



**UNIVERSITI PUTRA MALAYSIA**

**ACCOMMODATING THE MUSLIM WOMEN PRIVACY (HIJAB)  
REQUIREMENTS WITH VENTILATION NEEDS IN MALAYSIAN  
TERRACE HOUSES**

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HOUSES**

**By**

**SAKINEH NOSHIN NAHID**

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fulfilment of the requirement for the degree of Master of Science

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There is a conflict in the design of a tropical house when it comes to ventilation and privacy requirements. This situation is seen more acute in modern terrace houses in Malaysia. This study seeks to find a layout guideline that balances between the required ventilation and female privacy in Malaysian terrace houses.

The Islamic principles have been discussed to find out the privacy requirements. The result shows that the privacy has different degrees, and spaces of a house can be divided into three separate areas: public area, semi-private area and private area. The principles of planning for building in tropical climate have been discussed to find out ventilation requirements. Iranian traditional rural and urban houses have been studied to analyze how

privacy and ventilation were considered in their design and to observe if these results could be applied to Malaysian houses. A study of the traditional and typical housing types of Malaysian terrace houses had been done to analyze the adaptation to privacy and ventilation. The result shows that terrace houses could not provide complete privacy and some factors of traditional adaptation can be applied in new terrace house designs. A case study was conducted to evaluate the preferences of Malay women for privacy and to find the visual and physical space relationship in the house. The result indicates that terrace houses are not designed according to Malay women preferences.

The result of the study shows that it is possible to have a suitable layout that balances between the required ventilation and the female privacy in Malaysian terrace houses by considering a review and rearrangement of terrace house unit floor.

Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia  
sebagai memenuhi keperluan untuk ijazah Master Sains

**PENYESUAIAN KEPERLUAN HIJAB DENGAN KEPERLUAN  
PENGUDARAAN DALAM RUMAH TERES DI MALAYSIA**

Oleh

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Terdapat percanggahan didalam merekabentuk sesebuah rumah yang berunsurkan iklim tropika, ruang pengudaraan yang secukupnya dan kehendak hak peribadi (privacy). Situasi ini bertambah rumit lagi didalam setiap pembinaan rumah teres di Malaysia.

Kajian ini diharap dapat memberi garis panduan yang seimbang samada untuk memberi keselesaan bagi sistem pengudaraan dan hak peribadi individu setiap wanita di dalam sesebuah rumah teres di Malaysia.

Sedia maklum, bahawa ajaran Islam amat mementingkan hak peribadi bagi setiap individu. Hasil kajian ini menunjukkan bahawa hak peribadi dan sistem pengudaraan yang sempurna dapat dibahagikan kepada tiga bahagian: ruang umum, ruang separa-umum dan ruang peribadi. Manakala

perancangan untuk membina rumah iklim tropika amat mementingkan sistem pengudaraan yang sempurna. Di Iran, rumah tradisional dan rumah moden di bandar telah di kaji untuk mengenal pasti samada rekabentuk rumah tersebut bersesuaian dengan iklim tropika seperti di Malaysia.

Di Malaysia kajian terhadap rumah tradisional dan kawasan perumahan teres di bandar yang sedia ada kurang memberi perhatian terhadap sistem pengudaraan dan hak peribadi bagi setiap wanita.

Hasil kajian ini menunjukkan bahawa rumah teres masa kini tidak dapat memenuhi kehendak hak peribadi dan beberapa faktor rumah tradisional boleh diterapkan didalam merekabentuk rumah teres moden. Satu kajian dijalankan untuk menilai kelebihan dan kekurangan keperluan peribadi khususnya untuk wanita Melayu dan pergerakan dan hubungan kekeluargaan didalam sebuah rumah teres.

Secara rumusnya, kajian ini menunjukkan bahawa rumah teres di Malaysia tidak dibina mengikut keperluan peribadi wanita Melayu dan keseimbangan diantara sistem pengudaraan yang sempurna. Oleh yang demikian setiap pembinaan rumah teres hendaklah megimbangkan keperluan peribadi dan sistem pengudaraan yang sempurna dalam menghasilkan pengubahsuaian bagi setiap rumah teres di Malaysia.

*"One who does not thank people  
has not thanked the Creator."*  
The Prophet Muhammad (SAW)

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## **CHAPTER 1**

### **INTRODUCTION**

#### **1.1 Background of Study**

The encounter of human being with its surrounding natural environment is one that had been and will always be there. Facing climatic conditions and various threats and insecurities are examples of these encounters and the solutions provided exhibit the victory of human being over them.

On the other hand, the internal beliefs of human being have been influenced by such encounters. This is where human being, inspired by the Mighty Creator, and equipped with the knowledge to encounter nature, started building structures on Earth. Subsequently, Man succeeded in building residences, which are in harmony with nature as well as fulfilling his physical and spiritual needs.

Unfortunately, with the advent of industrial revolution and overpopulation in larger cities, residential shortage crisis began showing its face to metropolitan centres. This crisis has also affected Muslim communities. Some of the important factors in appearance of such quantitative and qualitative crisis in Muslim countries are listed below:

- City dwelling became popular in Muslim countries so quickly that there was not enough time for these societies to adapt themselves with it and

develop a proper model for metropolitan life. Thus, imitations of alien models, which are suitable for other cultures and climates, emerged.

