Plurality of the Vernacular Houses of Orang Siam in the Northern States of Malaysia

Supawadee Chuapram¹ Tanasun Tapparut²

^{1 2} Department of Architecture, School of Architecture and Design, University of Walailak University, Nakorn Si Thammarat, Thailand Email: ¹csupawad@wu.ac.th,² t.tanasun@gmail.com

Abstract

It is well known that the identity of vernacular houses are similar or different based on the adaptation of specific context of each region due to the change of physical environment and cultures, This can be emphasized in the kinship of Thai Buddhist (Orang Siam) vernacular houses in the Northern State of Malaysia, especially in Kedah and Kelantan where Orang Siam have settled in the most.

This study was conceptualized in order to find out the characteristics of the vernacular houses of the Orang Siam. In aims to identify the similarities and differences and reasons for the same. The research used qualitative research methods: especially the field surveys together with documentary analysis.

It revealed that the vernacular house of the Orang Siam in Kedah was adapted due to the external factors including political and administrative factors. It uncovered that the house patterns of the vernacular houses, expanded semi-detached houses, and gable roof houses that were similar to the houses of Southern Thai Muslims. Most houses of Orang Siam in Kelantan maintained the old patterns except form the purpose of repair and maintenance. The houses were semi-detached and single houses extended with the roof to expand the utility space. Nevertheless, both areas still maintained the beliefs in Buddhism, kinship and Thainess.

Keywords: Vernacular House, Orang Siam, Kelantan, Kedah, Malaysia

Introduction

The studies on the southern Thai Buddhist houses in Thailand have shown that "All house patterns have the common characteristic of the floor layout" (Panin, 2004). Moreover, the research on the houses located at the Sonkhla Lake basin has shown that not only were they in harmony with the environment, climate and cultures in the southern region context that maintained the existence of vernacular houses but also the internal factors including the strength of kinship, concepts and belief in Buddhism and former experience in self-adjustment (Chuapram, 2013:176). However, in other regions, the houses of Thai Buddhists should be studied whether it would have the same conclusion or not.

The southern Thai Buddhist and Orang Siam (Malaysian Siamese) in Malaysia have settled in for long times are the relatives of Thais who came since in the old days before the secession. This group of Thais is living in the northern state of Malaysia i.e. Kedah (Sai Buri), Kelantan, Perlis, and Terengganu, especially in Kedah (Sai Buri) and Kelantan where Thais have settled in the most and call themselves as the "Orang Siam" meaning the Malaysian Siamese who are the original Siamese (Tipsrinimit, 2011: 16). The document of Tipsrinimit

(2011: 8-12) revealed that Pendang was the largest center of Malaysian Siamese in Kedah, particularly Baan Plai Ramai or Kampong Titi Akar that was the ancient community of Malaysian Siamese. They were settled in for hundred years before the reign of King Rama V where Wat Plai Ramai was the community center and Tumpat in Kelantan was selected as the study area. Most Thai in Kelantan had settled down in Tumpat where Wat Pikulthongwararam (Wat Bo Samet). People in Kelentan respect this as the center. Both states had different environmental, social, economic, and political contexts. This has led to the question what the house of Siamese would be because they were not the original Malayans. It also raises the question what would be the difference or similarity of the Siamese in Kedah (Sai Buri) and Kelantan in Malaysia, and what factors and causes affect their adaptation in the different context that reflect of plurality of vernacular architecture under the holistic view.

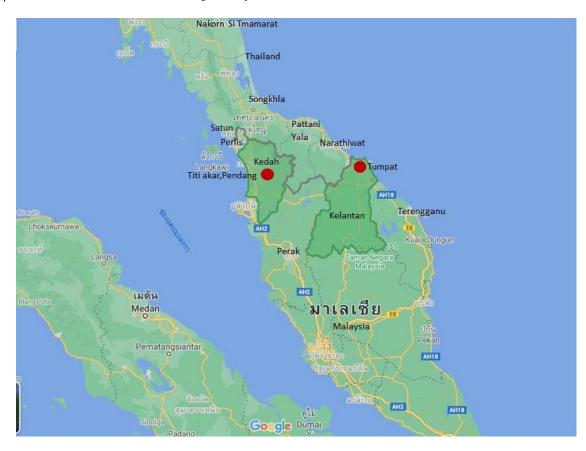


Fig. 1: The location of selected Siamese community of Kedah and Kelantan, Malaysia Source: Author (modified from Google map, 2019 and Tipsrinimit, 2011)

From the study of Tipsrinimit (2011) was the identity of Siam's culture of Kelantan and Kedah that emphasized Siamese have still aware of being Thai and conserved the traditional Thai lifestyle. Panin (2014) compared the Thai houses of Narathiwat province, Thailand with Siam house of Kelantan found the relationship of kinship and the similarity of characteristics of their house. Chuapram (2018) studied the transformation of Thai Buddhist Houses in Nakorn Si Thammarat and Songkhla province in Southern of Thailand with Siamese in Kedah, Malaysia that pointed the Siamese of Kedah have greatly adapted from political factor significantly different from the Thai houses in Southern Thailand. This studied increase the picture of Southern Thai house and their change clearly, and showed the adaptability of vernacular house in different local policy and location focus point to compare the transformation of Siam houses especially Kelantan and Kedah that in the past were the State of Siam.

METHODS

The 50-year-old houses of Orang Siam in Kampong in Kedah and Kelantan, four houses of each area were selected to study the architectural characteristic in this qualitative survey research. Documents study and pilot study method were applied. The houses that maintained the traditional culture and reflected the relationship between the surrounding were selected. For the pilot study, the tool involved the participatory observation, non-structured in-depth interview. The integration of maps, photographs, architectural survey and drawing, and morphological planning was used to analyze the data with the documents and survey data. The cultural ecology concept, attitude and beliefs of the southern people in Buddhism, the socio-culture, and southern traditional architecture changes were analyzed in order to answer the research questions.

