



**UNIVERSITI PUTRA MALAYSIA**

***VERNACULAR ARCHITECTURE IN SECOND HOME DESIGN  
IN KISH ISLAND, IRAN***

***ALI AFSHAR***

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**VERNACULAR ARCHITECTURE IN SECOND HOME DESIGN  
IN KISH ISLAND, IRAN**

**By**

**ALI AFSHAR**

**Thesis submitted to the School of Graduate Studies, Universiti Putra Malaysia,  
in Fulfillment of the Requirements for the Degree of Doctor of Philosophy**

**January 2013**

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خلق را تقلیدشان بر باد داد  
ای دو صد لعنت بر این تقلید باد

*Blind imitation of them has undone me  
Cursed be that blind imitation*

*A Persian Poem by Mulana Jalaluddin Mohammad Rumi  
13<sup>th</sup> Century A. D.*

## DEDICATION

*To Mona,*

*for her continual support and encouragement throughout the study*



Abstract of thesis presented to Senate of Universiti Putra Malaysia in fulfilment of the requirements for the degree of Doctor of Philosophy

**VERNACULAR ARCHITECTURE IN SECOND HOME DESIGN IN KISH ISLAND, IRAN**

By

**ALI AFSHAR**

**January 2013**

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**Faculty: Design and Architecture**

Kish, which is located in the south of Iran, is an island that has more than one thousand year history of architecture. It is known as one of the most important free trade-tourism zones and holiday destinations of the country, and it has become an increasingly popular destination for investment in housing. According to official statistical reports, all the houses in the island are generally known as second homes for their owners. Modern development in Kish Island has led to the destruction of vernacular architecture and the loss of intellectual capital that flows from this. The main issue in this context is that most of the houses do not correspond with their owners' requirements especially in the context of local circumstances. This research posits that the vernacular architecture of Kish Island, through its adaptation over a long time to local context, has the potential to provide a more appropriate response than the mis-constructed styles that are currently undermining the architectural design of the second homes in the island. It also emphasizes on the physical and socio-cultural aspects of the vernacular architecture in relation to second homes, the

owners and their interaction. Therefore, the study utilized qualitative or quantitative research methods although preliminary qualitative methods were used to answer the research questions, “How can vernacular architecture be applied in designing the contemporary second homes in Kish Island?” The research used a qualitative research methodology to identify the features of the Kish Island’s vernacular architecture as well as to find the relationships between the vernacular architecture and second homes. The research also used the quantitative method to support the qualitative methods and to select units of analysis. As a case study, this study selected Kish Island in Iran and sought to develop architectural solutions to contemporary second home design problems with using adapted vernacular solutions. The research outcome is a series of guidelines for developing second home design solutions to address the contemporary design problems. The suggested outputs for second home design not only improve its quality for answering owners’ requirements but also employ second home design for enhancing local architecture. Finally, the research provides a theoretical and experimental approach to support the development of practical and competent constructions in the architectural design field. The implications of the research to the design of second homes are important while advocating the suitability of human requirements which has not been completely investigated and the expected results could be contributed to a specific cultural and geographical domain of Iran, as well as countries in the Persian Gulf region.

Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk ijazah Doktor Falsafah

**REKA BENTUK VERNAKULAR DALAM SENI BINA RUMAH KEDUA DI  
PULAU KISH – IRAN**

Oleh

**ALI AFSHAR**

**Januari 2012**

**Pengerusi: Profesor Madya Ar. Azizah Salim Syed Salim, PhD**

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Pulau Kish yang terletak di selatan Iran memaparkan sejarah seni bina lama yang menjangkau lebih satu alaf yang lalu. Ia dikenali sebagai zon pelancongan bebas niaga yang terpenting di Iran. Di samping itu ia juga dikenali sebagai destinasi percutian yang semakin terkenal sebagai tempat strategik bagi pelaburan dalam sektor perumahan. Secara amnya semua kediaman di pulau ini merupakan rumah kedua bagi pemiliknya. Pembangunan semasa di sini telah merubah reka bentuk vernakular serta harta intelek yang terkandung di dalamnya. Tambahan pula semua kediaman ini tidak sejajar dengan kemahuan pemilik terutamanya dalam konteks keadaan setempat. Kajian ini menyarankan agar reka bentuk vernakular di Pulau Kish berpotensi untuk menghasilkan reaksi yang lebih sesuai dengan mengadaptasi binaan dalam keadaan setempat dalam jangka masa yang lama. Ini dianggap penting daripada hanya sekadar gaya yang tidak bermakna yang semakin melemahkan seni bina rumah kedua di pulau ini. Ia menekankan keadaan fizikal dan sosial reka bentuk vernacular rumah kedua, pemilik dan hubung kait di antara keduanya. Oleh itu,



kajian yang telah dijalankan sama ada secara kualitatif atau kuantitatif, walaupun secara asasnya bersifat kualitatif, telah menjawab soalan “Bagaimanakah reka bentuk vernacular dapat di aplikasikan dalam mereka bentuk rumah moden kedua di Pulau Kish?”. Kajian ini telah dijalankan secara kualitatif bagi mengenal pasti ciri-ciri reka bentuk vernakular Pulau Kish disamping mencari hubungan di antara reka bentuk tersebut dengan rumah kedua. Kajian ini juga menggunakan pendekatan kuantitatif sebagai sokongan dan analisa unit-unit yang tertentu. Di samping itu, Pulau Kish juga telah diambil sebagai subjek bagi kajian kes bertujuan menyelesaikan masalah reka bentuk rumah kedua yang kontemporari dengan mengadaptasi penyelesaian vernakular. Dapatan kajian merupakan beberapa panduan dalam melakarkan reka bentuk rumah kedua bagi menyelesaikan masalah dalam reka bentuk kontemporari. Hasil reka bentuk rumah kedua bukan hanya mencadangkan peningkatan kualiti dalam memenuhi keperluan pemilik tetapi juga agar reka bentuknya dapat meningkatkan seni bina setempat. Akhir sekali, kajian ini menggariskan pendekatan secara teori dan eksperimen dalam menyokong pembangunan yang praktikal dan cekap dalam bidang seni reka dan seni bina. Implikasi kajian terhadap reka bentuk rumah kedua sedia ada adalah perlu di samping mempertimbangkan kepentingan rumah kedua dalam memajukan industri perlancongan yang secara tidak langsung meningkatkan potensi seni bina dan perkembangan ekonomi.

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This thesis submitted to the Senate of Universiti Putra Malaysia and has been accepted as fulfilment of the requirement for the degree of Doctor of Philosophy. The members of the Supervisory Committee were as follows:

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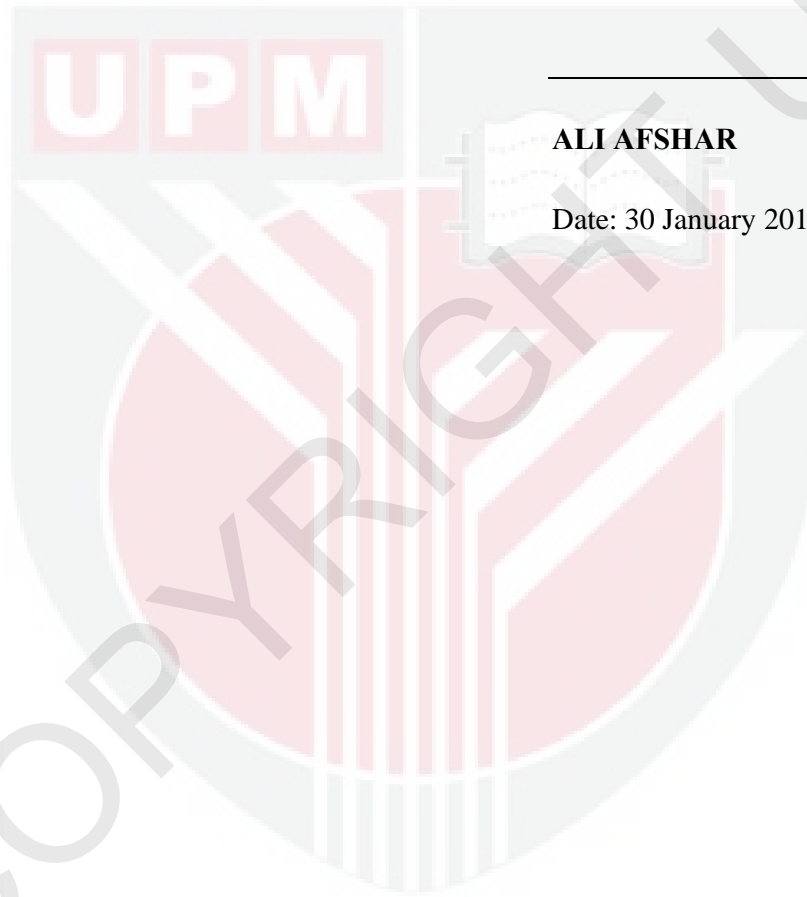
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## DECLARATION

