2. REVIEW OF RELATED LITERATURE

In the words of E.B. Tylor, "that complex whole which includes knowledge, belief, art, morals, law, custom and any other capabilities and habits acquired by man as a member of society." (Tylor 1871:1) Cambridge dictionary states that culture is, "the way of life, especially the general customs and beliefs, of a particular group of people at a particular time." As a defining aspect of what it means to be human, culture is a central concept in anthropology, encompassing the range of phenomena that are transmitted through social learning in human societies. The word is used in a general sense as the evolved ability to categorize and represent experiences with symbols and to act imaginatively and creatively. This ability arose with the evolution of behavioral modernity in humans around 50,000 years ago. This capacity is often thought to be unique to humans, although some other species have demonstrated similar, though much less complex abilities for social learning. It is also used to denote the complex networks of practices and accumulated knowledge and ideas that are transmitted through social interaction and exist in specific human groups, or cultures, using the plural form. Some aspects of human behavior, such as language, social practices such as kinship, gender and marriage, expressive forms such as music, dance, ritual, religion, and technologies such as cooking, shelter, clothing are said to be cultural universals, found in all human societies. The concept material culture covers the physical expressions of culture, such as technology, architecture and art, whereas the immaterial aspects of culture such as principles of social organization (including, practices of political organization and social institutions), mythology, philosophy, literature (both written and oral), and science make up the intangible cultural heritage of a society.
In the humanities, one sense of culture, as an attribute of the individual, has been the degree to which they have cultivated a particular level of sophistication, in the arts, sciences, education, or manners. The level of cultural sophistication has also sometimes been seen to distinguish civilizations from less complex societies. Such hierarchical perspectives on culture are also found in Class based distinctions between a high culture of the social elite and a low culture, popular culture or folk culture of the lower classes, distinguished by the stratified access to cultural capital. In common parlance, culture is often used to refer specifically to the symbolic markers used by ethnic groups to distinguish themselves visibly from each other such as body modification, clothing or jewelry. Mass culture refers to the mass-produced and mass mediated forms of consumer culture that emerged in the 20th century. Some schools of philosophy, such as Marxism and critical theory, have argued that culture is often used politically as a tool of the elites to manipulate the lower classes and create a false consciousness, such perspectives common in the discipline of cultural studies. In the wider social sciences, the theoretical perspective of cultural materialism holds that human symbolic culture arises from the material conditions of human life, as humans create the conditions for physical survival, and that the basis of culture is found in evolved biological dispositions. When used as a count noun "a culture", is the set of customs, traditions and values of a society or community, such as an ethnic group or nation. In this sense the concept of multiculturalism is a political ideology that values the peaceful coexistence and mutual respect between different cultures inhabiting the
same territory. Sometimes "culture" is also used to describe specific practices within a subgroup of a society, a subculture (e.g. "bro culture"), or a counter culture. Within cultural anthropology, the ideology and analytical stance of cultural relativism holds that cultures cannot easily be objectively ranked or evaluated because any evaluation is necessarily situated within the value system of a given culture.

2.1 Malay

Malay is an ethnic group of Austronesian peoples predominantly inhabiting the Malay Peninsula, eastern Sumatra, southernmost parts of Thailand, south coast Burma, island of Singapore, coastal Borneo including Brunei, West Kalimantan, and coastal Sarawak and Sabah, and the smaller islands which lie between these locations - that collectively known as the Alam Melayu. These locations today are part of the modern nations of Malaysia, Indonesia, Singapore, Brunei, Burma and Thailand.