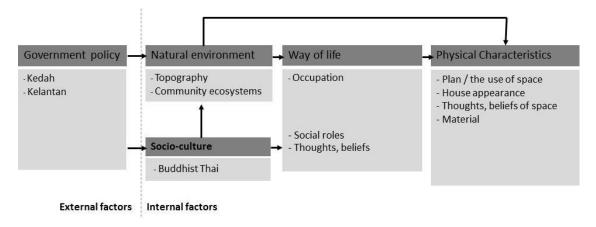


Fig. 2: The Conceptual Framework Source: Author

The Physical Characteristics of Southern Buddhist Thai House

The study of Tipsrinimit (2011) and Chuapram (2018) concluded the observation of the current connection between Nakon Si Thammarat, Sonkhla and Kedah (Sai Buri) in Malaysia that were related in multiple aspects. Firstly, Kedah (Sai Buri) was adjacent to Songkhla and the Buddhist Thais settled down in this state the most. Secondly, Kedah (Sai Buri) was one of the 12 zodiac cities in Nakon Si Thammarat which the politic and administration linked to Nakon Si Thammarat for a long time. Thirdly, it was from the saying of people "Kin Muang Khon Non Muang Sai" or eats in Nakon Si Thammarat and sleep in Sai Bur. Lastly, Siamese in Kedah spoke southern dialect with the accent of Nakon Si Thammarat and Songkhla. Moreover, the phrase that Siamese in Malaysia always said "we have to visit Prathat Muang Nakon to pay a respect once in our life" showing the close relationship among Thai Buddhist.

Pongpaiboon (1999) concluded the study that the Thai southern vernacular house had the high slope roof with short eaves. The panel had the horizontal louver with a small windows in the post intervals. The posts were on the ground founded on the footing. Most houses were semi-detached house that were extendable (for the extended family). The house layout faced to the east while the kitchen and barn were located across. The head of bed heading towards the south. The floor had many levels showing the respect and hierarchy. Head was considered the high position. The undercroft was rarely used. It was in line with **Figure 2** of the research of Chuapram (2018) on the houses in Songkhla, Thailand, which adjacent to Kedah, Malaysia, that illustrated that the houses had twin gables and was designed for the extended family. The utility space was connected with the roofing central hall. The kitchen was laid across at the back.



Fig. 3: The Buddhist Southern Thai house in Songkhla Province, Thailand Source: Author (modified from Chuapram, 2018)

The research of Panin (2014:38) compared the traditional Songkhla house and the Buddhist Thai house in Narathiwat, Thailand, which was the province adjacent to Kelantan, Malaysia, to the house of Orang Siam in Tumpat, Kelantan, Malaysia. It was obvious that the house area and house layout of the three types of house were the same.

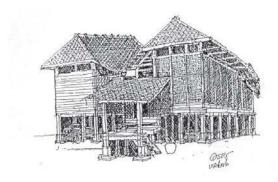


Fig.4: The Buddhist Southern Thai house in Narathiwat Province, Thailand Source: Panin, 2018: 38

Background of Siamese in Malaysia

Siamese in Kedah

Siamese has been settled down in the northern state of Malaysia for hundred years. Arun A/L Boontiang, cited in Tipsrinimit (2011: 3) stated that "During the 18-19 Century, there was the economic crisis in Songkhla and Nakon Si Thammarat. Some people relocated to Sai Buri (currently Kedah) which was the vast and plentiful area where the governor promoted the plantation". Nakseethong & Puttichot (2007: 26) explained that the geopolitics of Kedah (Sai Buri) was the land bridge to connect the international trade so there was the migration of ethnic groups as well as Thai people who relocated to earn a living and settle in Kedah. This group of Thais maintained the famer way of life because it was the "reclamation". Some historical documents presented the settlement of Siamese in Sai Buri which implied that Sai Buri was the plentiful and significant port until it was dominated by Siam, as the administrative subdivisions of Thailand, till the treaty with the Great Britain was signed in

1909. The most important turning point was when Great Britain announced the decolonization to Federation of Malaya in 1957. Since then, Siamese in Malaysia changed the nationality to Malaysian as the original settler (landowner) and most of them lived in Kedah (Sai Buri) and Kelantan respectively. Tipsrinimit (2011: 13) research results showed that these Siamese had the awareness of being Thai, were proud of Thai origin, and maintained Thai way of life strictly. Most were rice farmer, planted rubber tree, owned the orchard, and worked for hire. Wat Plai Ramai was the center of community (Kampong Titi Akar) was the foothills of the conserved forest where Ramai canal flew through.



Fig. 5: The location of Kampong Titi Akar, Pendang, Kedah, Malaysia Source: Google Earth (2019)

The change of administration affecting Kedah (Sai Buri) in Malaysia that was summarized by Nakseethong & Puttichot (2007) and Tipsrinimit (2011) was as follows.

- 1) During 1785-1897, Kedah was under the influence and administration of Siam as the tributary state.
- 2) During 1897-1909, Kedah was under the influence and administration of Siam as the administrative subdivisions of Thailand until the treaty with the Great Britain was signed in 1909.
- 3) During 1909-1941, Kedah was dominated by the Great Britain. There was no major incident affecting Siamese in Malaysia because the Great Britain was not pay attention to the minority.
- 4) During 1942-1945, Kedah was under the domination of Japan. During the World War II, people had a difficult time and were stressful due to the strict administration of Japan during that time.
- 5) During 1946-1956, Kedah was dominated by the Malayan Union and Federated Malay States. The Great Britain played the role after the World War II by establishing "Malayan Union" to administrate Malaya with the absolute centralization and minimize the authority of the Sultan of each state. As a result, there was the strong resistance and it finally changed to "Federated Malay State". During 1949-1952, the Malayan Communist Party was taken down and "The Briggs Plan" was set up to control the citizen to not cooperate with the communist. Consequently, Siamese community in Kedah encountered the very difficult time so the temple, religious places and objects were destroyed. Some Siamese migrated.
- 6) During 1957-present, Kedah is dominated by Malaysia. Siamese are known as Malaysian Siamese though there is a separation by the state border and administration.

However, Siamese in this area consider themselves as "Siamese" which represents their pride of being Thai and the right of being the citizens of Malaysia.

At Plai Ramai community_(Kampong Titi Akar), there were two types of households. First type was the house surrounded by the land. The houses were located at a distance along the road near Wat Plai Ramai. Second type was the cluster of houses where the land was located in the distance. According to the new house layout and land, the cluster was located to the South of Wat Plai Ramai. From the history, "The Briggs Plan" project aimed to suppress the Chinese Malayan communists. During 1952-1949, Siamese from Plai Ramai community were moved to "the coop" at Baan Tai Talad and Baan Nakah. Later, they relocated back to Wat Plai Ramai (Nakseethong & Puttichot, 2007). Such migration affected the community, as well as the existence of houses and the house patterns of the Siamese.