I declare that the thesis is my original work except for quotations and citation which have been duly acknowledged. I also declare that it has not been previously, and is not concurrently, submitted for any other degree at Universiti Putra Malaysia or at any other institution.



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**ALI AFSHAR**

Date: 30 January 2013

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## LIST OF ABBREVIATIONS

<b>BSCEC</b>	Baft-e-shahr Consultant Engineering Company
<b>DCIEC</b>	Dress and Sommer International Consultants Engineering Company
<b>GCEC</b>	Geno Consultant Engineers Company
<b>KFZO</b>	Kish Free Zone Organization
<b>KUDCS</b>	Kish Urban Development and Services Company
<b>MCC</b>	Mercury Consultant Company
<b>PMCEC</b>	Pajooresh and Memari Consultant Engineers Company

# CHAPTER 1

## INRODUCTION

### 1.1 Introduction

Kish Island, due to its natural-geographical features, was selected as the first tourism free zone of Iran in 1968 (Monsef, 1978; Ameri, 2011). In order to promote tourism and ensure its development, massive changes have been made on this historical island and its vernacular settlements. In addition, Kish Island also forms a part of a system of Islands in the north of Persian Gulf. It is the most urbanized island and has a key role in its own territory (Razmara, 1962; Moradi, 2010). According to the 2007 Master Plan of the Island, Kish would be an increasingly popular destination for second homes investment by 75 million Iranians and Iranian expatriates (3.5 million Iranians who have immigrated worldwide). This thesis emphasizes on the characteristics of vernacular architecture in relation to second homes and their owners. In this chapter, the thesis introduces the field, vernacular architecture, second home and also the aims of this research.

### 1.2 Problem Statement

At present, many critics in the Persian Gulf region are becoming increasingly concerned about the inappropriate adoption of international architectural styles (Ardalan, 2004; Mahgoub, 2007). In contrast and according to Dress and Sommer International Consultant Engineering Company (DSIEC) in 2007, the present situation of Kish in comparison to the ones in the neighbouring countries is of greater

concern. As compared to the neighbouring countries, Kish has its own special circumstances due to its designation as a free zone area (Taebi, 2008; Monfared, 2009). Therefore, the existing architecture in Kish Island does not follow the architectural movements in the southern side of the Persian Gulf. Additionally, it does not have a logical connection to the vernacular architecture of the region (Mohebbi, 2011).

Iran, with its long and eventful history, has a strong tradition in the organization and generation of urban centres and settlement units (Pope, 1965; Manzoor, 1989). In the northern edge of the Persian Gulf as a part of Iran, the component of the built environment is paramount and this should be seen in its vernacular context. This will contribute to a better understanding of both the objective and subjective dimensions of the built environment which constitutes its traditional context. Moreover, since the first centuries and after the appearance of Islam, Kish has been a habitable Island (Mokhtarpour, 1996). Therefore, the vernacular houses of Kish are the best examples of the harmony among human behaviour, construction and the natural environment and thus, it has a potential to improve appropriate response of contemporary architectural design in the island.

