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The role of traditional material culture in contemporary Saudi Arabia: The traditional courtyard house as exemplar

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The Ohio State University, 1994
THE ROLE OF TRADITIONAL MATERIAL CULTURE IN
CONTEMPORARY SAUDI ARABIA: THE TRADITIONAL COURTYARD
HOUSE AS EXEMPLAR

DISSERTATION
Presented in Partial Fulfillment of the Requirements for the
Degree Doctor of Philosophy in the Graduate School of the Ohio
State University

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# TABLE OF CONTENTS

**ACKNOWLEDGMENTS** .............................................................................................................................................. ii

**VITA** ...................................................................................................................................................................... iii

**CHAPTER** ......................................................................................................................................................................... PAGE

I. THE PROBLEM OF TRADITION AND MODERNIZATION IN SAUDI ARABIA'S CHANGING CONTEMPORARY CULTURE .................. 1

- STATEMENT OF THE PROBLEM ................................................................................................................................. 2
- OBJECTIVES OF THE STUDY ........................................................................................................................................ 2
- SIGNIFICANCE OF THE PROBLEM ............................................................................................................................. 4
- METHODOLOGY ............................................................................................................................................................. 5
  - Geography ................................................................................................................................................................. 6
  - The Rise of Islam .................................................................................................................................................... 8
  - The Status of Women .............................................................................................................................................. 10
  - The Discovery of Oil .............................................................................................................................................. 11
  - Toward a Definition of Culture and Tradition ........................................................................................................... 14
- Ethnographic Focus ...................................................................................................................................................... 16
- Research Questions ................................................................................................................................................... 17
- Descriptive Research .................................................................................................................................................. 19
- Unstructured Interviews ............................................................................................................................................ 19
- Study Subjects ............................................................................................................................................................ 21
- Data Gathering .......................................................................................................................................................... 23
- Treatment of Documents .......................................................................................................................................... 23
- Use of Photography .................................................................................................................................................... 23
- THE TRADITIONAL COURTYARD HOUSE .................................................................................................................. 24

II. THE STRUCTURE AND FUNCTION OF THE TRADITIONAL COURTYARD HOUSE ................................................................. 25

- FAMILY STRUCTURE AND ISLAMIC TRADITION ......................................................................................................... 28

iv
# LIST OF FIGURES

<table>
<thead>
<tr>
<th>FIGURES</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. A map of Saudi Arabia showing the five regions.</td>
<td>7</td>
</tr>
<tr>
<td>2. Section through the traditional courtyard house explaining the air cycles during night and day.</td>
<td>25</td>
</tr>
<tr>
<td>3. A large traditional house in Riyadh showing the openings in the first floor and the windows in the second floor.</td>
<td>26</td>
</tr>
<tr>
<td>4. Traditional courtyard house expansion</td>
<td>29</td>
</tr>
<tr>
<td>5. Model plan for a traditional courtyard house.</td>
<td>30</td>
</tr>
<tr>
<td>6. Construction of the ceiling.</td>
<td>36</td>
</tr>
<tr>
<td>7. Milban used to make mud brick</td>
<td>36</td>
</tr>
<tr>
<td>8. The techniques of building the walls</td>
<td>39</td>
</tr>
<tr>
<td>9. Men's reception room</td>
<td>40</td>
</tr>
<tr>
<td>10. Columns and ceiling constructions</td>
<td>41</td>
</tr>
<tr>
<td>11. Men's exterior door</td>
<td>45</td>
</tr>
<tr>
<td>12. Traditional way of cooking using wood and fire</td>
<td>49</td>
</tr>
<tr>
<td>13. Viewing box</td>
<td>52</td>
</tr>
</tbody>
</table>
14. The ornate roof line of a traditional courtyard house ..........53
15. Decorated interior door ...............................................................55
16. Decorative patterns in the traditional houses .........................57
17. The hearth (Camar) .....................................................................59
18. Inside the traditional courtyard house featuring the private internal courtyard .................................................................62
19. The north facade of a modern villa (in Riyadh) and the first-floor plan showing the garden surrounding the house (instead of the house surrounding the courtyard as in the traditional house) .................................................................63
20 Section and first-floor plan of a small villa in Riyadh showing the main structure of the villa made of concrete and the walls made of cement bricks .................................................................66
21 A small villa in Hail showing the new patterns of design inside and out .........................................................................................67
22 Plan of a modern villa showing the two types of reception rooms .........................................................................................70
23 Location of material culture ............................................................................95
24 Bedouin traditional loom which Bedouin women still use to weave tent cloth and rugs .................................................................................96
25 A typical Bedouin's tent .............................................................................97
26 The traditional wooded chest (kazznah) ...............................................100
27 The traditional mihmash used to roast coffee beans .................102
28 A typical traditional mubrad, which used for cooling hot coffee beans ................................................................................................................. 102

29 A typical niger from northern Saudi Arabia ................................................................................................................................. 103

30 Coffee-serving Dallah from central region (Najd) .......................................................... 104

31 A traditional incense burner (mubkhrah) made in Hail in northern Saudi Arabia ......................................................................................... 106

32 Saudi traditional tray for serving large meal (Sunniah) .................................................. 107

33 The traditional outer garment of the Saudi woman (abaaya) .................................................................................................................................. 113

34 Men's traditional headgear – Ghoutra usually worn in the summer and Shmag worn in the winter ........................................................................ 115

35 The Saudi man's thawb which is worn all over Saudi Arabia and in some other Arabian countries ........................................................................ 116

36 The Saudi traditional merodan, which was worn mainly in the Central (Najd) and Northern regions ......................................................................... 116

37 The traditional Saudi mantle (bisht or mishlah) ................................................................................. 119

38 Residence of Alhammed family ................................................................................................................. 179

39 Residence of Alobaid family .................................................................................................................. 180

40 Traditional courtyard house built in the late 1940s ................................................................................. 181

41 Residence of Alagial family in Burayda ................................................................................................................. 182

42 A traditional courtyard house was built in Unayzah around 1949 ................................................................................................................. 183
43 Traditional courtyard house which was built in Riyadh in 1954 for a large, extended family...

44 Partially destroyed house exposing the tree trunk, mud and palm leaf and twig layers of roof and staircase.

45 Exterior doors framed in mud plaster.

46 Columns supporting the balcony/roof in the courtyard.

47 Parapet designs along inner wall of roof of courtyard and along the exterior wall.

48 The "open living" area below the balcony along the courtyard.

49 Hearth area (camar) in men's reception room.

50 Dates tree design carved in mud plaster.
CHAPTER I
INTRODUCTION: THE PROBLEM OF TRADITION AND MODERNIZATION IN SAUDI ARABIA'S CHANGING CONTEMPORARY CULTURE

With the discovery of oil in Saudi Arabia during the 1930s came a turning point in the history of that country. The oil brought a flow of money, a rush to modernize and an influx of foreigners to the country. External influences and imported technologies radically affected the everyday lives and activities of the Saudi citizens.

Throughout the countries of the world, contemporary cultures have drawn upon traditional cultures for national definition. In Saudi Arabia, the rapid industrialization of the country has challenged and threatened the traditional Arab culture. People were pulled away from the traditional culture that had played so much a part in the lives of their parents and grandparents. New ideas, lifestyles and values influenced the Saudi society, and in so doing, reshaped, redefined and even
removed traditional cultural elements of the Saudi people's history.