The Siamese in Kelantan

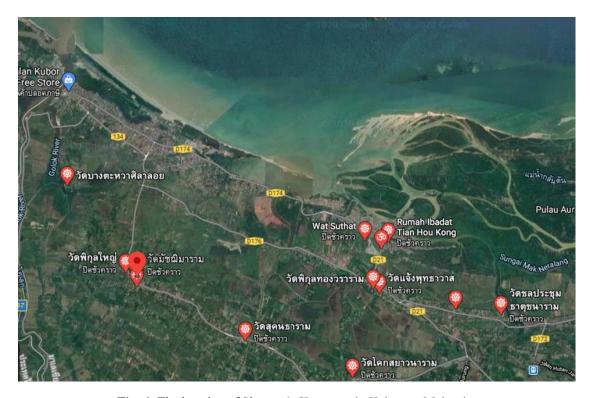


Fig. 6: The location of Siamese's Kampong in Kelantan, Malaysia Source: Google Earth (2019)

Some "Siamese" in Kelantan were local people who settled down and transferred the way of life from generation to generation while some migrated afterwards. However, all Siamese were settled before the delimitation, after the treaty with the Great Britain in 1909. The Talweg of the Golok River and Tak Bai River which were the branches of the Golok River was the boundary line. Consequently, the Siamese who were living in the South of the Golok River became "the landowner" or the "Orang Siam", as well as those in Tumpat, Kelantan, Malaysia. There, the density of habitation was high, particularly in Baan Bo Samet (Kampung Terbak), Baan Yung Kao (Kampung Jubakar), Baan Bang Tawa (Kampung Mentua), and Baan Khok Saya (Kampung Kok Seraya). Most of them were involved in agriculture doing rice f arming, rubber, coconut or vegetable plantation, as well as the mixed orchards. Currently, rice farming is rarely seen; accounts to only 30%, although the geographical characteristic of the area is lowland while the remaining area is the mountain and the forest (Chaisorn, 2008: 18-22; Panin, 2014:27). Moreover, the government constructed the road along the South China Sea which became the dam. Thus, there was

insufficient water for rice farming. Some people turned to grow tobacco or vegetables. As a result, the barn was abundant (Tipsrinimit, 2011:111-114; Panin, 2014: 28).

The politic and the administration affecting Kelantan was not different from that of Kedah but Kelantan had no influence from the suppression of the Chinese Malayan communists during 1949-1952. Therefore, most houses were maintained in the same condition. However, it was affected by the local administrative policy because the state was very strict within Islamic culture.

Regarding the role of political party affecting the Orang Siam, Nakseethong & Puttichot (2007: 51has (pointed out that the Siamese in Kedah were the strong base of the Umno Party which had the power in the federal and local administrative organization. For this reason, Siamese had the right and liberty and the support for doing activities when compared to the Siamese in Kelantan. Meanwhile, Pan-Malayan Islamic Party, the leader of the opposition party formed a party based on Islam and had major support from the northeastern region i.e. Kelantan and Terengganu, where some Siamese were located and was very strict in Islamic culture.

The habitation of Siamese in both areas was similar. The houses were in clusters and had unity. They helped and supported each other under the kinship relation (Tipsrinimit, 2011; Panin, 2014:28).

A Comparison of Vernacular Houses

From the pilot study, photographs, in-depth interview, architectural survey and the drawings, four houses from each community were selected to compare the way of living affecting the houses in both areas, as shown in Table 1.

Table1: 1 The Comparative of living way and their house of Orang Siam in Kedah and Kelantan

Issue	Kampong in Kedah (K01-K04)	Kampong in Tumpat, Kelantan (T01-T04)
House	K01 House's ages: More than 50 years Owner's ages: 50 years - Built by the father	T01 House's ages: More than 50 years Owner's ages: 51 years - Built by the father
House's age/Owner's ages	K02 House's ages: More than 50 years Owner's ages: 72 years - The linage moved from the coop in front of the temple K03 House's ages: More than 33 years Owner's ages: 72 years - Built by the father who moved from Nakha kampong K04 House's ages: More than 70 years	T02 House's ages: More than 70 years Owner's ages: 63 years - Built by the father T03 House's ages: More than 50 years Owner's ages: 82 years - Built by the owner T04 House's ages: More than 60 years Owner's ages: 40 years - Built by the father
	Owner's ages: 78 years - Built by the father who moved from the coop in front of the temple	
Number of Residents	K01 6 pax.in the past but currently 4 pax. K02 10 pax. in the past but currently 2 pax.	T01 Currently 4 pax. T02 Currently 5 pax.
r of ats	K03 5 pax. in the past but currently 4 pax. K04 12 pax. in the past but currently 6 pax.	T03 6 pax. in the past but currently one pax. T04 Currently 8 pax.