According to the Tourism Master Plan of Iran (2001), Kish Island is one of the country's main tourism destinations and the tourism centre of the Persian Islands in the Persian Gulf. As a result and based on to DSIEC (2007), within the next 20 years, the market for second homes (vacation residences, condominiums, time share style apartment complexes) in the island will achieve high growth rates. The demand for these second homes is significant due to the fact that Iranian families prefer



private atmosphere and privacy within these holiday apartments (Annabestani, 2011). Another reason for the popularity of the second home units in Kish is their respective affordability, self-catering, and sharing of apartments with other families turn these units into an economical vacation alternative.

The existing second homes in Kish Island are not matched with owner's requirements, especially in the context of vernacular condition (Mohebbi, 2011). Due to this reason, the principal objective of this study was to recognize the physical and socio-cultural aspects of the vernacular architecture in relation to second homes, the owners and the interaction between the owners and their homes. Furthermore, it also intended to elucidate the relevance and the necessity of the vernacular architectural patterns to the contemporary requirements and methods for architecture and also, the second home development in Kish Island.

The key issues of the study are as follows:

1. The vernacular architecture of Kish Island and the region generally demonstrates an adaptation to the local environment and culture.
2. Modern development at Kish Island, in which most of the buildings are second homes, leads to the destruction of the vernacular architecture and the loss of intellectual capital that flows from this. Moreover, these homes do not correspond with the owners' requirements, especially in the context of local circumstances.
3. Contemporary buildings in Kish Island have not a sustainable form due to their un-harmoniously integrate with the existing urban context.

The main problem can thus be summarized as follows:

Most of houses on Kish Island which generally are known as Second homes for their owners do not correspond with their owners' requirements especially in the context of local circumstances.

The vernacular architecture of Kish Island, through its adaptation over a long period of time to local environment and culture, can be translated into a contemporary architectural response that has the potential to provide a more appropriate response to the second homes owners' requirements than the imported styles which are currently undermining Kish Island's culture and architectural coherence.

### **1.3 Research Questions**

This study focuses on the application of the vernacular architecture in second home design in Kish Island. Thus, the following research questions were formulated for the purpose of this study:

#### **General Research Question**

How can vernacular architecture be used in the contemporary second homes design at Kish Island?

#### **Specific Research Questions**

- 1) What are the characteristics of the vernacular architecture at Kish Island?
- 2) What are the vernacular architecture characteristics that have been applied in the existing Kish Island's second homes?
- 3) How can the vernacular architecture meet the second home owners' requirements?

#### **1.4 Aim of the Study**

The main aim of this study was to develop architectural solutions to the design of the contemporary second homes using the adapted vernacular architectural characteristics at Kish Island.

This study also aimed at introducing the adapted vernacular guideline for the architectural design of contemporary second homes at Kish Island in Iran. These new guidelines will protect all the new second homes from defective architectural design and have the most connection with the physical and socio-cultural requirements of owners. The proposed guidelines could be initiated by the Kish Island authority in implementation of by architects and builders for all the new second homes. Furthermore, some of the lessons learned through this research may well have application to other developing countries.

#### **1.5 Objectives of the Study**

The primary goal of this research was to apply the vernacular architecture features for the second homes in Kish Island. Thus, it is necessary to understand the historical vernacular architecture of Kish Island and the principles which are applicable for these second homes. In more specific, the study has three objectives:

- i. To identify the characteristics of the vernacular architecture at Kish Island.
- ii. To explain the extent of the vernacular architecture in the existing second homes.
- iii. To recognize the second homes owners' requirements in term of vernacular architecture can answer.

## **1.6 Key Concept**

In this research, the vernacular architecture in Kish Island is introduced according to a new perspective as well as Kish's building regulations in second home design is explained. Moreover, this study describes different definitions of vernacular architecture and second home in international context. It also makes a bridge between vernacular architecture and second home criteria, in a tourist island, in south of Iran.