**STATEMENT OF THE PROBLEM**

In this study, I have examined the role of tradition in contemporary Saudi culture. My primary focus was the role the traditional courtyard house — both the structure of the house and the crafts within the house — played in Saudi culture. These traditional designs and structures are important historically, aesthetically and educationally. Today, as part of the rapid socioeconomic change in Saudi Arabia, the traditional courtyard houses, and the cultural heritage they embody, are being replaced by imported designs. In the process, pieces of the country's cultural heritage are threatened by destruction. It is my contention that the study of traditional housing in Saudi Arabia has importance for the development of modern housing from aesthetic, functional and cultural perspectives.

**OBJECTIVES OF THE STUDY**

The objective of this study was not a descriptive analysis of traditional artifacts in Saudi Arabia. The study, however, used aspects of traditional courtyard houses — exteriors, interiors and decorations — as representative examples of traditional characteristics from which one can discover and analyze the role
of tradition in Saudi Arabia. To that end, answers were sought to the following questions:

1) What is the role of tradition in contemporary culture?
   a) What characteristics define "traditional" Saudi culture?
   b) What characteristics define "contemporary" Saudi culture?

2) How have modern houses evolved from their architectural past?

3) How does the traditional courtyard house exemplify the historical culture?
   a) What do the interiors reveal?
   b) What do the exteriors reveal?
   c) What do the decorations reveal?
   d) What do the Saudis know about the design of such houses?
   e) How do Saudis feel about the value of these houses?

4) How have external influences affected Saudi architecture?
   a) Where can these influences be seen?
   b) How do Saudis feel about these influences?
   c) How do Saudis feel about contemporary architecture?
I want to be very clear. This study was not confined to a descriptive cataloging of traditional aspects of Saudi culture. This study, however, used these characteristics, as exemplified by the courtyard house, as a means to understanding the role of tradition in Saudi Arabia. This study provides insights about the influence of external cultures on Saudi Arabian architecture in particular, and the Saudi culture in general.

SIGNIFICANCE OF THE PROBLEM

The significance of the problems is multi-fold. 1) The preservation of traditional courtyard houses can play an important role in maintaining the threatened indigenous culture of Saudi Arabia. 2) A study of these houses can contribute to an awareness and interest in the houses. 3) An emphasis on aesthetic values can increase the Saudi people's understanding of their cultural past. 4) An awareness of pattern and beauty in one's surroundings can bring new insights.

I researched historical aspects of architectural design to the present day in order to illuminate the cultural heritage found within the traditional house and to assess people's responses to design techniques. This study could assist in the development of a method to create designs that are more functional, more aesthetically pleasing and more culturally meaningful. As Hassan Fathy notes:
Modern science can develop human capabilities to use natural sources of energy far beyond what has been achieved in vernacular architecture. This requires a systematic application of science and a comprehensive comparison of modern and traditional structures. But if modern science is to revitalize architecture in this way, the principles that produced the traditional solutions must be respected. This is the only way modern architecture can surpass, in human and ecological quality, the achievement of vernacular architecture in the hot arid regions of the world (Fathy, p. 69).

As human needs have changed and lifestyles have become more sophisticated, developing a suitable environment for human growth has become more important. This research looks at shared values, attitudes and beliefs among the Saudi people and how architectural design can be an expression of these shared values, attitudes and beliefs.

**METHODOLOGY**

One cannot study the material culture of traditional architecture without considering the main climatological and social factors that have affected architectural design. In Saudi Arabia, the desert landscape and the religion of Islam have been major influences on architectural developments.
Geography

The Kingdom of Saudi Arabia occupies 80 percent of the Arabian Peninsula. The world's largest peninsula, the Arabian Peninsula lies between Asia and Africa in an area commonly referred to as the Middle East. With an area of 830,000 square miles (2,149,690 square kilometers), Saudi Arabia is slightly larger than the state of Alaska (McCarthy, 1986, p. 4). The country's population exceeds 15 million -- fewer people than in the state of New York (Foster, 1993, p. 7).

Much of Saudi Arabia is inhospitable desert with little or no rainfall, no lakes and no rivers. Daytime temperatures often reach 130 degrees Fahrenheit; nightfall typically brings a sudden temperature drop. During the winter, night temperatures can fall to the freezing point.

Saudi Arabia is divided into five geographic regions (Fig. 1).
The eastern, central and northern regions are mostly dry, arid lands. The western and southern regions are semi-arid and somewhat mountainous.

Over the years, the indigenous people of Saudi Arabia have adapted to the hardships of the desert environment and the scarcity of water and have formed permanent settlements. Many
of these settlements have grown over time to become towns, cities, and, most recently, major metropolitan areas. Throughout the history of this land, decisions about where settlements were located and how structures were built were vital questions of survival in light of the harsh and unforgiving environment.

*The Rise of Islam*

Since the traditional material culture of Saudi Arabian architecture is derived from an Islamic root, it is important to consider the tenets of this religion. The religion of Islam is a system of beliefs and practices initially revealed by Allah to Mohammed and enshrined in the Arabic Quran (Koran). Through the ages, secular traditions have brought certain modifications to the religion in response to changes in time and place.

Islam is a monotheistic religion and is closely related historically to Judaism and Christianity. Islam arose in Arabia in the 7th century A.D. as a result of the teachings of the prophet Mohammed. Islam in Arabic means 'surrender,' pointing to the fundamental religious belief that a Muslim (i.e., an Islam believer) accepts surrender to the will of Allah. Allah is the unique God, the creator, the sustainer and the restorer of the world. Allah's will is made known to humans through the Quran that was revealed to Mohammed, the prophet and messenger.
Islam is the faith observed by an overwhelming majority of Saudi Arabians.

The country of Saudi Arabia is a monarchy based on the laws of Islam. The king not only holds executive and legislative powers, but he also is the imam, the country's supreme religious leader. The country has no formal constitution. Instead, the sharia, the body of Islamic law, regulates public affairs. Saudi Arabia is the only fully Islamic state in that all laws and all powers of the king are governed by Islam. As such, most of the governmental and societal conditions of Saudi Arabia differ greatly from those of Western countries.

Because there is no separation of religion and government in Saudi Arabia, the institution of religion plays an important role in the daily lives of Saudi citizens. With religion and tradition the two major influences on the Saudi citizen, the culture of the country would generally be described as conservative. Many Saudis tend to view Western cultures where church and state are separated — the United States, for example — as less spiritual, more materialistic and more liberal than the Islamic culture. In spite of these views, however, Western culture has had an undeniable influence on contemporary Saudi Arabia.
The Status of Women

Saudi Arabian society also has experienced conflicts between the institution of Islam as a religion and the patriarchal Arabic culture. One issue at the heart of modern Arabic culture is the status of women. When Islam defined the rights, roles and duties of women in an Islamic society, it did so in response to the Arabic patriarchal culture. Among the most important aspects of women's life addressed by Islam was the status of women in comparison to that of men.