There is considerable genetic, linguistic, cultural, and social diversity among the many Malay subgroups, mainly due to hundreds of years of immigration and assimilation of various regional ethnicity and tribes within Maritime Southeast Asia. Historically, the Malays population is descended primarily from the earlier Malayic-speaking tribes that settled in the region, who founded several ancient maritime trading states and kingdoms, notably Brunei, Old Kedah, Langkasuka, Gangga Negara, Old Kelantan, Negara Sri Dharmaraja, Malayu and Srivijaya, and the later Cham and Mon-Khmer settlers.
The advent of the Melaka Sultanate in the 15th century triggered a major revolution in Malay history, the significance of which lies in its far-reaching political and cultural legacy. Common definitive markers of a Malay identity - the religion of Islam, the Malay language and traditions - are thought to have been promulgated during this era, resulting in the ethnogenesis of the Malay as a major ethnoreligious group in the region. In literature, architecture, culinary traditions, traditional dress, performing arts, martial arts, and royal court traditions, Melaka set a standard that later Malay sultanates emulated. The golden age of the Malay sultanates in the Malay Peninsula, Sumatra and Borneo saw many of their inhabitants, particularly from various tribal communities like the Batak, Dayak, Orang Asli and the Orang laut become subject to Islamisation and Malayisation. Today, some Malays have recent forbears from other parts of Maritime Southeast Asia, termed as anak dagang ("traders") and who predominantly consist of Javanese, Bugis, Minangkabau and Acehnese peoples, while some are also descended from more recent immigrants from other countries.

Throughout their history, the Malays have been known as a coastal-trading community with fluid cultural characteristics. They absorbed numerous cultural features of other local ethnic groups, such as those of Minang, Acehnese, and to some degree Javanese culture; however Malay culture differs by being more overtly Islamic than the multi-religious Javanese culture. Ethnic Malays are also the major source of the ethnocultural development of the related Betawi, Banjar, Cape Malay, Peranakan and Sri Lankan Malay cultures, as well as the
development of Malay trade and creole languages like Ambonese Malay, Baba Malay, Betawi Malay and Manado Malay.

2.1.1. Malay Deli Serdang

Deli Serdang (Indonesian: Kabupaten Deli Serdang) is a regency in the Indonesian province of North Sumatra. It surrounds the city of Medan, and also borders the chartered city Binjai, which is effectively a bedroom community for Medan. The capital of the district is Lubuk Pakam, which is located approximately 30 km east of Medan. Its 2010 census population was 1,789,243 people, but the latest official estimate (for January 2014) is 1,865,695 Medan's new airport in Kuala Namu is in this regency.

The boundaries of the district are with:

1) To the north: the Langkat Regency and the Strait of Malacca.
2) To the south: the Karo Regency and Simalungun Regency.
3) To the east: the Serdang Bedagai Regency and the Strait of Malacca.
4) To the west: the Karo Regency, Langkat Regency and the city of Binjai.

Deli Serdang has three plantations owned by London Sumatra (LONSUM).

In June 2004, farmers and indigenous peoples in a number of villages within the district had protested over land ownership of their villages (apparently, the government had leased the land in the villages to LONSUM, but they rejected such leasings and resisted moving. It is said that the authorities had shot farmers and indigenous people attempting to reoccupy the villages. The national census of 2000 recorded 1,572,768 people, but by 2010 the regency's population increased.
by 13.76% to 1,789,243; the latest official estimate (for January 2014) is 1,865,695.

2.2. Concept of Malay Traditional House

The traditional Malay house is a timber house raised on stilts. It is basically a post-and-lintel structure with wooden or bamboo walls and a thatched roof. Windows are plentiful, lining the walls and providing good ventilation and views for the house. This quality of openness is also reflected by the large open interior spaces with minimal partitions.

From a distance, the Malay house seems to merge naturally with the environment. The roof, which is large, dominates the low walls and the open-stilted bottom of the house. The juxtaposition of the roofs with different sizes and at different orientations creates an interesting visual form, adapting to their needs, culture and environment. It may not possess the grandeur or ostentatiousness found in modern buildings designed by modern self-conscious designers but it reflects other qualities lacking in the modern buildings - a clear expression of the way of life and culture of its users. With a direct dependence on nature for its resources and embodying a deep knowledge of ecological balances, the house is efficiently designed to suit the local climatic requirements using various ventilation and solar-control devices, and low-thermal-capacity building materials. Besides being well adapted to the environment, the house has also evolved a prefabricated building system which is flexible and varied to suit the needs of the users. It has also developed a very sophisticated addition system which allows the house to be extended in line with the growing needs of the user. Various traditional
and hybrid Malay houseforms can be identified in Peninsular Malaysia. They are classified mainly by their roof shapes. The basic house forms are the *bumbung panjang, bumbung lima, bumbung perak* and *bumbung limas*.