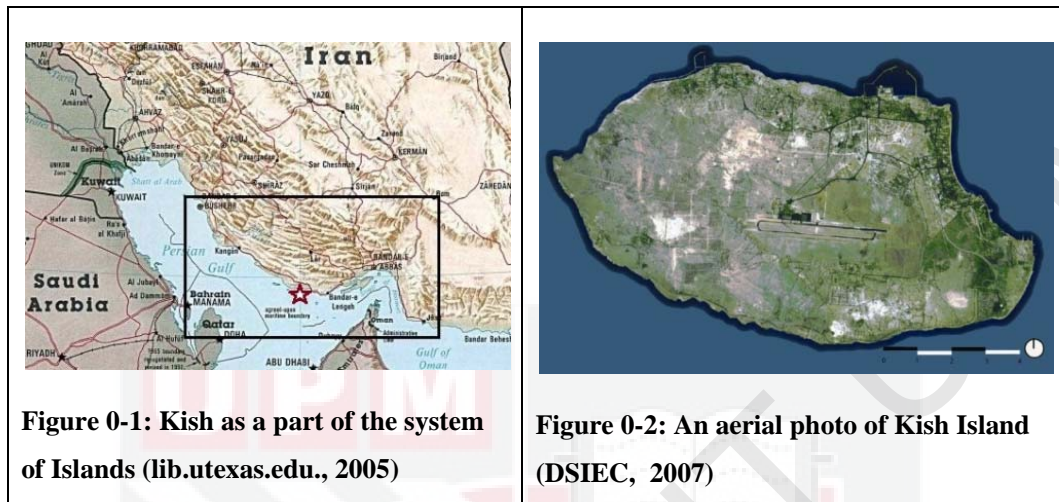
### **1.6.1 Kish Island**

Kish is a beautiful and attractive island that is located in the south of Iran; it is known as one of the most powerful tourism area of the country. This island has a long history of more than 1300 years (Nasr, 1971; Hamidi, 1999; Mahmoudian, Varjavand, Ghasemi, Ghasemi, & Artidar, 1998). It was selected as a tourism free zone in 1968 due to its natural-geographical features (Monsef, 1978). In order to increase tourism development, massive changes were made on this Island. In the

1970s, a luxury resort for the international elite was completed with a Grand Casino (now known as the Shayan International Hotel) and an airport designed to handle the Concorde (Monsef, 1978). Until 1969, the number of settlements in Kish was limited to some sparse villages (Mokhtarpour, 2002). After the Islamic revolution in 1979, Kish was chosen as the first free zone of Islamic Republic of Iran and by 1986, there was no building activity in the island because of the war with Iraq. From 1993 to 2001, development process gained speed all over the country. Thus, organizing the management structure clearly caused an increase in constructional activities and as a result, the number of tourists also increased. However, this island is known as an area which adopts the standard laws of the country, which were far more relaxed compared to those at the main land (Mahmoudian, Varjavand, Ghasemi, Ghasemi, & Artidar, 1998).

At the present, Kish is the most important beach recreational holiday and tourist destination in Iran; located in the northern part of the Persian Gulf (see Figure 1-1 and Figure 1-2). Based on the unique potentials of the Island, there are two noteworthy implications for it in the “Tourism Master Plan of Iran” (2001). The willingness of the Iranian Government to invest in tourism is a favourable sign for Kish. Thus, Kish Free Zone Organization (KFZO) makes it their objectives to develop tourism and be noticed in the budget allocation for improving the tourism conditions in the island. In addition, KFZO also needs to make itself known in the development of Iran’s plans and to involve itself more in the development of the country in the first years of this decade so that the overall vision was to create a new destination image with a new “brand”, or leitmotif which guides the design of the

other Master Plans. On this basis, the new plan was named “Destination Master Plan-Kish Island-Persian Garden in the Persian Gulf”.



Based on the classification of this Master Plan, tourism is one of the significant economic opportunities for this Island that can be cited in two main contexts, namely, five star luxury and second home ownership. The master plan of Kish also mentions the need to promote the value of this particular industrial sector which should be paramount in the strategic direction of any industry. It emphasizes that the industry focuses on the social and environmental, as well as the economic benefits of tourism.