According to the Quran, women were deemed equal to men. However, because the Saudi society is controlled by men who were selective in carrying out the social agenda, this mandate never became reality. The result is that women lag behind men in the number of opportunities afforded them. Women are restricted to a limited number of professions like teaching, nursing and gynecology. And the clientele of a woman professional is restricted to other women.

A woman in Saudi Arabia does have the right to conduct financial business in full separation from a man and can gain financial stability and independence. In fact, women control a large percentage of the wealth in Saudi Arabia. It is estimated that women, who make up 49 percent of the Saudi Arabian population, control 40 percent of the country's wealth, according
to Marilyn Waldman a professor of history at Ohio State University.

Despite this economic power, women in Saudi Arabia live in a limiting, segregated society. In the arena of sexual conduct, it is up to women to abide by an established ethical code. Women who break the code are treated harshly by society and face serious consequences, whereas men rarely bear any responsibility for code violations. This results in women being a source of shame to society, and men being a source of pride.

As this study demonstrates, the traditional attitudes toward women in Saudi society were incorporated into the architectural design of the traditional courtyard house.

_The Discovery of Oil_

The discovery of oil in Saudi Arabia during the 1930s may have been the most powerful force in the country's history since the advent of Islam. As D. J. Hablin (1982) writes:

Nothing half so dramatic as the force of Islam happened again for more than a millennium, but when it did, it not only caused upheaval in the West but also changed Saudi Arabia forever. The change was oil, oceans of oil, discovered in the 1930s but achieving its full impact with the oceans of money which began to roll in during the 1970s. With all that money came a rush to modernize that has impelled the Kingdom with wrenching and
bewildering suddenness from the 17th century to the 21st, technologically at least (pp. 43-52).

With the discovery of oil in the 1930s, the isolated and undeveloped country of Saudi Arabia was suddenly exposed to the outside influences of the industrialized world. This exposure resulted in massive social and economic changes. By the 1970s, the oil wealth had taken the kingdom's traditional society into the 20th century. The oil brought unheard of opportunities as well as unprecedented challenges. As Shirley Kay (1982) points out:

The changes that followed the oil discovery have not been immune to some sacrifice on the part of the indigenous people and their culture. For as fast as a massive influx of wealth solves one set of problems it creates another. The latter are more worrying to deal with in that they are new, often unforeseen, sometimes almost without precedent and therefore cannot be solved by example (p.171).

The case of modernization in Saudi Arabia, and the impact on traditional Saudi culture, is unique inasmuch as the process of modernization occurred so rapidly throughout much of Saudi culture. The rapidity of technological change affected severely the continuity of traditional Saudi cultural change and evolution such that within one to two generations many traditional aspects
of folklife and material culture disappeared while negative attitudes toward the traditional culture increased. Throughout this study, and especially in chapters II and IV, I have illustrated and outlined some of the significant changes as regards folk housing and material folk culture and the decline of the traditional folk ways. Finally, the uniqueness of this cultural change is in part the fact that change, due to an influx of capital did not occur over a period of time through evolution. Further, the rapid cultural change came about through an intense process of modernization, bringing Saudi daily culture quickly to the highest levels of technological culture available in the world. To be sure, this vast cultural and technological change was not universal, but the intensity of change was widespread throughout many areas of Saudi society, such as architecture, where visible change is influential on the population as a whole.

External influences and imported technologies, in areas like transportation and communications, have radically affected the everyday lives and activities of the Saudi citizens and have challenged their traditions. Although the inhabitants of a few of the country's regions have continued to live in small towns or have remained predominantly nomadic, the population of most towns and cities has exploded. The Saudi government adopted policies that encouraged tribal societies and communities to settle in urban areas. Prior to the 1940s, only 10 percent of the
country's population lived in urban centers. Today, a majority of Saudis, about 77 percent, live in cities (Foster, 1993, p. 108). The population of Saudi Arabia's political and administrative capital, Riyadh, had risen from 8,000 at the beginning of the 20th century to over 1.8 million by the late 1980s (Lerner Publications, 1989, p. 18).

This urbanization brought profound changes in housing, construction and other related fields. The houses that have been built recently or that are under construction currently employ modern building materials and designs imported from foreign societies. The indigenous, traditional methods and designs for buildings have been largely, if not totally, abandoned.

This loss of tradition may have ramifications not only in the architecture of Saudi Arabia but may have ramifications also on a larger societal and cultural level.

*Toward a Definition of Culture and Tradition*

Culture is a controversial concept and is a difficult word to define. According to June King McFee (1980, p. 280), the definition of the word culture is under continuous and serious debate. The *Encyclopedia of Anthropology* (1976) offers a popular definition of culture: "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."
This definition can be applied to the culture of an independent and broad society or civilization, such as the Islamic or Greek civilizations and the Western or Eastern cultures.

However, a different definition is needed for modern societies and contemporary cultures around the world, including that of Saudi Arabia, who have experienced rapid changes in their native cultures due to the invention of machines and technology. McFee writes:

That which has been commonly learned by a group of people, is maintained from one generation to the next, subject to modification over time and learned in some degree differently by the members (p. 226).

In recent years, culture in Saudi Arabia has not undergone "modification over time." Rather, sudden change has exploded the cultural past and has left, between the generations, gaping holes in the understanding and appreciation of Saudi tradition.

For the purpose of this study, it was necessary to define the term "traditional culture" in order to differentiate it from "contemporary culture." Indigenous culture is related to the past and can be called traditional. Contemporary culture is related to the present. Traditional culture consists of the organic, inherited traditions and customs handed down from one generation to the next -- the cultural elements that have a connection with the past and the authenticity of society. The elements of traditional
culture, such as folklore, crafts, customs, costumes, architecture and design, can be readily seen in the remote and tribal areas of Saudi Arabia. A great number of people in these areas still follow tradition and find it to be an important part of their identities. They encourage their children to follow their ancestors' traditions in order to maintain continuity. On the other hand, few of these traditions are seen in the cities, although the traditions linger in the memories of the older generations.

Ethnographic Focus

Ethnographers go to the field to explore a culture. They diligently try to collect reliable information and to learn more about a culture. Ethnographers make inferences to facilitate the culture learning process. James P. Spradley (1980) points out three types of information supplied by ethnographers to make cultural inferences: 1) observation of people's activities (cultural behavior); 2) observation of the way people make and use objects (cultural artifacts); 3) listening to people's conversations (speech messages). These components are of major importance in understanding the cultural meaning of the total cultural scene.

As Spradley (1979) writes:

(Ethnography) consists of a body of knowledge that includes research techniques, ethnographic theory, and hundreds of cultural descriptions. It seeks to build a systematic
understanding of all human cultures from the perspective of those who have learned them. Ethnography is based on the following assumption: knowledge of all cultures is valuable. This assumption warrants a careful examination (pp. 9-10).

In this study, I have used the second component (cultural artifacts), as well as the third component (speech messages), as the ethnographic focus. Since I did not undertake ethnographic fieldwork the first component (observation of people's activities) was not used for my study. Questions for interviews were carefully designed to investigate the 'artifact' component of the Saudi culture.

Research Questions

The research questions were developed from the study's objectives in an attempt to elicit responses that were applicable and useful to the study's objective. Questions were as follows:

1) Is a combination of traditional and modern house designs suitable for today's living? [These responses relate to the questions 1a, 1b and 2 in the OBJECTIVES OF THE STUDY section.]