The most common house form is the *bumbung panjang*, characteristic by a long gable roof. The *bumbung panjang* houses are the oldest identified in Peninsular Malaysia, many of them being over a hundred years old and still in good condition. The *bumbung panjang* is the simplest of the four house forms. It has a simple gable roof, supported by kingposts. The most common roofing material used for the *bumbung panjang* is the roof (a thatch made from *nipah* and other palm trees found in the local natural vegetation). The simple *bumbung panjang* roof-form is most efficient in its ventilation properties. Its simple funnel shape, the use of ventilation grilles at its gable ends and the use of ventilation joints allow good ventilation of the roof, space which cools the house effectively.

The roof is simple and easy to construct, and this partly explains the popularity of this house form among the poorer villagers and those who build houses themselves. The *bumbung panjang*, due to its simplicity, is a very efficient roof-form for making additions to the house. The *bumbung lima, bumbung limas* and *bumbung perak* are all house forms which are not indigenous but developed through foreign influence. The *bumbung lima* and *bumbung perak* houses are believed to have been influenced by colonial Dutch and British house forms. The *bumbung lima* house has a hipped roof, the *bumbung perak* house has a gambrel roof and the *bumbung limas* house has a pyramidal roof. Of these three foreign house forms used in Malay houses, the *bumbung*
perakhouse form (also called bumbung Belanda roof in the East Coast) is the most popular.

**Design and layout**

![Diagram showing the use of interior space in the Traditional Malay House. The diagram depicts various activities and spaces within the house, including cooking, preparing food, washing, dining, adult sleeping, child sleeping, meeting, entertaining guests, praying, and reading.](image)

Basically, the traditional Malay house can be divided into the front and back portions which are centred around the core house and the kitchen respectively. At the entrances of most traditional Malay houses, stairs lead up to a covered porch called the *anjung*. The porch acts as a good transition space between the public and the private domains. The *anjung* also acts as an important focal point for the entrance. Unfamiliar visitors and guests are entertained here. It
is also a favourite place for the house occupants to rest, chat and watch the goings on and passers-by in the village. From the entrance porch, one enters into the serambi gantung (hanging verandah). This is the place where most guests are entertained. Dows in the serambi gantung allow for good ventilation and good views to the exterior. From the serambi gantung, one enters into the core house, which is the core area. This is the largest area in the house where most activities are conducted. Sleeping, sewing, praying, ironing, studying and even feasting (kenduri) which is held during marriages and other festivals, all occur here. The importance of the core house is expressed by its floor level being the highest in the house. Selung is a closed walkway used to link the kitchen and the core house together. The side entrance to the kitchen is also located here. Besides being a circulation space, selang is often used by the womenfolk as a space to chat and socialise. Selang is a very effective linking device which leaves an open space between the two portions, allowing good ventilation and lighting for the house. The kitchen is always situated at the back of the house, and is on the lowest floor level. Modern kitchens in new Malay houses are often dropped to the ground level where floors are cemented. Preparation of food, cooking, eating and washing are all done here. The womenfolk also often group here to chat. The court space, which is peculiar only to Malay houses in Malacca, is an intimate, private interior open space in between the core house and the kitchen. This space is the wet core of the house where the washing, drying and toilet areas are situated. It is often beautifully decorated with flowers and plants. It is a favourite resting place for the users. Sometimes, informal guests, especially ladies, are entertained here.
2.2.1. Adapting to the Climate

One of the main characteristics of vernacular houses is that they are designed with a deep understanding and respect for nature. A comprehensive knowledge of nature’s ways and ecological balance was prevalent in traditional societies as the villagers relied heavily on nature for most of their resources. Their food, medicines, and building and household materials were obtained directly from the natural environment. This design-with-nature approach found in the traditional Malay house is best reflected in the climatic design of the house. To appreciate the climatic adaptations of the traditional Malay house, one must first understand the climatic and environmental conditions that the house is set in.