### 1.6.2 Vernacular Architecture

Vernacular architecture is defined as architecture by people and it is not designed for people by architects. It is related to environmental and socio-cultural context and available resources, as well as traditional materials with its appropriate technologies. It usually meets specific requirements, accommodates the cultural and social values, and also relates to the existing economic possibilities (Oliver, 1998). In particular,

the Iranian vernacular architecture is a result of a long-time practice of social, cultural and environmental development which extends all over the country. Pirnia (1992) noted that it is based on five fundamental characteristics: compatibility with the needs of people, inward-looking, avoiding un-necessities, self-efficiency, and structural rigidity. These codes concern building quality from two aspects: firstly, concepts and ideas, and secondly, construction and technology (Vakili-Ardebili & Boussabaine, 2006).

The hot and humid region of Iran is situated in the long and narrow coastal strip on the northern side of the Persian Gulf (Babakrad, 1985; Azari-Najafabadi, Daneshvar, Pakseresht, & Pooryousefnejad, 2006). Kish Island, which is located in this region, also has the same social and environmental factors. Here, the summers are long hot and humid, while winters are short and mild. Meanwhile, humidity in all seasons is high throughout the year. Its annual precipitation is extremely low, most of which is during fall and winter (Mahmoudian, Varjavand, Ghasemi, Ghasemi, & Artidar, 1998). Sub-ground waters are saline in much of the region, while vegetation all around this region is limited. The most prominent features of the vernacular architecture in this area are an adaptation to the environment and consideration of the socio-economic factors through energy saving techniques (Babakrad, 1985; Pourjafar, 1996).

The characteristics of the vernacular architecture of the region are generally reflected by one-storey dwelling units with courtyards, high surrounding walls and large windows facing the courtyard (Azari-Najafabadi, Daneshvar, Pakseresht, & Pooryousefnejad, 2006), as shown in Figure 1-3. Meanwhile, natural ventilation and

breeze are the main ways to reduce high temperature and to cool the spaces (Babakrad, 1985). The roofs are usually flat and the typical houses do not facing outside to prevent indoor activities from being viewed by outsiders. Furthermore, limestone is commonly used in the house to provide a convenient solar reflection (Azari-Najafabadi, Daneshvar, Pakseresht, & Pooryousefnejad, 2006). Kish Island has same physical and socio-cultural aspects and traditional house construction methods. (see Figure 1-4).



**Figure 0-3: The Coastal City of Lenghe (Sh. Arfaei, 2006)**



**Figure 0-4: The Old Saffein Village in Kish Island (earth.google.com, 2010)**

### 1.6.3 Second Homes

According to many researchers, second homes are not the principal property of their owners (Tress, 2007) who are mostly coming from upper, middle class of the community. Stedman, Goetz, and Weagraff (2006) believe that in the recent decades, the chief source of second home development in non-metropolitan areas increased disposable income, leisure time, improved transportation and growth in population. As their opinion, these non-metropolitan areas are rich in natural amenities, such as mild climate, surface water, mountain and trees. Notwithstanding all these



definitional concerns and for the purposes that a second home is a property owned or rented for a long time, the occasional residences of a family normally live elsewhere (Visser, 2004). The increasing interest in second homes can be addressed as a response to and rejection of globalization. Air travel and improved accessibility have generally allowed second homes to be located a long distance from the owner's permanent residence.

In relation to desert and semi-desert climates which covered most parts of Iran, second home tourism has a long history in the country (Ziaei & Salehinasab 2009). In the recent decades, the metropolitan cities of Iran have faced growth in their populations and physical development. It has caused a significant interest in second homes for families to spend their weekend holidays in the rural areas or coastal shores (Rezvani 2003, Annabestani 2010). Thus, with its remarkable features and conditions, Kish Island is the most influential tourists' attraction in the southern part of Iran (Ameri 2011). Natural factors, such as mild climate, surface water, as well as white sands and bright sun, encourage people to buy second homes in the island (DSIEC, 2007). In contrast to most other tourism areas in Iran, the owners are also offered a secure environment.