2) Do you believe that traditional houses have special characteristics? [Relate to Objective questions 1a, 3a, 3b and 3c.]
3) Would you like to live in a house that combines traditional and modern features? [Relate to Objectives 1a, 1b, 3d and 3e.]

4) Should architects try to combine traditional and modern features into the design of a new house? [Relate to Objectives 1a, 1b and 2.]

5) Would you like to have a courtyard in your new house: [Relate to Objective 3c.]

6) Do you think that contemporary Saudi houses are fulfilling the climate conditions and people’s needs? [Relate to Objectives 1b and 4c.]

7) Which architectural style would be more appropriate you your social and cultural beliefs? [Relate to Objectives 3d, 3e, 4a, 4b and 4c.]

8) What value do you place on the architectural styles of other cultures? [Relate to Objective 4b.]

9) Do you think that Saudi Arabia has benefited from the influences of other cultures? [Relate to Objectives 4a, 4b and 4c.]

10) Please identify from the photographs:
   a) Traditional cultural aspects.
   b) Contemporary cultural aspects.
   c) Design influences not native to Saudi Arabia.
Descriptive Research

Descriptive research methodology has proven to be the most suitable approach for this study. Using an emic perspective or the perspective of an insider, descriptive research was ideal for obtaining data in this study of the role of tradition as seen in traditional courtyard houses in specific places and conditions. C. Hopkins discusses the importance of descriptive research as such:

Descriptive research deals with those questions that are based in the present state of affairs which have implications beyond the limits of the subjects or other elements studied. Questions which generate answers that contribute to principles and theory about educational concerns are many times answerable through study of current conditions and existing relationships (p. 137).

The following procedures enabled this researcher to consider the relationship of traditional houses (their exteriors, interiors and decoration) to other dimensions of social experience. To implement this research, I returned home to Saudi Arabia and gathered information employing the following:

Unstructured Interviews

I conducted unstructured interviews for use as support in this study. The informal studies were conducted in the central
region of Saudi Arabia called Najd. This region was selected because it is the geographic center of the country. The traditional courtyard house was developed in this region, specifically in the cities of Riyadh, the capital of Saudi Arabia, and Hail.

The unstructured-interview format was selected because such interviews can produce in-depth data not obtainable through a questionnaire. When discussing the advantages of conducting an interview study, L.R. Gay (1987) states:

(T)he interview is flexible; the interviewer can adapt the situation to each subject. By establishing rapport and a trust relationship, the interviewer can often obtain data that subjects would not give on a questionnaire. The interview may also result in more accurate and honest responses since the interviewer can explain and clarify both the purpose of the research and individual questions. Another advantage of the interview is that the interviewer can follow up on incomplete or unclear responses by asking additional probing questions. Reasons for particular responses can also be determined (p. 203).

The unstructured interview format was chosen over the structured format because the unstructured allows "absolute freedom of response (and) can yield in-depth responses and provide otherwise unobtainable insights" (Gay, p. 204). The ability to clarify and explain individual questions, as well as the
complete freedom of response was particularly important when dealing with photographs. This format was not flawless. With unstructured interviews, the researcher can give uneven weight to the interviewees' responses. But I believe this format was the only possible approach with the people of Saudi Arabia who respond more openly to informality. A more formal approach might have been associated with the formality of the government and its bureaucracy, thereby coloring interviewees' responses. In other words, with a more structured format, the interviewees might have felt compelled to be 'politically correct' rather than honest and open.

Study Subjects

Four groups of people participated in the interviews. They represented different occupations, education levels and interests. Only the male sector of the Saudi culture was interviewed because of the religious restriction prohibiting males from interacting with females. The number of individuals interviewed was determined during my visit to Saudi Arabia.

The criteria used in selecting the participants was as follows:

1) Workers, such as carpenters, master builders and craftsmen, who have participated in the building of traditional houses. Most of these workers have other jobs because of the
lack of construction requests for new traditional houses. Those who are still in the trade typically work for the government to renovate and maintain traditional buildings. I contacted craftsmen working at The Department of Antiquities and Museums as well as displaced craftsmen who were contacted through mutual acquaintances.

2) Architects who have studied architecture in modern schools and architects who design and build modern houses while maintaining an interest in traditional architecture. They were contacted through architectural firms in Saudi Arabia where they work.

3) Educators in the field of art education or related subjects like architecture education and art history who have expressed interest in traditional architecture. There were selected from King Saud University faculty members.

4) Consumers who ranged in age from 30 to 60, which is the average age range of homeowners in Saudi Arabia. The study subjects lived in the Riyadh area. They also have an expressed interest in traditional architecture and its development and usage in modern houses.

Responses from these interview subjects are attributed throughout this paper. Additional information about the subjects and their responses can be found in Appendices A, B and C.

Data Gathering
Some of this study's data was collected from the informal unstructured interviews. Open-ended interview questions were constructed in order to obtain a wide range of information and to give the interviewees freedom in responding. Responses were recorded by the interviewer on paper and also, when acceptable to the respondent, on audio tape. All interview questions were presented in the Arabic language, and the responses were in Arabic. The interview questions and responses were translated into English by a Saudi linguist. Both sets of questions and responses (the Arabic and the English) are being submitted.

Treatment of Documents

Various documents have been procured for this study. Those include official Saudi Arabian government documents that relate to housing starts, architectural design criteria and building materials. Documents relating to housing and construction also were obtained from architectural design firms, construction companies and building-material suppliers.

Use of Photography

Photographs, taken by me, and similar to those in Appendix E were used to identify specific qualities and characteristics of traditional and contemporary houses. Research subjects were asked to classify photographs of houses as either
traditional or contemporary and to identify elements that they considered to be traditional or contemporary. Specific elements that were seen in the photographs included: doors, windows, main rooms, exterior walls, balconies, courtyards, pillars, ceilings and interior decorations.

THE TRADITIONAL COURTYARD HOUSE

In my study, the traditional courtyard house is offered as a cultural artifact through which we can build an understanding of the Saudi culture. This is a culture that in recent years has felt shock waves from the discovery of oil during the 1930s and that discovery's aftermath. Can the demise of the traditional courtyard house be seen as a symbol of the demise of traditional Saudi culture? Before that question can be answered, we must first take a look at the courtyard house and how its design came to reflect Saudi tradition.
CHAPTER II
THE STRUCTURE AND FUNCTION OF THE TRADITIONAL COURTYARD HOUSE

The traditional courtyard house has long been considered the typical dwelling of the Arab-Islamic culture. The house is distinguished by an open-air, interior courtyard around which are situated rectangular dwelling units. This arrangement allows the rooms of the dwelling units to draw light and air from the courtyard (Fig. 2).

Fig. 2 Section through the traditional courtyard house explaining the air cycles during night and day.¹

¹ All drawings have been created by the researcher using computer graphics.
Fig. 3 A large traditional house in Riyadh showing the openings in the first floor and the windows in the second floor.
Built primarily before 1970, these one- or two-story houses are marked by plain facades designed to withstand severe elements like hot winds and sand. The houses are thick-walled with few or no window openings on the street side except in the second floor in the case of large houses (Fig. 3). Roofs are flat with high parapets. These residences offer their dwellers privacy and security.