Similarly, because of high humidity, evaporative cooling and perspiration are greatly reduced and even inhibited. Evaporation of moisture from the body in the humid climate quickly forms a saturated air envelope around the body. The saturated air envelope prevents any further evaporation from the body and undermines the last means of heat dissipation.

Thus, to achieve some degree of thermal comfort, the saturated air envelope around the body must be removed. Air flowing across the body can remove the saturated air envelope and accelerate evaporation. However, this is insufficient because without ventilation (air exchange), both the temperature and humidity in a room will build up to very high levels, leading to very uncomfortable conditions. This temperature and humidity build-up is caused by the heat and moisture output of human bodies within an enclosed space. Though
natural ventilation is often accompanied by air movement, the reverse is not necessarily true. Air movement can often occur without ventilation. This is illustrated in the familiar situation of the use of fans in badly ventilated rooms. The circulation of hot and humid air within a confined space does little to relieve climatic stress. Thus, adequate ventilation is the critical factor in dissipating body heat. Direct and indirect solar radiation, hot air, together with conduction and radiation from the building fabric are the main sources of heat gain to the body. Direct solar radiation is the primary source of heat gain while the others are secondary sources, thus making the proper control of solar radiation most crucial for the achievement of thermal comfort. The other major source of heat gain lies in the type of building material used. In most modern buildings where high-thermal-capacity material such as bricks, concrete and zinc is used, the heat absorbed within the building fabric which is radiated to the interiors of the buildings causes great discomfort. From the above discussion, it is clear that to achieve thermal comfort in the warm humid Malaysian climate, solar heat gain by the building and human body must be minimised while heat dissipation from the body must be maximised by ventilation and evaporative cooling. A deep understanding of such thermal-comfort requirements and the nature of the Malaysian climate is reflected in the climatic adaptation of the traditional Malay house discussed in the following sections.

2.2.3 Design for Climatic Control
From the preceding explanation of the climatic characteristics of Malaysia, it is obvious that to attain optimal climatic control, a houseform in Malaysia should provide for the following:

a) allow adequate ventilation for cooling and reduction of humidity;

b) use building materials with low thermal capacity so that little heat is transmitted into the house;

c) control direct solar radiation;

d) control glare from the open skies and surrounding.

e) protect against rain; and

f) ensure adequate natural vegetation in the surroundings to provide for a cooler micro-climate.
The Malay house was designed and built taking these points much into account. As a result, it is a very appropriate houseform suited specifically to the vagaries of the tropical climate of Malaysia. Indeed, it is much more suited to the local climate than the modern Western-style brick house. The wooden traditional Malay house raised on stilts exhibits a quality of openness which is unseen in most modern houses. This is shown by the many voids of the building in its windows, ventilation grilles and panels; the open stilted bottom; and its open interiors with minimum partitions. This quality of openness reflects the importance given to ventilation in the design of the Malay house. There are numerous features in the traditional Malay house that are geared towards providing effective ventilation. The house is raised on stilts to catch winds of a higher velocity. The elongated structure of the traditional Malay house with minimal partitions in the interior, allows easy passage of air and cross-ventilation.

Windows are plentiful in the Malay house and since the body level is the most vital area for ventilation, full-length fully openable windows are used. The carved wooden panels and wooden grilles in the house are also effective ventilation devices. The sail-like gable end of the roof is used to trap and direct air to ventilate the roof space. Ventilation joints in the roof called the patah are another creative ventilation device used to ventilate the roof space. Besides ensuring adequate ventilation in the interior of the house, winds from the exterior are also encouraged to flow through the house. The random arrangement of the kampong houses and the careful planting and selection of trees ensure that winds are not blocked for the houses in the latter path of the wind. The lightweight
construction of the Malay house with minimum mass and much voids, using low-thermal-capacity and high-insulation materials, is most appropriate for thermal comfort in our climate. The wood, bamboo and roof used have good insulating properties and they retain or conduct little heat into the building. Solar radiation is effectively controlled by the large thatched Malay house roof with large overhangs. The walls of the house are low, thus effectively reducing the vertical areas of the house exposed to solar radiation. The low walls also make the task of shading easier. The large overhangs which provide good shading also provide good protection against driving rain. They also allow the windows to be left open most of the time for ventilation, even during the rain. The Malay house is also designed to control direct exposure to heat from direct sunlight. Traditionally, many Malay houses are oriented to face Mecca for religious reasons. This East-West orientation of the house reduces the exposure of the house to direct solar radiation. The compound of the house is also often heavily shaded with trees and covered with vegetation. This sets the house in a cooler environment, by the trees and vegetation not absorbing and storing heat from solar radiation and reradiating it into the environment. Glare, which can be a major source of stress in the Malaysian climate, is effectively controlled in the traditional Malay house. This is done by excluding open skies and bright areas from the visual field. Windows are kept low and shaded by large roof overhangs to reduce glare from the open skies. Glare from the surrounding environment is lessened by the less reflective vegetation ground cover, trees and houses. Glare is also controlled by the use of
grilles and carved wooden panels which break up large bright areas into tiny ones and yet allow the interiors to be lighted up.