No. 1 No. 2 No.	
T03 Rice farming, tobacco plantation	ously Nora
T04 Rice farming, growing vegetables	
K01 Semi-detached house with the extended kitchen on the side. Multiple floor levels. K02 Semi-detached house with many bedrooms, extended kitchen and multiple floor levels. K03 Semi-detached house with additional house connected with the ground floor. K04 Semi-detached house connecting with the kitchen, have rice room and multiple floor levels. K01 Twins gable house which the long-side facing to the south. K02 Triplets gable house which the long-side facing to the south. K03 Gable house connected with the new twin's concrete building at multiple levels. K04 Twins hip gable house connected with the new thouse facing the east. K04 Twins hip gable house connected with the new house facing the east. K05 Light structure with crossbeam around the post with the carved tile. K06 Light structure, unconventional. K08 Single crossbeam and stud beam with gable carved tile roof. K08 Hod lowards the east and the Buddha altar and image of ancestor in front of the bedroom. K08 Head towards the south and the image of the King and Buddha altar in front of the bedroom. K04 Head towards the south and the image of the King and Buddha altar in front of the bedroom. K04 Head towards the south and the east, the Buddha altar and image of ancestor in front of the bedroom. K04 Head towards the south and the east, the Buddha altar and image of ancestor in front of the bedroom. K04 Head towards the south and the east, the Buddha altar and image of ancestor in front of the bedroom. K05 Head towards the south and the east, the Buddha altar and image of ancestor in front of the bedroom. K06 Head towards the south and the east, the Buddha altar and image of ancestor in front of the bedroom. K06 Head towards the south and the east, the Buddha altar and image of ancestor in front of the bedroom.	
the back and multiple floor levels. K02 Semi-detached house with many bedrooms, extended kitchen and multiple floor levels. K03 Semi-detached house with additional house connected with the ground floor. K04 Semi-detached house connecting with the kitchen, have rice room and multiple floor levels. K01 Twins gable house with separate double-roof kitchen for ventilation. K02 Triplets gable house which the long-side facing to the south. K03 Gable house connected with the new twin's concrete building at multiple levels. K04 Twins hip gable house connected with the new house facing the east. K05 Triplets gable house connected with the new house facing the east. K06 Triplets gable house which the long-side facing to the south. K07 Triplets gable house connected with the new house facing the east. K08 Twins hip gable house connected with the new house facing the east. K09 Twins hip gable house connected with the new house facing the east. K01 Original structure with crossbeam around the post with the carved tile. K02 Light structure, unconventional. K03 Single crossbeam and stud beam with gable carved tile roof. K04 Single crossbeam and stud beam with gable carved tile roof. K05 Single crossbeam and stud beam with gable carved tile roof. K06 Head towards the east and the Buddha altar and image of ancestor in front of the bedroom. K07 Head towards the south and the image of the King and Buddha altar in front of the bedroom. K08 Head towards the south and the image of the King and Buddha altar in front of the bedroom. K08 Head towards the south and the east, the Buddha altar and image of ancestor in front of the bedroom. K08 Head towards the south and the east, the Buddha altar and image of ancestor in front of the bedroom. K08 Head towards the south and the east, the Buddha altar and image of ancestor in front of the bedroom. K09 Head towards the south and the east, the Buddha altar and image of ancestor in front of the bedroom.	citchen at
K03 Semi-detached house with additional house connected with the ground floor. K04 Semi-detached house connecting with the kitchen, have rice room and multiple floor levels. K01 Twins gable house with separate double-roof kitchen for ventilation. K02 Triplets gable house which the long-side facing to the south. K03 Gable house connected with the new thouse facing the most with gable house connected with the new house facing the east. K04 Twins hip gable house connected with the new house facing the east. K04 Twins hip gable house connected with the new house facing the east. K01 Original structure with crossbeam around the post with the carved tile. K02 Light structure, unconventional. K03 Single crossbeam and stud beam with gable carved tile roof. K04 Single crossbeam and stud beam with gable carved tile roof. K04 Head towards the east and the Buddha altar and image of ancestor in front of the bedroom. K05 Head towards the south and the image of the King and Buddha altar in front of the bedroom. K06 Head towards the south and the image of the King and Buddha altar in front of the bedroom. K07 Head towards the south and the image of ancestor in front of the bedroom. K08 Head towards the south and the image of the King and Buddha altar in front of the bedroom. K09 Head towards the south and the image of the King and Buddha altar in front of the bedroom. K09 Head towards the south and the image of the King and Buddha altar in front of the bedroom. K09 Head towards the south and the image of the King and Buddha altar in front of the bedroom. K09 Head towards the south and the east, the Buddha altar and image of ancestor in front of the bedroom. K09 Head towards the south and the east, the Buddha altar and image of ancestor in front of the bedroom. K09 Head towards the south and the east, the Buddha altar and image of ancestor in front of the bedroom. K09 Head towards the south and the east, the Buddha altar and image of ancestor in front of the bedroom. K09 Head towards the south and the eas	citchen at
connected with the ground floor. K04 Semi-detached house connecting with the kitchen, have rice room and multiple floor levels. K01 Twins gable house with separate double-roof kitchen for ventilation. K02 Triplets gable house which the long-side facing to the south. K03 Gable house connected with the new twin's concrete building at multiple levels. K04 Twins hip gable house connected with the new house facing the east. K01 Original structure with crossbeam around the post with the carved tile. K02 Light structure, unconventional. K03 Single crossbeam and stud beam with gable carved tile roof. K04 Single crossbeam and stud beam with gable carved tile roof. K05 Lead towards the east and the Buddha altar and image of ancestor in front of the bedroom. K06 Head towards the south and the image of the King and Buddha altar in front of the bedroom. K06 Head towards the south and the east, the Buddha altar and image of ancestor in front of the bedroom. K07 Leage so the south and the east, the Buddha altar and image of ancestor in front of the bedroom. K06 Head towards the south and the east, the Buddha altar and image of ancestor in front of the bedroom. K07 Leage so the kitchen, multiple floor levels. T07 Single and hip roof house connected kitchen at the back, facing to the east. T08 main building with hip roof and gable roof with extended gable roof twith extended gable roof twith extended gable roof to expand the utility. The house facing to the east. T08 main building with hip roof house connected kitchen at the back, facing to the east. T09 main building with hip roof house connected with the new house facing to the east. T08 main building with hip roof house connected with east. T09 main building with hip roof house connected with east. T08 main building with hip roof house connected kitchen at the back, facing to the east. T08 main building with hip roof house connected with east. T08 main building with hip roof house connected kitchen at the back, facing to the east. T08 main building w	en with
kitchen, have rice room and multiple floor levels. K01 Twins gable house with separate double-roof kitchen for ventilation. K02 Triplets gable house which the long-side facing to the south. K03 Gable house connected with the new twin's concrete building at multiple levels. K04 Twins hip gable house connected with the new house facing the east. K01 Original structure with crossbeam around the post with the carved tile. K02 Light structure, unconventional. K03 Single crossbeam and stud beam with gable carved tile roof. K04 Single crossbeam and stud beam with gable carved tile roof. K05 Single crossbeam and stud beam with gable carved tile roof. K06 Single crossbeam and stud beam with gable carved tile roof. K07 Lage Single crossbeam and stud beam with gable carved tile roof. K08 Single crossbeam and stud beam with gable carved tile roof. K09 Lage Single crossbeam and stud beam with gable carved tile roof. K09 Lage Single crossbeam and stud beam with gable carved tile roof. K09 Head towards the east and the Buddha altar and image of ancestor in front of the bedroom. K09 Head towards the south and the image of the King and Buddha altar in front of the bedroom. K09 Head towards the south and the image of the King and Buddha altar in front of the bedroom. K09 Head towards the south and the east, the Buddha altar and image of ancestor in front of the bedroom. K09 Head towards the south and the east, the Buddha altar and image of ancestor in front of the bedroom. K09 Head towards the south and the east, the Buddha altar and image of ancestor in front of the bedroom.	citchen at