The traditional courtyard house can be found in almost all regions of Saudi Arabia and is most common in Najd and al-Hasa. As Ellahi Ishteeaque (1985) notes, the development of the courtyard house was influenced by a number of factors – including climate, family structure and the Islamic religion. Writes Mohammed A. Eban Saleh:

Traditional planning and architecture was not based on a deliberate pre-planned concept. It was a result of a complex interaction between multiple variables and took place within difficult circumstances. Such variables include economic, political, religious, cultural and physical constraints (p. 51).

Years ago, the location of the traditional courtyard house was based upon strong cultural criteria. In most cases, the traditional courtyard house was situated near the local mosque, the extended family or tribe, and the place of work.
FAMILY STRUCTURE AND ISLAMIC TRADITION

Cultural factors influencing the design of the Saudi traditional courtyard house include family structure and Islamic tradition. The Quran decrees that one be kind to and honor the family. Thus, Muslims have close family ties, and extended families traditionally have shared living quarters. The design of the traditional courtyard house nourishes the concept of the family as the basic Islamic institution by allowing the dwelling to be expanded to accommodate a growing family (Fig. 4).

It is often said that the courtyard house is never a completed project. Yousef Fadan states (1983) that:

The influence of the extended family upon the principal house can be clearly seen in the evolution of land configuration as family size increases (either by marriage or by birth) requiring more rooms to be built upon unused land on the house lot. Once the land around the courtyard has been covered, any further expansion must take place in a vertical direction (p. 315).
When the head of a family appropriates land to build a house, he takes into consideration the size of his family. As in tribal organization, the head of the family facilitates the land and provides for his family members. Having staked out the land, he may use one part of the space to house the members of his present family, reserving other parts for future expansion. If and when one or more male children grow to maturity and become financially independent, the family marries him to a woman the family has chosen and builds a living quarter for the couple. Such house construction takes place every time a male member of the family gets married. Thus, the traditional house takes shape according to the number of male members in a particular family.
Fig. 5 Model plan for a traditional courtyard house.
Islamic teaching and Arab tradition influence the design of the traditional courtyard house particularly where gender relations are concerned. Othman Llewellyn (1983) indicates that:

Urban design must insure privacy for women with sufficient air and sunlight. This affects the regulation of building heights, the design and placement of doors and windows, and the design of garden and rooftop walls so that the interiors of buildings and courtyards cannot be seen from outside (p. 34).

In discussing gender segregation, Miles Danby (1983) notes that the practice results in two basic zones in the house -- one zone for women and children and another for adult males. Danby writes that sex segregation is so ingrained in Saudi tradition that even nomads with their minimal movable dwellings or tents engaged in the practice. It is common in Saudi Arabia for tents to be partitioned into two sections (one for men, one for women) with separate entrances that face in opposite directions.

Women in Saudi traditional culture have a very special social and familial status. A woman, whether a wife, sister or daughter, is tied to the honor of a man. The dignity of a man is preserved only when the female members of his immediate family remain morally unscathed by scandal, intrigue or sin.

The traditional courtyard house was designed not only to ameliorate the outside climate but also to preserve such cultural
norms. When a house is to be built, a design (Fig. 5) takes the following under account: the women's quarters are separated from the men's; the women have their own entrance and bathroom; and the courtyard provides an outdoor living area where the woman -- as well as the entire family -- can be secluded from public view (per interviewee Mohammed -- see Appendices A and B for further information on and responses from the interviewees).

LOCATION OF THE TRADITIONAL COURTYARD HOUSE

Traditional courtyard houses generally face north. This helps to keep the house cool during the summers that are long, hot and dry (per interviewee Hejer). One room, which is always on a corner of the front of the house, is responsible for the circulation of air into the reception room. Because the ceiling of that room is much taller than any other part of the house, it serves as a wind catcher. Air from the north, which is generally cooler, is drawn down into the courtyard. Because all the rooms of the house have doors and windows that open into the courtyard, the rooms are cooled by the air from the courtyard. The reception room also has windows near the ceiling to allow the warmer air to escape.
TRADITIONAL COURTYARD HOUSE CONSTRUCTION

During the time when traditional courtyard houses were still under construction, there were a number of reasons for building new ones: to make room for a growing family forced to move from a smaller house with insufficient land for adequate expansion; to avoid the uneconomical expense of repairing a decaying structure; and to move from an area where a drop in the water level had led to the drying of wells.

The Stad

In order to enact construction, the head of the family selects the Stad, a professional traditional courtyard house builder who is usually well respected in his craftsmanship. The Stad works closely with the head of the family in every aspect of the house's design and construction. The dimensions of the traditional courtyard design are varied to suit the family's needs, stature and finances. The Stad builds the walls and supervises other craftsmen who work on different aspects of the construction. Male members of the family often are part of the construction crew. The entire family assists in many ways. They make the building of the new house their major priority until the structure has been completed. Family members work with the person who mixes the mud, the person who coats the walls with
plaster, and with the person who sculpts and decorates the plaster according to traditional design.

The Stad pays the workers daily, while the family head pays the Stad after the house is completed. Women assist by cooking for the workers. They also help to smooth the floor during the last phase of construction.

**Construction Materials**

The materials used in building the traditional courtyard house are dependent on locally available raw materials. In Najd, the basic materials employed in the courtyard house have been mud-brick, roughly cut stone, wood and a plaster of gypsum or lime (per interviewee Hejer). Centuries-old methods are followed in preparing these materials.

Historically, the primary material used to construct the courtyard house is earth – or mud. Earth is undoubtedly the least expensive building material available. And because it is abundant at the building site, there are no transportation costs. The thickness and density of earth houses are ideal for thermal insulation in hot, dry climate of Saudi Arabia. In the thick mud walls, the coolness of the night can be gathered and stored.

Local mud is used in different ways when building the traditional courtyard house. Two types of mud, differently prepared and applied, are used to cement the house. The first is
made by mixing clay and fine textured gravel with water. The professional mixer of the mud, the *Kallot*, mixes the mud with his feet. This mixture is then used to cover the floor, to construct the walls, and cover the roof. The second kind of mud is made of clay, fine gravel, water and chopped wheat straw. This mixture is left to cure for a few days -- until a chemical change produces a distinct foul odor. At this point the mud is ready to be used in coating the outer walls and in constructing the outer layer of the roof. This second type of mud is more resistant to water due to the reinforcing strength of the straw.

Mud plaster is used to coat and decorate the inside walls, including the frames of the doors and windows. It also used to reinforce the surfaces of water tunnels (*Merzap*) and -- in conjunction with cut stone -- to construct and coat the columns of the balcony.

The roof and staircase are made by laying tamarisk, or ethel, tree trunks across the space between the walls and spanning these with thick bundles of date-tree twigs. After twigs are laid, the date-tree leaves are covered with a thick layer of mud. Doors and window shutters are made of tamarisk, or ethel, tree trunks (Fig. 6).
Fig. 6 Construction of the ceiling

Fig. 7 Milban used to make mud brick
Construction Tools

The most important tools used to construct traditional courtyard houses include a knife for sculpting the hearth; a large, hand-made spade which resembles a trowel; wooden frames (Milban) for making mud bricks (Fig.7); sticks for the plaster frames; a woven basket for carrying the mud mixture; and a hand-made wooden geometric compass to outline circles and other interior decorations (per interviewee Ibrahim). These are the essential tools, but others may be used if the elaboration of the house calls for them.