### **1.7 Significance of the Study**

The study proposed a set of guidelines which integrate the second home elements and vernacular architecture characteristics, and are adapted to the Kish Island's regulations. The proposed guideline was expected to be an alternative solution to providing second home owners' long term requirements. Thus, it was expected that

this guideline would become an alternative and effective solution for permanent or second home design in the south of Iran as well. Additionally, the application of the vernacular architecture in second homes in Kish Island's experience could be applied to other developing countries, especially those in the Persian Gulf region, which are in a dire need of housing for their second home ownerships, while trying to balance between developments to sustaining them.

### **1.8 Scope and Limitations of the Study**

In this study, a new perspective of the vernacular architecture at Kish Island is introduced, together with an explanation of the existing Kish's building regulations in second home design. This study also describes different definitions and functions of second homes in the international context to make a strong connection between the vernacular architecture and the criteria for second homes at a tourist island in the South of Iran.

This research provided a proposal for the development of second homes only in Kish Island, with its own environment, culture and function. Thus, this study was only concerned Iranian second homes owners who are the main owners of the Island's facilities. More studies are required to generalize the findings to any place outside of Kish Island.

### **1.9 Organization of the Thesis**

This thesis consists of eight chapters, which are organized as follows:

**Chapter One** gives a brief overview and the context of the study by introducing the research questions, research objectives, significance of the study and definition of the relevant terms used.

**Chapter Two** is the first part of the literature reviews which focuses on the definition of second home in general, its related theories, as well as its components and applications. It also introduced the theories countering second homes. Then, it highlights Kish Island's housing plans, strategies and development through the history and in the recent decades. Moreover, it introduced the current situation of second homes in the island.

**Chapter Three** is the second part of the literature review which it discusses the vernacular architecture and its principles, as well as describing it in the Iranian and regional contexts. This part of the chapter also includes a survey on the vernacular architecture evaluation and an overview on application of vernacular architecture in Iranian contemporary architecture.

**Chapter Four** discusses in detail the methodological approach adopted in this study. It is given based on two principles of inquiry, namely, literature review and case study. In this chapter, the researcher also introduced the general research question and its specific research questions, as well as explained the qualitative case study research methodology. For this purpose, two main strategies were considered for the research content of the case study and the literature review which comprised of the techniques of data collection and data analysis.

**Chapter Five** discusses vernacular architecture of Iran and then the vernacular architecture of Old Saffein; a vernacular settlement in the island. Archival study, which is according the protocol and observation, creates this part of thesis. It attempted to investigate the vernacular architecture in the Old Saffein village so as to find its specific characteristics. It also sought to emphasize on the architectural concepts and ideas, as well as the construction and technologies which are applied in the vernacular architecture of the village, as the last opportunity for saving the architectural heritage of Kish Island.

**Chapter Six** discusses the findings of the interviews that were carried out with professional architects at Kish Island. It also explores the attributes of the architects' reflections and ideologies based on their on-site experiences. In addition, the authority of Kish Island has also been analyzed to make the process and steps for the guidelines in taking distance to any unpractical proposal. Moreover, this chapter also presents the process for the synthesis of vernacular architecture characteristics and second home principles with owners' requirements in Kish Island.

**Chapter Seven** explains the collected data, analyses, observations and interviews with the owners of two selected case projects at Kish Island. The integration of the findings in this chapter with other incorporated methodologies will lead to further recommendations of the proposed guideline for a better designing of second homes at Kish Island. This chapter also reviews the findings on the owners' expectations of their second homes, their understandings of the physical design feature. This chapter is concluded by the summary of the findings from the interviews carried out.

**Chapter Eight** presents the conclusion of the research. It initially highlights the main findings by reflecting on the results obtained in each methodological approach and subsequently proposing several recommendations on how the appropriate vernacular architecture design can be adopted and covers owners' requirements. The recommendations also include the improvement that can be introduced into the guideline for future second homes at Kish Islands. In this chapter, the researcher also explains the benefits of the new approach and makes a clear image of Kish Island in future. Finally, the thesis is concluded with the contributions and suggestions for future studies based on the findings of the current research.