K02 Triplets gable house which the long-side facing to the south. K03 Gable house connected with the new twin's concrete building at multiple levels. K04 Twins hip gable house connected with the new house facing the east. K04 Twins hip gable house connected with the new house facing the east. K04 Twins hip gable house connected with the new house facing the east. K01 Original structure with crossbeam around the post with the carved tile. K02 Light structure, unconventional. K03 Single crossbeam and stud beam with gable carved tile roof. K04 Single crossbeam and stud beam with gable carved tile roof. K05 Single crossbeam and stud beam with gable carved tile roof. K06 Single crossbeam and stud beam with gable carved tile roof. K08 Single crossbeam and stud beam with gable carved tile roof. K09 Light structure, unconventional. K09 Single crossbeam and stud beam with gable carved tile roof. K09 Light structure, unconventional. K09 Single crossbeam and stud beam with gable carved tile roof. T09 Large Single crossbeam and stud beam with gable carved tile roof. T09 Large Single crossbeam and stud beam with gable carved tile roof. T09 Large Single crossbeam and stud beam with gable carved tile roof. T09 Large Single crossbeam and stud beam with gable carved tile roof. T09 Large Single crossbeam and stud beam with gable carved tile roof. T09 Large Single crossbeam and stud beam with gable carved tile roof. T09 Large Single crossbeam and stud beam with gable carved tile roof. T09 Large Single crossbeam and stud beam with gable carved tile roof. T09 Large Single crossbeam and stud beam with gable carved tile roof. T09 Large Single crossbeam and stud beam with gable carved tile roof. T09 Large Single crossbeam and stud beam with gable carved tile roof. T09 Large Single crossbeam and stud beam with gable carved tile roof. T09 Large Single crossbeam and stud beam with gable garden carved tile roof. T09 Head towards the south and the east. T09 Head towards the south and the east, file Buddha altar	
The house facing to the east. The house facing to the south and the sack-roof for the kitchen and the such and the east. The house facing to the east. The house facing to the south. The house facing to the east. The house facing to the east. The house facing to the south. The house facing to the south. The house facing to the south. The facing to the south. The house facing to the south. The facing to the south and the	d with the
Concrete building at multiple levels. K04 Twins hip gable house connected with the new house facing the east. K01 Original structure with crossbeam around the post with the carved tile. K02 Light structure, unconventional. K03 Single crossbeam and stud beam with gable carved tile roof. K04 Single crossbeam and stud beam with gable carved tile roof. K05 Single crossbeam and stud beam with gable carved tile roof. K04 Single crossbeam and stud beam with gable carved tile roof. K05 Light structure, unconventional. K06 Single crossbeam and stud beam with gable carved tile roof. T03 Large Single crossbeam and stud beam with earthenware and carved tile roof. T04 Large Single crossbeam and stud beam with earthenware and carved tile roof. T05 Large Single crossbeam and stud beam with earthenware and carved tile roof. T06 Large Single crossbeam and stud beam with earthenware and carved tile roof. T08 Large Single crossbeam and stud beam with earthenware and carved tile roof. T09 Large Single crossbeam and stud beam with earthenware and carved tile roof. T09 Large Single crossbeam and stud beam with earthenware and carved tile roof. T09 Large Single crossbeam and stud beam with earthenware and carved tile roof. T09 Large Single crossbeam and stud beam with earthenware and carved tile roof. T09 Large Single crossbeam and stud beam with earthenware and carved tile roof. T09 Large Single crossbeam and stud beam with earthenware and carved tile roof. T09 Large Single crossbeam and stud beam with earthenware and carved tile roof. T09 Large Single crossbeam and stud beam with earthenware and carved tile roof. T09 Large Single crossbeam and stud beam with earthenware and carved tile roof. T09 Large Single crossbeam and stud beam with earthenware and carved tile roof. T09 Large Single crossbeam and stud beam with earthenware and carved tile roof. T09 Large Single crossbeam and stud beam with earthenware and carved tile roof. T09 Large Single crossbeam and stud beam with earthenware and carved tile roof.	
K04 Twins hip gable house connected with the new house facing the east. K01 Original structure with crossbeam around the post with the carved tile. K02 Light structure, unconventional. K03 Single crossbeam and stud beam with gable carved tile roof. K04 Single crossbeam and stud beam with gable carved tile roof. K05 Single crossbeam and stud beam with gable carved tile roof. K06 Single crossbeam and stud beam with gable carved tile roof. K07 Light structure, unconventional. K08 Single crossbeam and stud beam with gable carved tile roof. K09 Single crossbeam and stud beam with gable carved tile roof. T08 Large Single crossbeam and stud beam with earthenware and carved tile roof. T09 Large Single crossbeam and stud beam with earthenware and carved tile roof. T09 Large Single crossbeam and stud beam with earthenware and carved tile roof. T09 Large Single crossbeam and stud beam with earthenware and carved tile roof. T09 Large Single crossbeam and stud beam with earthenware and carved tile roof. T09 Large Single crossbeam and stud beam with earthenware and carved tile roof. T09 Large Single crossbeam and stud beam with earthenware and carved tile roof. T09 Large Single crossbeam and stud beam with earthenware and carved tile roof. T09 Large Single crossbeam and stud beam with earthenware and carved tile roof. T09 Large Single crossbeam and stud beam with earthenware and carved tile roof. T09 Large Single crossbeam and stud beam with earthenware and carved tile roof. T09 Large Single crossbeam and stud beam with earthenware and carved tile roof. T09 Large Single crossbeam and stud beam with earthenware and carved tile roof. T09 Large Single crossbeam and stud beam with earthenware and carved tile roof. T09 Large Single crossbeam and stud beam with earthenware and carved tile roof. T09 Lead towards the south and the east. T01 Head towards the south and the east, the Buddha altar and image of ancestor in front of the bedroom. T09 Head towards the south and the east, the Buddha altar and image	with the
Nouse facing the east. T04 Twins gable and hip roof house connected kitchen at the back, facing to the east.	
K01 Original structure with crossbeam around the post with the carved tile. K02 Light structure, unconventional. K03 Single crossbeam and stud beam with gable carved tile roof. K04 Single crossbeam and stud beam with gable carved tile roof. K04 Single crossbeam and stud beam with gable carved tile roof. K05 Single crossbeam and stud beam with gable carved tile roof. K06 Single crossbeam and stud beam with gable carved tile roof. K06 Single crossbeam and stud beam with gable carved tile roof. K07 Large Single crossbeam and stud beam with gable carved tile roof. T08 Large Single crossbeam and stud beam with earthenware and carved tile roof. T09 Large Single crossbeam and stud beam with earthenware and carved tile roof. T09 Large Single crossbeam and stud beam with earthenware and carved tile roof. T09 Large Single crossbeam and stud beam with earthenware and carved tile roof. T09 Large Single crossbeam and stud beam with earthenware and carved tile roof. T09 Large Single crossbeam and stud beam with earthenware and carved tile roof. T09 Large Single crossbeam and stud beam with earthenware and carved tile roof. T09 Large Single crossbeam and stud beam with earthenware and carved tile roof. T09 Large Single crossbeam and stud beam with earthenware and carved tile roof. T09 Large Single crossbeam and stud beam with earthenware and carved tile roof. T09 Large Single crossbeam and stud beam with earthenware and carved tile roof. T09 Large Single crossbeam and stud beam with earthenware and carved tile roof. T09 Large Single crossbeam and stud beam with earthenware and carved tile roof. T09 Large Single crossbeam and stud beam with earthenware and carved tile roof. T09 Large Single crossbeam and stud beam with earthenware and carved tile roof. T09 Large Single crossbeam and stud beam with earthenware and carved tile roof. T09 Large Single crossbeam and stud beam with earthenware and carved tile roof. T09 Large Single crossbeam and stud beam with earthenware and carved tile roof. T09 Large Si	