The Construction Process

As mentioned above, all traditional courtyard houses differ somewhat, even though their designs are similar, if not identical. The following dimensions are general approximations.

Foundations are laid where the walls are to be built. The pit for the foundation is generally three-feet by three-feet wide. These foundations are then filled with stones of various sizes and with the mud mixture made from fine gravel, clay and water. Stone and mud are applied alternately until the foundation is complete. The technique for building the walls employs bricks or bands (Urouq) of mud. The bricks used for construction are made from clay, fine gravel and water. The compound is mixed to a dough-like consistency, whereupon it is packed into a rectangular
frame of wood (*Milban*) and lifted from the wet mud brick. The bricks take an average of one to two days to dry, provided the weather is warm. The bricks are then cemented together with mud in layers, leaving the wall 16-inches thick (per interviewee Hejer).

Openings are left for doors, windows and water tunnels (*Merzap*). Building walls with brick is less time-consuming than building with layers of mud (*Urouq*); however, the bricks are not as strong as the layers of mud. In the latter method, the mud is mixed to be sufficiently thick, so that when put into place, it can be compacted and shaped by hand. This technique is much slower than that which utilizes bricks because the bands (*Urouq*) must dry enough to support the next layer (Fig. 8).
One day is usually a sufficient amount of time to allow before adding another layer. During the layering of mud bands, openings are left for windows and doors. These have a wooden support across the top which serves as a frame. This frame provides a place on which to continue building the layers. Windows face the courtyard from the inner walls, except for some windows which face the exterior from the reception room. The walls are built to the level of 10 to 12 feet from the floor,
except for the men's reception room which is usually higher (Fig. 9).

Prior to the construction of the ceiling, columns must be placed along the edge of the courtyard for support. These columns support the balcony roof which extends from the inner walls of the rooms bordering the courtyard. They usually measure eight to 10 feet in length. This distance is determined by the length of the ethel tree trunks which form the foundation of the balcony (per interviewee Sulaiman).

Columns are made of cylindrical-shaped blocks of cut stone. These blocks are joined by and coated with mud plaster and are stacked vertically. When the column reaches the desired height, a large square of cut stone is placed on the top. This stone is larger than the column stone and becomes the support for the ethel tree trunk poles which extend in pairs from column to column, and from columns toward the walls (Fig. 10).
Fig. 10 Columns and ceiling constructions
From these supports, the ceiling is formed. There are two ceilings. One ceiling is for the rooms and another is for the balconies. Both are extremely thick and sturdy as they must support the living area on the roof. The roofs of the two ceilings are at the same level, except for the men's reception room which is usually higher. Ethel tree trunk poles also are used to support the roof of rooms that are very large, for instance, in the men's reception room, where larger poles represent a higher family stature (per interviewee Sulaiman).

Ethel branches, around six inches in diameter, are then laid from outer to inner walls about three inches apart, and in the same direction as the supports from the walls of balcony. After this layer, bundles of date-tree twigs are laid across at a right angle from the branches and placed in a tight layer. Upon this layer are laid date-tree leaves covered with a layer of mud. This layer is about one foot thick. The strings of the bundles are cut below before the mud dries. The twigs are spread to fill all spaces under the weight of the wet mud, forming a very tight seal below the mud. When this layer dries, a thick layer of wheat straw mud is laid. A thin layer of this type of mud is applied every year or two depending upon the wear on the roof from use and rainfall (per interviewee Sulaimad).
THE TRADITIONAL COURTYARD HOUSE: ITS PARTS AND THEIR USES

The Courtyard

The traditional courtyard house employs an introverted design. In other words, the courtyard is the focus for the arrangement of the interior space. The interior courtyard, then, is the heart of the traditional courtyard house.

The area of the courtyard is basically rectangular and usually contains several large, interior gardens. The area performs such important functions as modifying the climate and providing a private refuge. The courtyard offers a safe playground for children who can be directly supervised by their mothers. And the courtyard also offers a convenient space for family and social gatherings. For women, the courtyard allows a place to get air and sun, a place to socialize, while being shaded from public view.

The Quran states that anyone who revives dead land shall have a reward. By planting the courtyard with such vegetation as date trees, orange trees, lemon trees and grape vines, the sower thus receives, not only the spiritual reward, but also the physical reward of fruit. Because the conservation of water is important, water is not wasted by growing purely ornamental plants or gardens. Only useful plants are grown.
A walkway space is built above the ground level, dividing the planted areas. A small pool often is constructed in the middle planted area for water storage. This is another way, along with conservation, that people deal with the shortage of water in the desert. Containers are found next to the pool for washing dishes and hands. Even the houses of the poorer families may contain some trees, plants and a modest water tank. There also is a deep hole used as a drain for waste water.

Except for the men's reception room, which has a wall to shield the courtyard from view, all the rooms of the courtyard house have direct access to the courtyard. Circulating air from the courtyard acts to cool these rooms, while the trees in the courtyard provide some humidity in the dry climate.

In the Quran, the major physical characteristics of heaven include an abundance of green areas, gardens full of fruit trees, luxuriant shade and flowing streams of water. Thus, a house's courtyard is more than practical. With its greenery, trees and pool, the courtyard becomes a human aspiration to transcend Earth. As the garden of heaven is a refuge for the believer, the garden on Earth is a refuge from the harshness of the desert. Stephen Lesiuk notes (p. 216), on the outside of the courtyard is the desert that represents desiccation and death. Inside the courtyard is bountiful life.
Fig. 11 Men's exterior door

The Entrance

The importance of the entrance to a traditional courtyard house as a port of welcome is often symbolically emphasized with decorations on the door. A heavy entrance door to the men's
reception room is a common feature (per interviewee Ibrahim) (Fig.11). The heavy, decorated door also emphasizes the distinction between the men's reception room and the women's quarters. The door to the women's quarters typically is unadorned.

Thus, the traditional courtyard house has two entrances: a main entrance, usually used by men, and a secondary entrance exclusively used by women. This is seen as a means of protecting the women's privacy. Furthermore, the main entrance door is built to open out on a blank wall in order to obstruct all view of the house's interior, as well as to prevent immediate access to the women's quarters and courtyard. The location and design of the entrance also serves to protect the interior from the sand, dirt and noise of the street.

**Men's Reception Room**

The main entrance leads to the men's reception room. Traditionally, the courtyard house has had at least one reception room, usually a large one. This room is the most prestigious area in the house. The reason for this is cultural: the Arabs are known for their generous hospitality.

The harsh life of the desert forced the Bedouin to develop certain communal characteristics. Due to scarcity of food and water, they learned to share whatever food was available with
their tribe. Thus, Arabs learned to feast together. This tradition
grew into a social rule tacitly and implicitly recognized by
members of society, even the ones who settled in the cities.
Accordingly, the men's reception room in the house is where the
male members of the family entertain their numerous guests.

