are used as examples are sofa and tables.

2.3 Heritage Village

As recognized by the Malacca Museums Corporation (PERZIM, 2016), heritage village functions as a tourist location promote the village. In Malacca, the heritage village are gazetted under the Conservation and Restoration of Cultural Heritage 1988 Enactment (Amendment 1993) and seven heritage villages are selected: Kampung Morten, Kampung Chitty, Kampung Portugis, Perkampungan Baba Nyonya Melaka, Kampung Banda Kaba, Kampung Bukit China and Kampung Sidang Seman. Conservation needs to consider in the recognition process the architectural and building design, the residents' culture and customs, daily activities of Malays, traditional craft and food business.

According to Kamaruddin (2015), alteration is needed nowadays where the presence of traditional Malay house are in four different states of continued existence; (1) modification or extension of old structures (2) adaptation or reuse of an old building (3) reconstruction of old structure (4) adoption of the architectural form in modern materials and construction. The TMH in Kampung Sidang Seman is facing modification or extension of old structure that affected the structures and spatial element layout of the house. Thus, the literature study above explained theoretically the characteristics and usage of TMH, the alteration where the investigation and observation of TMH are carried out which focused on the spatial element of the house, and the heritage village.

3.0 METHODOLOGY

Kampung Sidang Seman (KSS) was chosen as the case study area which it is categorized as one of the heritage village in Malacca that mainly occupied by Malays. This village is a small village found in Kampung Sungai Rambai located at the South of Malacca in Jasin district. Although the history of the village has not yet been documented, it has been gazetted by the government as a heritage village due to its potential for conservation of TMH, traditional culture and rural lifestyle. The sampling selection of the houses' criteria applied are: (1) constructed with timber structure excluding extension parts (2) structure raised on stilts or piers (3) existing of *rumah ibu* and *rumah dapur*.

Investigations and observations on the alteration of TMH are conducted in terms of spaces and functions. The interviews are held to identify the background of the house and the factors of alteration done. There are almost 110 houses are found but only 27 houses are still remained as the TMH in the village as listed in the sampling criteria. However, in this study, only eight houses are investigated and

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documented in this papers. Written notes, sketches on spatial layout of the house and photo is taken for the purpose of data analysis.

4.0 RESULT AND DISCUSSION

The findings of this research study are deeply explained in Table 1. As listed in sampling criteria, the selected TMH structure raised on floor, however, there are also some TMH are brought on the ground level but still remained the original layout as a traditional house. Based on investigation and observation, only 2 houses fulfill the criteria of research sampling where the structure raised on floor and *rumah ibu* and *rumah* dapur still existed such in case study 1 and case study 2. Meanwhile, there are only 3 houses on stilts still maintained the *rumah ibu* as shown in case study 3, 4 and 5. But, in case study 6 show the structure still on stilts but the original of *rumah ibu* and *rumah dapur* are altered where it structures are on ground. In addition, the others traditional houses are found where the structure were brought on the ground level as shown in case study 7 and 8. Both of these case studies still preserved the spatial layout of *rumah ibu* and *rumah dapur*. Nowadays, both of these areas have been altered the functions into a family areas. Furthermore, the extension works are built with concrete structure on the ground level where it mostly done next to *rumah dapur* in order to provide more spaces and to include toilet in the house.

No	Case Study	Spatial Element	Descriptions		
1		Layout	<i>Serambi, rumah ibu</i> and <i>rumah dapur</i> still remained structure on stilts but only <i>rumah ibu</i> and <i>rumah dapur</i> are altered the functions by adding walls for into bedrooms. The extension is built at the back space of the house and on ground. These areas are functions as a religious area, bedroom, kitchen and toilet.		
2		Long Hall	The <i>serambi, rumah ibu</i> and <i>rumah dapur</i> still remained as original structure which is on stilts. However, both of <i>rumah ibu</i> and <i>rumah dapur</i> have altered its functions into bedrooms. An extension is built on the ground that purposely used as a living hall, kitchen and toilet.		
3		Testing Ration Living Math Bittion 4 Image Bitting Math Bitting Math Bitting Math Image Bitting Math <t< td=""><td>The whole house structure brought on the ground except for the <i>rumah</i> <i>ibu</i> still existed. But, this space has been altered into bedrooms. However, the extensions is made in front of the house in order to provide space for gallery purpose while at the back is used for family purposed. An external toilet is also built outside the house for public use.</td></t<>	The whole house structure brought on the ground except for the <i>rumah</i> <i>ibu</i> still existed. But, this space has been altered into bedrooms. However, the extensions is made in front of the house in order to provide space for gallery purpose while at the back is used for family purposed. An external toilet is also built outside the house for public use.		
4		Anerodo in ten ty- Letters	The <i>serambi</i> and <i>rumah ibu</i> is the only structure remained on stilts. The functions of <i>rumah ibu</i> has altered into family space such as family hall and bedroom. Then, the extension is created at the side and back of the house by adding space for living hall, bedrooms, kitchen, and toilet.		
5		Ved Klaher Proteiner Proteiner Bestoorn denner denner Serand Serand Serand Serand	The original structure of <i>rumah dapur</i> demolished in 1970 and new building constructed on the ground. An alteration done at the <i>rumah ibu</i> by adding wall to provide space for bedroom. Therefore, an extensions also been carried out at the back space of the house in order to provide new spaces for living hall, bedrooms, kitchen and toilet.		