- Separation of builders and inhabitants of residential units gave rise to building for commercial benefit and developers began concentrating on making the most out of their investments, instead of responding to occupants' needs. In an example of construction for financial benefit, developers may not invest money to implement proper ventilation for houses they build but left it to occupants to purchase electrical cooling devices like fan and air-conditioner. The cost of such devices is born by the occupant, not the developer.
- Along with the process of industrialization and rapid expansion of city dwelling, people's life style underwent dramatic changes and as a result, traditional rural patterns of residential buildings were no longer able to respond to the needs of their new lives. The role of media exposure should not be ignored.
- Availability of ready-made houses, which would not give many choices to people.
- New building materials such as glass, metal and concrete made it possible for new types of buildings to be constructed, which did not exist before. Utilization of these materials in buildings became a matter of prestige and luxury, instead of being used for the benefit of human being and his natural environment. Improper use of glass and metal instead of wood and galvanized iron for thatched roofing in warm and humid climate is an example of this.

Fortunately, Muslims have started believing in and having confidence that Islam has the ability to provide solution to problems in Muslim societies. In the past two decades, Muslim architects have begun efforts to find principles of township development and architecture based on sacred text and local and climatic conditions.

The aim of the present study is to define two main factors in designing Malaysian Muslim houses: the Islamic culture and its tropical climate.

## **1.2 Literature Review**

This study of literature review can be discussed in the following aspects:

- Effect of privacy (a component of Islamic culture) on housing architecture.
- Tropical climatic conditions
- Housing in Iranian warm and humid regions both in the past and at the present.
- Housing in Malaysian Muslim families both in the past and at present.

### **1.2.1 Effect of Privacy (A Component of Islamic Culture) on Housing Architecture**

In this study, privacy is taken into consideration as the main factor in a Muslim dwelling. In general, the subject of privacy plays a primary, important role in housing architecture. In each society, religious and cultural values seriously affect the sort of privacy that the people in that society would require. In a Muslim society, privacy has always been so prominent and so obviously needless to talk about, that it is taken for granted. But in recent decades, imitations of alien patterns have entered Muslim societies, lacking acceptable privacy level in accordance with Islamic requirements. Therefore, it is essential to preserve privacy based on Islamic teachings and to make it a focus in designing houses.

Although this requirement is vital, unfortunately no complete and comprehensive research on this topic has been made except mention in some books and papers, which have referred to the subject briefly. In this part, the study is broken into three areas: background, general view of point and privacy in Muslim homes.

#### **1.2.1.1 Background of an Ideal Islamic Society and Architecture**

The majority of studies ever conducted about Muslim built environments mainly attend to physical and historical aspects of building, rather than other important principles and values that form Islamic architecture.

However, studies have begun to appear in the last two decades, recognizing some truly Islamic principles that affect the built environment.

In an essay titled "Faith and Environment," Serageldin (1989) points to three important sources of information, for every design of a contemporary Islamic settlement. The Holy Quran and the tradition (*Sunnah*) of the Prophet, and in developing an appropriate response to contemporary problems, the past experiences and present realities of Muslim societies must be taken into account. It is to be noted that past experience and present phenomena can be accepted and used by evaluating them according to the two main sources of Islam. They can be beneficial only when they are not against Islam.

He mentions that no reading of the Quran, at any level, or a study of the Sunnah, will provide detailed instructions on how to design a house in Morocco or Indonesia, or how to design the thoroughfares of Cairo or Istanbul. Those that tried to derive specific examples from these sources are doing both themselves and the sources disfavoured. Themselves by ignoring the wider context in which we live and which must provide the major "given" of the problems to be addressed, and the sources by demeaning them to the level of a "hand-book" or "text-book" rather than treating the Quran as the eternal message of inspiration and guidance for all times and the Sunnah of the Prophet as the embodiment for exemplary behaviour. If God has desired to give people specific instruction on how to build structures in the twentieth century, He could certainly have done so

explicitly. (...) But the systematic review of the sources should produce a general set of principles that should help guide the searcher towards what is an appropriate response to the problems confronting Muslims societies today and tomorrow.

He further introduces several general principles, which are derived from Quranic concepts, the first and the most important of which is the "Stewardship of Earth." Based on this principle, he believes that Man, as the Caliph (*Khalifah*) of God on Earth, has a special responsibility, which must be manifested through the "development of the earth" and a "justly balanced society."

Some other verses of the Holy Quran make it clear that all things in the universe are subjected to human beings. He adds that other principles are actually explanations of these principles. Relationship with nature, relation between people, individual behaviour, freedom, the search for knowledge, action and industry, justice and concern for the poor and the weak, are principles derived from Quranic concepts,

At the end, Serageldin (1989) also explains that Islam proposes principles, not exact details. He notes: To seek to define any architecture as 'Islamic' exclusively through the detailed analysis of the architectonic features of the building would be like trying to measure the temperature or the humidity of a room with a yardstick.

### 1.2.1.2 Privacy in House In General

Rapoport (1969) explains about privacy in the book "House Form and Culture." He has suggested that social and cultural factors, rather than physical forces, are most influential in creating the house form. He has pointed out some of the more important aspects of the *genre de vie* (form of life) which affect building form. They are:

- Some basic needs, if viewed in specific terms. For instance, with regards to sleeping, it is not the fact of sleeping, which is significant. They are rather the furniture, arrangements and spaces used, which affect house forms.
- Family: Difference in family structures (for example polygamy and monogamy) affect house forms.
- Position of women: He suggests that courtyards in Mediterranean areas, Greece, North Africa and Latin America are related to some social factors. The extreme need for privacy for women in these societies, who are mostly cloistered, may be one of these factors. Then he mentions that Islamic culture generally affects the form of houses through the demands of *pardah* (screen), the harem and so on.
- The need for privacy: He has examined variations in the definition of privacy and how it is achieved, and has attached importance to this consideration. He has considered that feeling of personal worth; territoriality and the place of the individual may affect attitudes towards privacy. Rapoport (1969) also mentions: Although architects of our culture often refer to privacy as a basic need, it is really a complex and