The furniture of the men's reception room is usually the
best in the house. It may include Arabian and Persian rugs. The
prominent part of the men's reception room is a rectangular
hearth on which Arabian coffee and tea is prepared for guests.
The reason for building the hearth in the men's reception room is
that, traditionally, the Arab people take pride in serving their
guests. The Arab host enjoys preparing fresh coffee and tea
before his guests (per interviewee Sulaiman).

The hearth is built at a right angle to the wall. Above it is a
rank of vertically patched shelves and cupboards, closed by a
wooden door. These shelves or cupboards are used for the
display and storage of the cups, tea, coffee pots, and other
materials essential for preparing tea and coffee. This cupboard is
sculpted ornately to represent the social status of the host family
(per interviewee Sulaiman).

The Roof

The roof is typically a thin structure so that it does not
collect and store the heat of the sun. This allows the roof terrace
to be used, during the hottest part of the year, as a sleeping area. The celebration of important family occasions, such as weddings and annual religious feasts, is usually held both in the courtyard and on the roof. Often, the roof is divided into different sections for the use of the men, women, guests, or parents and children. There is a storage room on the roof for bedding. The roof is usually surrounded with the high parapets which ensure privacy within the house.

*Space for Open Living*

This open-living space is the area on the ground that is covered by the roof of the balcony (*Mojabbab*) that surrounds the courtyard. The space is used as a living room during the day unless the weather is too cold. This space contains only essential and portable furniture. The open-living area is the gathering place for all family members and close relatives to eat and socialize.

*The Staircase*

The staircase is used to get from the floor to the roof. Furthermore, with its upper opening directing air to the courtyard, it acts as an air well. The space below the stairs serves a purpose as well; it can be used for storage.
The Kitchen

The kitchen is typically located in one corner of the traditional courtyard house. Unlike Western homes, the kitchen traditionally does not contain modern equipment, such as a stove or a sink. However, this room does contain commodities which are useful to the family. Frequently, there is a storage room for grain and other foods (per interviewee Fais). The kitchen also has grooves in the walls that are used for storing dishes. An actual fire is made for cooking, and this area is surrounded by three thimble-shaped mud bricks (Hawady) which extend from the floor and hold the cooking pots (Fig. 12).

![Fig. 12 Traditional way of cooking using wood and fire](image-url)

The fire is built underneath this structure, using date-tree sticks and leaves. A ceiling vent allows smoke and heat to escape.
The Bathrooms

There are usually two bathrooms in the traditional courtyard house, and they are located in separate corners of the house. One is for the men's reception room, and one is for the family. The bathroom consists of two compartments within a larger room. One compartment houses the toilet which is flushed manually with water. Also located here is a basin for cleaning. The second compartment is for cleaning the body more thoroughly and changing clothes. The second may contain a shower. This compartment also is used for washing clothes. The rest of the room is open to the air and used for drying clothes.

While water is not to be wasted, complete cleaning of the body is very important for religious reasons. The position of the toilets is influenced by the Islamic religion. These injunctions relate to pollution of the body and the sanctity of the holy Mecca orientation. It is religiously unacceptable for a person to turn his back to Mecca while in the bathroom.

The Bedrooms

Each married couple has its own bedroom. Bedrooms are used as sleeping areas and for storage of personal family belongings. Beds are thick cotton-stuffed mattresses (Doshag). Married couples occupy a room with their younger children. Older children may have their own rooms.
Wooden shelves display many of the gifts that a woman receives upon her marriage. Such gifts may include a large trunk-like box used for storing clothes, other belongings and colorful enamel pots. Women also receive mirrors which are hung side by side in a band around the room (Suffah).

The male head of the family usually has his own room, separate from the one he shares with his wife. This room is used for storing valuable family items, such as money, coffee beans and legal papers.

**Use of Space**

Except for a few rooms, the traditional courtyard house emphasizes social accessibility to all family members. Most interior spaces are functionally nonspecific rooms and can be used interchangeably for eating, sleeping and recreation. This flexible use of living space is reflected in the absence of bulky furniture such as chairs and tables. The people use the floor for sitting, sleeping and eating. They use rugs, mats and cushions which can be rolled up and stored when not in use.

**Openings**

External openings on the outer facades are few in number and are located mainly on the upper floor (roof). The only ground-floor window openings are the windows in the men's
reception room. There is a simple mud and wood box structure located immediately above the main door and another located above the women's door for defensive and viewing purposes (Fig. 13).

Fig. 13 Viewing box

In all the bedrooms, there are windows all facing the courtyard, as well as small rectangular openings for ventilation in the wall to the courtyard. These openings are located near the ceiling in most rooms.

Decoration

The exterior and interior of traditional courtyard houses are decorated. The Almojusis (plaster craftsman) casts the mud
plaster with a trowel-like tool. The carved decorations are done with a putty knife.

The most characteristic decorative feature of the traditional courtyard house is the ornate roof line. This design of parapets topped with crow-steps (Fig. 14) has appeared on virtually all of the buildings, thousands of years old, in Medain Salih located on the west side of Saudi Arabia.

![Diagram of ornate roof line](image)

Fig. 14 The ornate roof line of a traditional courtyard house

The design, protected and accented by a coating of mud plaster, softens the massive look of the walls. The exterior doors
and windows are framed with a coating of mud plaster which changes to a light color upon drying. This light color serves as a decoration that not only accents the appearance of the house but also adds protection against rain. Water spouts are framed for the same reason.

The exterior wooden doors and windows are decorated as well. The family door is relatively plain, while the door of the men's reception room is carved into horizontal ethel poles with large metal spikes that brace the vertical boards. A simple design done in paint, such as a row of tiny black circles, is added to the poles. Since the men do not traditionally wear colorful clothing, the door to the men's reception room similarly is not colorful. Not only does this follow tradition, but it is practical. Painted doors would be subject to deterioration from rain and other natural occurrences (per interviewee Hejer).

However, interior doors are decorated in two sections with colorful geometric designs (Fig. 15).
Fig. 15 Decorated interior door

The two sections usually employ the same design; yellow, blue, red and green are common colors. One common pattern uses
yellow to outline the shapes. Between the decorated sections are the carved poles that serve as braces for the door.

Other decorated areas of the interior include the men's reception room, window shutters and the walls facing the courtyard.

Window shutters are usually painted either blue or green. They are sometimes framed in yellow. Vertical metal bars serve as braces. The walls facing the courtyard are painted in blue or green from the ground up to a height approximately three feet. The remaining walls of the interior do not have decoration except for the men's reception room.

The Almojusis (mud-plaster craftsman) uses his putty knife for applying wet mud plaster and quickly carves the elaborate designs while the mud is semi-dry. Niches to be used as shelves, cupboards and display areas are first carved out from the mud walls. Then layers of mud plaster are cast, building the wall out from around the niches.
Fig. 16 Decorative patterns in the traditional houses

Two decorative bands encircle the men's reception room wall; the patterns often are geometric or floral. The first band laid is the upper one, above head level. The second, lower band is slightly raised from that. At the top of each band is a decorative, carved design that employs a pattern also common on clothing and weavings in Saudi Arabia. The niches situated about the room are framed by decorative carvings with three larger
frames surrounding the area. The first and second frames are the same geometric or floral pattern.