The traditional Malay house with its large roof and low windows tends to be underlighted. This gives a psychological effect of coolness as strong light is often mentally associated with heat. Indirect sources of light like internal and external reflected light are used in the traditional Malay house. They are the best forms of natural lighting for our climate as they minimise heat gain and glare. Direct sunlight should not be used for daylighting as it is accompanied by thermal radiation. It can be seen that the traditional Malay house uses mainly ventilation and solar radiation control devices to provide climatic comfort for the house.

Extending the house: The addition system Like the design flexibility found in other user-designed traditions, the traditional Malay house caters well to the varied needs of the users. This design flexibility is clearly expressed in the addition system of the traditional Malay house. This is basically a system in which new extensions are added on to the basic core house. The new parts may be built as extensions at various stages and times as and when the need arises, for instance when the family grows in size. The system grew out of the needs, means, constraints and socioeconomic contexts of the users. It is a very well-developed and sophisticated system which is based on addition principles which are sound in design, construction and aesthetics, and causes minimal disruption to the original house. The traditional Malay house is set in a rural setting where the main economic activities of the people are farming and fishing. The seasonal patterns of work leave much spare time to the villagers during the off-seasons for house
building, mending nets and boats, making household implements and doing other part-time economic activities. The addition system of the Malay house is well suited for this seasonal pattern of work by facilitating house building during the off-seasons, and thus allows the house to be built up gradually at a pace controlled by the users. The addition system also fits well with the economic means and the needs of the users. As a family accumulates savings over time, or as the family needs grow, or where there is a desire for a more comprehensive dwelling place, additions to the house are made. The addition system which allows the house to grow slowly also does not create heavy financial burdens on the users by allowing them to build according to their financial resources over time. The addition system in the traditional Malay house is not an ad hoc system of extensions like those made to modern houses and other non-traditional houses such as the spontaneous squatter houses. The addition system is a highly developed and sophisticated system following certain principles that integrate and grow well with the core house. The core house The basic core house of the addition system is the rumah ibu. The addition system is built upon the extension of this core house and this necessarily makes it the most important and central part of the house. The core house is the most basic housing unit which satisfies the basic needs of a small family. The core house can be big or small depending on the needs and affordability of the family. A small core house can, in fact, be converted to a kitchen if the family decides to build a much bigger of the core house. This is made possible by the use of standard houseforms and a variety of construction methods.
2.2.4 Addition Possibilities

The addition system of the traditional Malay house offers a wide variety of choices to the user seeking to extend his house. Through adaptations and use, the users in different parts of Peninsular Malaysia have evolved a wide range of possibilities, some of which are peculiar to localities and some of which are found throughout the Peninsula. What is described here is only a basic range of possibilities which are found throughout the Peninsula. In actual fact, combinations of the various possibilities are also possible. The range of possibilities can be enlarged in accordance with the variation in size and quality depending on the priorities of the users. The concept of incremental housing
shown in the addition system of the Malay house is a flexible approach which grows with the needs and means of the user. This housing concept is most appropriate for housing the poor as the house requires only a small initial capital investment and grows when the family has the means to expand the house. This lessens the financial burden on the poor. Incremental housing seen in the traditional Malay house can also be found in other vernacular houses and other autonomous houses such as those built by squatters. But incremental housing for the poor is today obstructed by rigid bylaws which require many bureaucratic procedures of housing approval, use middle-class and Western standards and require expensive housing materials. The incremental-housing concept is also hindered by the modern concept of housing as a highly finished final product rather than as an activity which changes and grows. Housing as a highly finished final product for the poor is oppressive in a sense that the heavy financial burden placed on the buyer or user removes the opportunity for the use of financial resources for other basic needs and social mobility. Special allowances for flexibility in the use of building materials and building design standards must be made to cater for the special needs of the poor.