FO1 Change the roof file use lower window in the toilet. K02 Light structure, unconventional. K03 Single crossbeam and stud beam with gable carved tile roof. K04 Single crossbeam and stud beam with gable carved tile roof. K05 Single crossbeam and stud beam with gable carved tile roof. K06 Single crossbeam and stud beam with gable carved tile roof. K07 Large Single crossbeam and stud beam with gable carved tile roof. T08 Large Single crossbeam and stud beam with earthenware and carved tile roof. T09 Large Single crossbeam and stud beam with earthenware and carved tile roof. T09 Large Single crossbeam and stud beam with earthenware and carved tile roof. T09 Large Single crossbeam and stud beam with earthenware and carved tile roof. T09 Large Single crossbeam and stud beam with earthenware and carved tile roof. T09 Large Single crossbeam and stud beam with earthenware and carved tile roof. T09 Large Single crossbeam and stud beam with earthenware and carved tile roof. T09 Large Single crossbeam and stud beam with earthenware and carved tile roof. T09 Large Single crossbeam and stud beam with earthenware and carved tile roof. T09 Large Single crossbeam and stud beam with earthenware and carved tile roof. T09 Large Single crossbeam and stud beam with earthenware and carved tile roof. T09 Large Single crossbeam and stud beam with earthenware and carved tile roof. T09 Large Single crossbeam and stud beam with earthenware and carved tile roof. T09 Large Single crossbeam and stud beam with earthenware and carved tile roof. T09 Large Single crossbeam and stud beam with earthenware and carved tile roof. T09 Large Single crossbeam and stud beam with earthenware and carved tile roof. T09 Large Single crossbeam and stud beam with earthenware and carved tile roof. T09 Large Single crossbeam and stud beam with earthenware and carved tile roof. T09 Large Single crossbeam and stud beam with earthenware and carved tile roof. T09 Large Single crossbeam and stud beam with earthenware and carved tile roof.	d with the
K03 Single crossbeam and stud beam with gable carved tile roof. K04 Single crossbeam and stud beam with gable carved tile roof. K04 Single crossbeam and stud beam with gable carved tile roof. K05 Single crossbeam and stud beam with gable carved tile roof. T06 Large Single crossbeam and stud beam with earthenware and carved tile roof. T07 Large Single crossbeam and stud beam with earthenware and carved tile roof. T08 Large Single crossbeam and stud beam with earthenware and carved tile roof. T09 Large Single crossbeam and stud beam with earthenware and carved tile roof. T09 Large Single crossbeam and stud beam with earthenware and carved tile roof. T09 Large Single crossbeam and stud beam with earthenware and carved tile roof. T09 Large Single crossbeam and stud beam with earthenware and carved tile roof. T09 Large Single crossbeam and stud beam with earthenware and carved tile roof. T09 Large Single crossbeam and stud beam with earthenware and carved tile roof. T09 Large Single crossbeam and stud beam with earthenware and carved tile roof. T09 Large Single crossbeam and stud beam with earthenware and carved tile roof. T09 Large Single crossbeam and stud beam with earthenware and carved tile roof. T09 Large Single crossbeam and stud beam with earthenware and carved tile roof. T09 Large Single crossbeam and stud beam with earthenware and carved tile roof. T09 Large Single crossbeam and stud beam with earthenware and carved tile roof. T09 Large Single crossbeam and stud beam with earthenware and carved tile roof. T09 Large Single crossbeam and stud beam with earthenware and carved tile roof. T09 Large Single crossbeam and stud beam with earthenware and carved tile roof. T09 Large Single crossbeam and stud beam with earthenware and carved tile roof.	vith gable
Carved tile roof. K04 Single crossbeam and stud beam with gable carved tile roof. K04 Single crossbeam and stud beam with gable carved tile roof. K05 Head towards the east and the Buddha altar and image of ancestor in front of the bedroom. K06 Head towards the south and the image of the King and Buddha altar in front of the bedroom. K07 Head towards the south and the image of the King and Buddha altar in front of the bedroom. K08 Head towards the south and the image of the King and Buddha altar in front of the bedroom. K09 Head towards the south and the image of the King and Buddha altar in front of the bedroom. K09 Head towards the south and the image of ancestor and the King in front of the bedroom. T09 Head towards the south and the image of ancestor and the King in front of the bedroom. T09 Head towards the south and the image of ancestor and the King in front of the bedroom. T09 Head towards the south and the image of ancestor and the cast, the Buddha altar and image of ancestor in front of the bedroom. T09 Head towards the south and the image of ancestor and the King in front of the bedroom. T09 Head towards the south and the image of ancestor and the King in front of the bedroom. T09 Head towards the south and the image of ancestor and the King in front of the bedroom.	vith gable
T04 Large Single crossbeam and stud beam will earthenware and carved tile roof. K01 Head towards the east and the Buddha altar and image of ancestor in front of the bedroom. K02 Head towards the east and the Buddha altar and image of ancestor in front of the bedroom. K03 Head towards the south and the image of the King and Buddha altar in front of the bedroom. K04 Head towards the south and the east, the Buddha altar and image of ancestor in front of the bedroom. K04 Head towards the south and the east, the Buddha altar and image of ancestor in front of the bedroom. T04 Head towards the south and the east, the Buddha altar and image of ancestor in front of the bedroom.	vith gable
image of ancestor in front of the bedroom. K02 Head towards the east and the Buddha altar and image of ancestor in front of the bedroom. K03 Head towards the south and the image of the King and Buddha altar in front of the bedroom. K04 Head towards the south and the east, the Buddha altar and image of ancestor in front of the bedroom. T03 Head towards the south and the image of ancest the King in front of the bedroom. T04 Head towards the south and the east, the Buddha altar and image of ancestor in front of the bedroom.	vith gable
K02 Head towards the east and the Buddha altar and image of ancestor in front of the bedroom. K03 Head towards the south and the image of the King and Buddha altar in front of the bedroom. K04 Head towards the south and the east, the Buddha altar and image of ancestor in front of the bedroom. K04 Change the roof tile, use lower window in the toilet. T05 Change to the galvanized sheet nanel.	
K03 Head towards the south and the image of the King and Buddha altar in front of the bedroom. T03 Head towards the south and the image of ances the King in front of the bedroom. T04 Head towards the south and the east, the Buddha altar and image of ancestor in front of the bedroom. K04 Change the roof tile, use lower window in the toilet.	, image of
K04 Head towards the south and the east, the Buddha altar and image of ancestor in front of the bedroom. A04 Change the roof tile use lower window in the toilet. T01 Change to the galvanized sheet nanel.	estor and
K01 Change the roof tile, use louver window in the toilet. K02 Build the new house attached. K03 Change from the Sagu roof to tile roof and build the new house attached. K03 Change from the Sagu roof to tile roof and build the new house attached.	dha altar
K02 Build the new house attached. T02 Change the roof tile, change the bamboo panel panel. Current location of kitchen was the bedroom across the main building.	
K03 Change from the Sagu roof to tile roof and build the paw house attached panel. Current location of kitchen was the bedroom across the main building.	
C LINW INDOSE GUIGNIEN	ı that lay
T03 Change the roof material to curved tile. Use the undercroft space as the hall and bedroom as it is more convenient of the elderly.	
T04 Change the roof material to curved tile and from bamboo panel to the galvanized sheet.	m the