Table 1 The Alteration of Spatial Element Layout in Traditional Malay House

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6	Beneard Mithun De Kalan Beneard Ben	The <i>serambi</i> is the only structure remained as original and on stilts. However, the original spatial layout of <i>rumah ibu</i> and <i>rumah dapur</i> still preserved even it has brought on the ground. These area are altered the functions into bedrooms. The extension is done at the back space of the house to create huge space for kitchen. Toilets are built inside the house to replace <i>pelantar</i> .
7	Whole structure on the local of	The whole structure of the house brought on the ground and the original layout of the house are maintained. The combinations space of <i>rumah ibu</i> and <i>rumah dapur</i> are altered into bedrooms and family hall. An extension is made at the back space of the house to add space for kitchen and attached toilets.
8	Abradom many termination of the second termination of termination of the second termination of termination of terminatio	The whole structure of the house brought on the ground but the original spatial layout still remained. The function of <i>rumah ibu</i> altered to create a bedroom while <i>rumah dapur</i> for dining area and bedrooms. Extension is made at the right and back space of the house to provide more bedrooms, huge living halls, kitchen and attached toilet.

4.1 The Factors of Alteration on Traditional Malay House

Based on findings from the interview session, there are few factors contributes in the alteration work of traditional Malay house that affected on it physicals and traditional spatial elements of traditional houses as shown in Table 2. The highest factors of alteration is due to family increased where it is the mainly reason why the alteration done on TMH. This is proved by the owners where more bedrooms are added in the house that affected the functions of existing *rumah ibu* and *rumah dapur*. Meanwhile, the second highest is because of timber decayed and termite attacked due to the house ages. Timber is easily to decay if it is not well maintained as required and currently the cost of timber is much expensive than brick or cement. This allowed the owner to substitute the timber into modern materials where it is much better in terms of price and maintenance cost. However, due to poor drainage system in old time, most of TMH in KSS have altered their houses after received compensation from the state government. These caused most of the house structure brought on the ground level and modern designed. This has mentioned before where there are 110 houses in the village but only 27 houses still maintained the characteristics of TMH. Lastly, the others factor only found in case study 3 which it has become a landmark of the village where some part of the house altered into gallery.

No	Factors	Descriptions	Case study	Numbers
1	Family Their needs more spacing in the house in orde		C1, C2, C3,	8
	increased	have a privacy and more comfortable living	C4, C5, C6,	
		environments. New function are created in order to	C7, C8	
		provide more spacing for living rooms, kitchen and		
		bedrooms where caused the extension works in the		
		house.		
2	Timber	The villagers decided to change the timber materials	C1, C4, C5,	6
	decayed and	into concrete structure for extension and renovation	C6, C7, C8	
	termite	work where timber and wood are more costly. Their		
	attacked	also concluded better to use a modern materials such		
		as brick or concrete structure because their incapable		
		to maintain the timber structure due to facing a		
		financial problem.		

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4	Poor drainage	The village had facing a poor drainage system that	C2, C9	2
	system	caused bad flood that affected their houses. As a		
		result, drainage and infrastructure work done in the		
		village in order to overcome the flood problems.		
5	Others	The house owner has altered the function of the	C3	1
		house into a gallery where it operate as an		
		exhibitions that shows the historical of the village		
		and the background and hierarchy of families'		
		owner.		

5.0 CONCLUSION AND FUTURE WORKS

In this paper, the existing spatial elements of *rumah ibu* and *rumah dapur* still can be seen at the most of the house in the village either the structure on stilts or on ground level. However, most of the case studies have altered the existing spatial layout into family areas. Theoretically, the internal usage of TMH is influenced by the Islam religion where the space functions for man and woman are built separately. Unfortunately, nowadays, the internal spatial usage of TMH have mixed either for man or woman. Therefore, the extension work mostly done next to *rumah dapur* and built on the ground level with concrete structure. Effect from that, the design of TMH disappear when the additional system of TMH is not implemented as required. There are various of additional system that can implemented in extending the house but most of the owner nowadays just extended at the back of the house which it is offense to TMH. In conclusion, these clearly shows that the spatial usage of traditional Malay house has been extinction due to our cultures and environments nowadays.

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