2.3 Theoritical Concept of Semiotic

Semiotics, translated as the science of signification, is often said to derive from two sources: F. de Saussure (Swiss-French, 1857-1913) and C.S. Peirce (Anglo-American, 1839-1914). Some other researchers known for their work in semiotics are Noam Chomsky, Umberto Eco, R. Barthes and Jean Baudrillard.
2.3.1. **Core Assumptions and Statements**

Semiotics is the theory of the production and interpretation of meaning. Its basic principle is that meaning is made by the deployment of acts and objects which function as "signs" in relation to other signs. Systems of signs are constituted by the complex meaning-relations that can exist between one sign and another, primarily relations of contrast and superordination/subordination (e.g. class/member, whole/part). Signs are deployed in space and time to produce "texts", whose meanings are construed by the mutually contextualizing relations among their signs. There are two major traditions in European semiotics: F. de Saussure, semiology; and C.S. Peirce, semiotics. Saussure's approach was a generalization of formal, structuralist linguistics; Peirce's was an extension of reasoning and logic in the natural sciences.

General Semiotics tends to be formalistic, abstracting signs from the contexts of use; Social Semiotics takes the meaning-making process, "semiosis", to be more fundamental than the system of meaning-relations among signs, which are considered only the resources to be deployed in making meaning. Multimedia semiotics is based on the principle that all meaning-making, because it is a material process as well as a semiotic practice, necessarily overflows the analytical boundaries between distinct, idealized semiotic resource systems such as language, gesture, depiction, action, etc. Every material act and sign can be, and usually is, construed in relation to more than one system of sign relations (e.g. a written word is both a linguistic sign and a visual orthographic one; a spoken word is also construed in relation to its non-linguistic acoustical qualities; an
image is interpreted both visually and usually also linguistically; etc.). Therefore it becomes important to study how different sign-systems are physically and semiotically integrated in texts and multimedia productions of various kinds.

Semiotics is the study of sign systems. It explores how words and other signs make meaning. In semiotics, a sign is anything that stands in for something other than itself. This lesson focuses primarily on linguistic signs. The word 'semiotics' dates back to ancient Greece, but its use in modern linguistics was propelled in the 19th century with the research of Ferdinand de Saussure. Saussure was a Swiss linguist who contributed greatly to the study of semiotics, also sometimes referred to as semiology.

Saussure, Scholars of modern linguistics understand that words do not have innate meanings. That is, when we say the word 'rabbit', it is not because those sounds or letter symbols have anything to do with the qualities of a small, furry herbivore. In fact, the word, sounds, and letters are all unrelated to the creature we call rabbit, except that humans have assigned a value to them. Because people have developed the ability to assign meaning with words, we are able to describe abstract meanings. That means we have words for things that we may not be able to actually see in front of us. Furthermore, the history of a word may not directly influence what it means to someone. As an example, we can use the word 'cool' without any thought or reference to temperature. The usage is separate from its history. For Saussure, language itself makes meaning rather than simply conveying meaning. Therefore, our experience is influenced by the language we use to describe it. This meaning-making is why the theories of Saussure have
become important to literary theory. When we understand that language is a sign system and not just a naming of objects, we read and discuss literary works differently.

2.3.2 Scope and Application

Social semiotics examines semiotic practices, specific to a culture and community, for the making of various kinds of texts and meanings in various situational contexts and contexts of culturally meaningful activity. Social semiotics therefore makes no radical separation between theoretical and applied semiotics and is more closely associated with discourse analysis, multimedia analysis, educational research, cultural anthropology, political sociology, etc.