Kampong Titi akar, Pendang, Kedah



Kampong in Tumpat, Kelantan



Fig.7: House of Siamese in Kedah and Kelantan Source: Author

The Identity of Buddhist Southern Thai House

The similarities were that both are farmer communities who settled down near the river. Most were extended families which although they separated the houses, the linage's house was in the same boundary or close-by. The house layout was aligned with the direction of sunlight, wind and rain, had the undercroft and multiple floor levels, which was similar to the southern Thai Buddhist house (comparing the information in Table 1, Fig. 6, 8 and 10). Further, there were many beliefs about the house. For instance, to lay down heading to the South because the southern Buddhist Thai called it "the direction to sleep" or believed that the East was the blessed direction. They also believed to face the house to the East, not using the undercroft or the downstairs because they considered the head as the top respectful position, pay a respect to the elder that was reflected via the multiple floor levels. The elder sat at the higher position in the house, and did not allow the linage to point the tip of the foot to the main building where the elderly were. Further, they had a spirit column, Buddha altar and image of the ancestor in front of the bedroom. The kinship was represented via the ritual ceremony that showed the connection with the ancestors such as the welcoming God ceremony (Songkran Festival), the Tenth Lunar Month Festival and the ordination ceremony. The image of King Ram IX and the temples in Thailand represented the firm connection with Thailand and Buddhism.

The identity of habitation and house form of the Siamese and the Southern Buddhist Thai reflected the optimal adaptation to the environment and climate of the southern region of Thailand and Malaysia, including the cultures, beliefs, concepts of agricultural society, and Buddhist way of life.





Fig. 8: The space in front of the bedroom where the Buddha altar and image of King Rama IX and Queen the ancestor existed in almost every house. A sample of T03.

Source: Author

The Plurality of Buddhist Southern Thai House

Pisuthiratananon & Maneechot (1992) classified the houses into two types. First, the traditional house with the curve gable roof like the Thai house in the central region of Thailand. Second, it was the late traditional house with the hip roof. From the study on the vernacular house of the Orang Siam in Kedah, K1 was the semi-detached vernacular house which looked like the house in the central region of Thailand. The double-roof kitchen (and the double roof was also found in K4) was very rare in the southern part of Thailand. During the suppression of Malayan communists, the new house form was evident. The vernacular house of the Orang Siam in Kedah was different. Firstly, it was the house with the additional layout such as the longitudinal extended bedroom. The asymmetric semi-detached building had the added front porch with roof, such as K2 and K3 which were in the renovation group. Although the building was built from the traditional components, the extension or renovation was different due to various factors such as the size of allocated land, the number of residents, the direction of the road, and the building ratio to the new material. House structure comprised of the single crossbeam and stud beam or was the light structure because it was built for the habitation at that period only. The Second was the semi-detached hip roof house. It had the double-panel door and a veranda. The opening door was similar to that of the southern Thai Muslim or Malay house. The roof structure was complex. The building had the high panel and undercroft.