In next page, Figure 1.5 (in next page) illustrates a flow chart that summarizes the overall structure of the study and this serves as a comprehensive reference and guideline to this thesis.

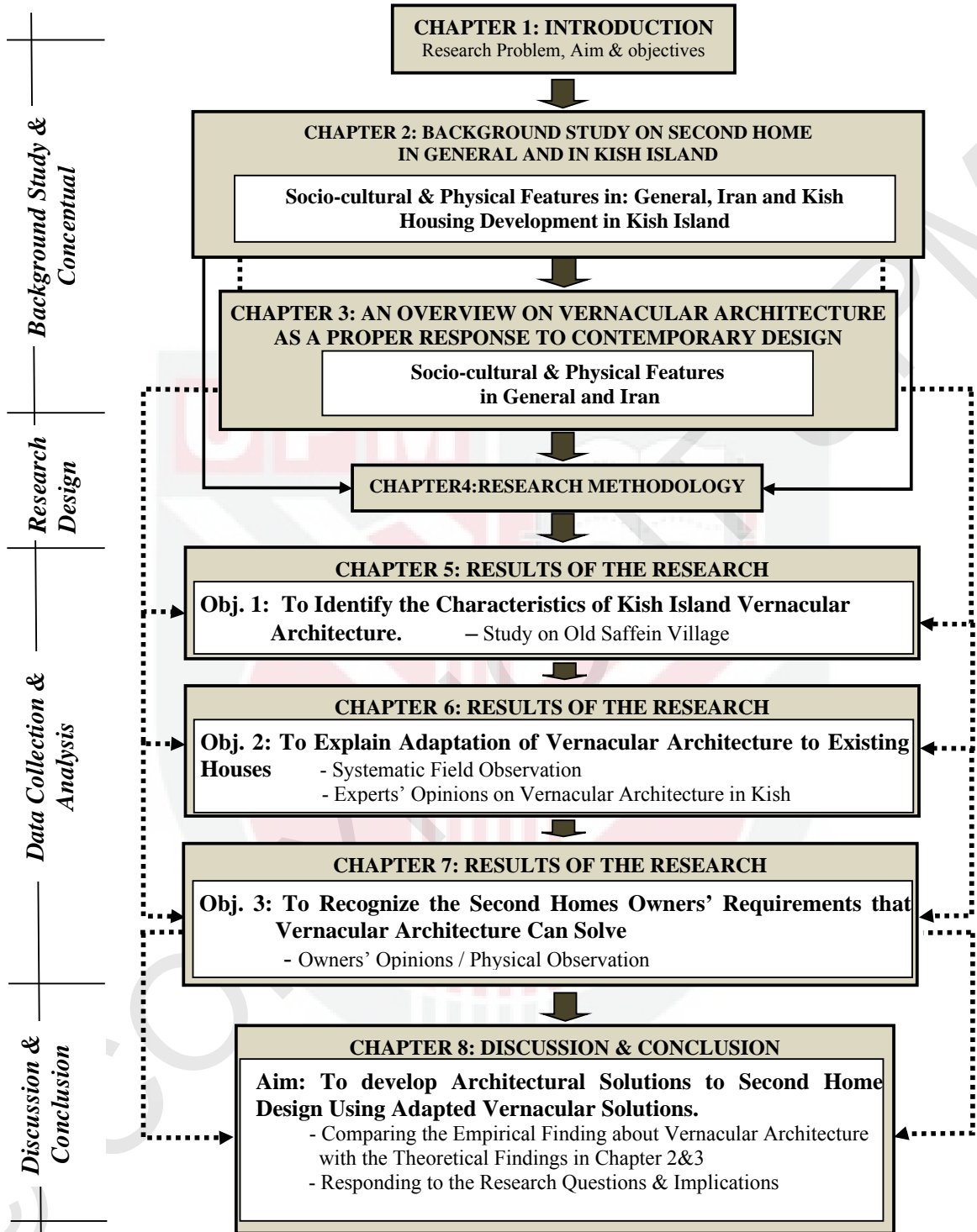


Figure 0-5: A flow chart of the overall structure of the thesis

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