The house of Orang Siam in Kelantan had two different types. The first type was the semi-detached house which was similar to the house in Narathiwat. The research of Panin (2014) reported that it had the hip gable roof, such as T01 and T04. The second type was the extended gable or extended building house in order to expand the utility space, such as T02 and T03. Further, the layout and form showed that it was the vernacular house with the renovation. Some materials were still bamboo which might be assumed in three different assumption ways: the financial status of the Orang Siam was low because of the inequality of the rights for the Orang Siam offered by the local government which was lower than that of those in Kedah, the inconvenient access to the Orang Siam community in Kelantan, and the relationship among the relatives of the Orang Siam which was tight and closed to the Siamese in Thailand due to the adjacent area.

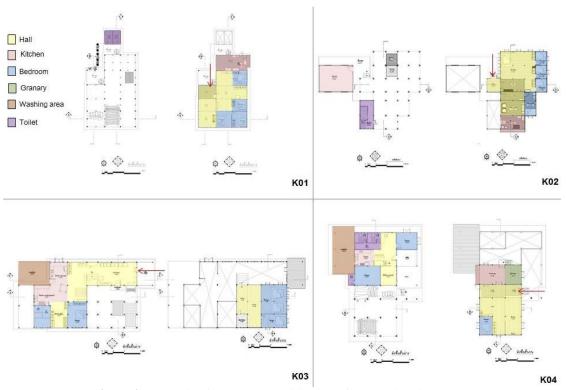


Figure 9: Analysis of house space utilization of Orang Siam in Kedah Source: Author

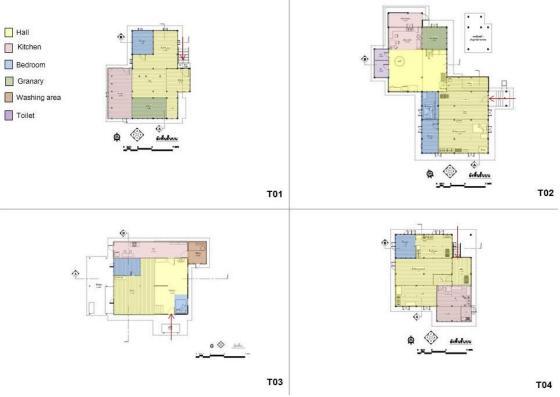


Figure 10: Analysis of house space utilization of Orang Siam in Kelantan Source: Author

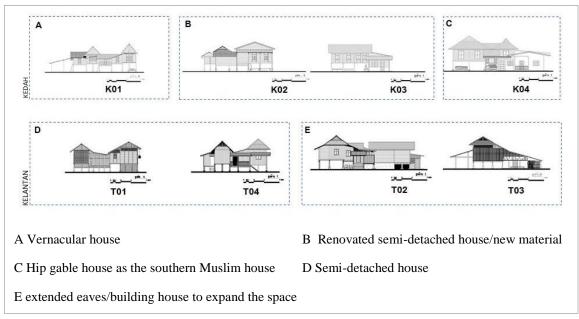


Figure 10: Analysis of house form of Orang Siam in both states Source: Author

Conclusion

The house reflected the harmony with the landscape, climate, society and cultures, concepts and beliefs in the agricultural way of life and Buddhism in the narrower context. The houses were different and had changed due to the difference of political and administrative factors. The house of Orang Siam in Kedah had more impact from the politics and administration, particularly the newly built house that had two different forms, the adjusted layout and the hip gable roof house which was similar to the southern Thai Muslim house or Malay house. Those of Orang Siam in Kelantan were the vernacular houses which were similar to the Thai Buddhist house in Narathiwat province of Thailand and was the extended house to increase the utility space. However, this research reflected the variety and difference of the traditional architecture based on the area of context where the way of life was the key factor affecting the changes of vernacular house and environment.

References

Armani, S. & Arbi, E. (2014) A Comparative Study on Chinese Architecture in Peninsular Malaysia and Mainland China. *Journal of Design and Built Environment*. 14(2): 1-15.

Chaisorn, P. (2008) Thai Temples in Kelantan: The Social and Economic Adaptation of a Buddhist Community in a Muslim State. Bangkok: The Thailand Research Fund. [in Thai]

Chuapram, S. (2018) Interrelationship of Living way and Vernacular Houses in Southern Buddhist Thai between Nakorn Sri Thammarat and Songkhla provinces, and orang Siam in Kedah Malaysia. Bangkok: The thailand research fund. [in Thai]

Nakseethong, P. & Puttichot, A. (2007) Thai People in Kedah: A study of Thai's existence in history (1785 - 2007). Bangkok: The thailand research fund. [in Thai]

Panin, O. et al. (2003-2004) Local wisdom development and relationship between Thai and Tai vernacular house sustainable qualities in Buddhist Thai vernacular house. Bangkok: The Thailand research fund. [in Thai]

Panin, O. (2014) The Kinship of the Vernacular Houses of The Orang Siam in Kelantan Malaysia. NAJUA: Architecture, Design and Built Environment. 17(1), 23-43. [in Thai]

Pisuthiratananon, M. & Maneechot, C. (1992) *The Southern Thai houses*. Institute for Southern Thai Studies, Srinakharinwirot University, Songkhla. [in Thai]

- Pongpaiboon, S. (1999) *The Southern Thai Vernacular Houses. Encyclopedia of Southern Thai Culture.* (Vol.16, pp.7704-7721) Bangkok: Foundation of Thai culture encyclopedia, The Siam Commercial Bank. [in Thai]
- Pongpaiboon, S. (2001) *Southern Thai cultural structures and dynamics vis-à-vis development.*Bangkok: The Thailand Research Fund. [in Thai]
- Somboon, V. (2007) Holistic pattern and meaning. Bangkok: Komol Keemthong. [in Thai]
- Wallipodom, S. (2002) Thai House. 2nd (ed.). Bangkok: Muangboranpress. [in Thai]
- Oliver, P. (1997) *Encyclopedia of vernacular architecture of the world*. Cambridge, UK: Cambridge University Press.
- Tipsrinimit, N. (2011) The Cultural Identities of the Thai People in the Northern States of Malaysia. (Unpublished Ph.D.'s thesis). Mahasarakham University, Mahasarakham , Thailand. [in Thai]
- Rapoport, A. (1969) House form and culture. Englewood Cliffs, N.J.: Prentice-Hall.
- Steward, J. (1979) *Theory of Culture Change: The Methodology of Multilinear Evolution.* 4th (ed.). Urbana: University of Illinois Press.