The Hearth

The hearth (Camar) is heavily decorated. Niches, shelves and cupboards are carved out for displaying coffee pots (Dallah), tea pots (Abriag), as well as coffee, tea and other items used in making the beverages. There also is a narrow niche for the incense burner (Mobkhreh). The lower section of the hearth is for storage of roasted coffee. An ornate pattern of three raised and inverted triangles adorns the left corner of the Camar. The triangles each contain a carved half ball. Located between the triangles are tree-like shapes carved into the plaster (Fig. 17).
Fig. 17 The hearth (Camar)

THE HOUSE AS A MIRROR OF SAUDI SOCIETY

The traditional courtyard house ultimately is a manifestation of Saudi culture. In its form and organization, the house reflects its cultural milieu. This chapter already has noted how the courtyard house iterates principles of Islam by segregating the sexes, by providing living arrangements that
respect the extended family and by creating courtyard gardens that reach toward a heavenly ideal.

Also of great importance to Islamic society is the strict separation of the public world and the private world. With its introverted design, the traditional courtyard house ensures this separation of worlds. High walls, screened balconies, concealed windows, high parapets on the roof and an entrance that obstructs an interior view all help to protect the privacy of the family.

In traditional Islam society, the woman is veiled from public view. Similarly, writes Youssef Belkacem (p. 6), through the traditional courtyard house, the family is veiled from public view. Belkacem calls the courtyard house the architecture of the veil. Situated at the center of the house, the courtyard can be compared to a person's innermost personality that hides itself inside the body. The courtyard is enveloped by a plain facade so that the house's innermost sanctum is kept secret. The introverted courtyard house expresses the need to exclude the outside environment, while, at the same time, valuing and protecting that which is inside — the family and the inner life.
By the 1970s, the discovery of oil — and the new wealth and foreign influence it engendered — had brought changes in lifestyle to Saudi Arabia. Architecture also had begun to change. If the personal privacy afforded by the traditional courtyard house represents the architecture of the veil (Fig. 18), then the new designs of contemporary housing could be called the lifting of the veil. The private, open-air courtyard all but vanished. In the contemporary house, or villa as it is called, the house no longer surrounds the garden or courtyard. Instead, the garden surrounds the house (Fig. 19).

The Western-inspired contemporary villa is not an introverted structure but an extroverted one. The new wealth from oil also brought changes to Saudi social and economic systems. In general, the Saudi Arabian development model is a unique one in which the forces of modernization and tradition exist side by side. Saudi Arabia does, however, share certain features of other developing nations, such as urbanization.
Prior to the 1940s, only 10 percent of the Saudi population lived in urban centers. During those earlier times, an overwhelming majority of the population engaged in nomadic and semi-nomadic activities (Ahmed Assah, 1969). Since the late 1970s, most of the population has lived in urban or semi-urban centers (Shirley Kay, 1982).

Fig. 18 Inside the traditional courtyard house featuring the private internal courtyard.
Fig. 19 The north facade of a modern villa (in Riyadh) and the first-floor plan showing the garden surrounding the house (instead of the house surrounding the courtyard as in the traditional house).

New cities are being built and old ones are being remodeled and expanded to accommodate more people and services. The
new sections of the cities became the main economic and social centers of town life, while the older parts of the cities were left to decay. Many old, traditional houses in Saudi Arabia are now being used as warehouses or as shelters for the low-income sector of the population. As Jamel A. Akbar (1981) notes:

Most of the inhabitants of owner-occupied courtyard houses have moved out to live in detached houses. As a result, a large number of courtyard houses are now occupied by poor families who have migrated to Saudi Arabia or the houses are used as storage for commercial use. These changes have come about because of rising standards of living and the growth of the population (p. 163).

The oil wealth also brought the emergence of a middle class. Many persons of this class were able to travel and study abroad. Students, including those in architecture and civil engineering, received education in Western countries and were influenced by Western civilization and its developments. They then returned to Saudi Arabia with different ideas. As Saudi architect Yousef Fadan writes:

The direct and indirect contact of this newly-emerging middle-class social group with other societies and cultures (through work, travel and education) has influenced their old style of life, and was translated into their living environment in a dramatic way with the help of architects, who began to
appear on the Saudi scene at the same time as this middle class was emerging (p. 74).

Thus, housing in Saudi Arabia was being influenced both by foreigners who had moved to the country to work in the oil industry and by the Saudis, themselves, who had been students of Western culture. Saudi young people began to prefer living in apartment buildings or building their own modern houses over the traditional courtyard houses.

**THE CONTEMPORARY VILLA**

The traditional features of the Saudi house were largely ignored in the contemporary structures that began appearing in the late 1960s. Samir Abdulac (1981) sums up the new urban architecture as follows:

Most housing types presently built in Arab countries are one way or another inspired by Western models of architecture. Examples include villas, small apartment blocks, or the ubiquitous high rise buildings. When these dwellings are huge enough and air-conditioned, it is still up to their wealthy inhabitants to pay for the imported technologies, their maintenance and energy consumption, as well as to choose their (sometimes unpleasant) urban environment (p. 300).
Contemporary villas tend to be rectangular buildings made of cement bricks, steel and concrete (Fig. 20). Whereas the traditional courtyard house had a subdued exterior, the contemporary villa might display a wide array of outside ornamentation including colored stucco facing, stone work and aluminum windows. The contemporary villas emphasize their individuality instead of their unity with the group or neighborhood.

![Diagram of a Villa Section and First Floor Plan](image_url)

**Fig. 20** Section and first-floor plan of a small villa in Riyadh showing the main structure of the villa made of concrete and the walls made of cement bricks
Fig. 21 A small villa in Hail showing the new patterns of design inside and out

As Ahmed Farid Moustapha and Frank J. Costa note (p, 247), one of the few similarities between the old and new styles
of houses is their height. Most new houses are two stories high and include a roof terrace with high side walls. The main entrance to a contemporary villa is located on the exterior of the house. In some villas, this entrance opens onto a small lobby (Fig. 21) which contains two doors, one leading to the guest room and one leading to the domestic quarters. This privacy feature also resembles the design of the entrance to the traditional courtyard house.

Most importantly, the imported style of housing does away with the inner courtyard or garden. Rather, the contemporary villa is surrounded by an open space that is used as a garden but is exposed to the hot sun (per interviewee Mohammed). The open space of the contemporary villa is bordered by low walls. Typically, three sides of the garden are bordered by the garden walls of neighboring villas, while the fourth side faces the street.

The function of the bordered walls is different in the contemporary villa. In the traditional courtyard house, high walls were a way to insure the privacy of the residents. In the contemporary villa, the low walls merely become dividers to mark out the ownership of land. The windows of the contemporary villa also decrease privacy. Instead of opening to an interior area as in the courtyard house, the windows of a new house open to the exterior. The new windows also expose the house to the hot sun.
The floor plan for the first level of the contemporary villa includes a covered hall and numerous rooms. The covered hall, that provides access to the other rooms on the first floor, sometimes resembles the open courtyard in the traditional house. Like a courtyard, the interior hall can perform an important function as a modifier of climate in hot weather.

The hall is spacious with a high ceiling and is frequently used for family interaction, becoming a sort of contemporary living room. The hall employs contemporary furniture like sofas, tables and chairs — furniture rarely seen in the traditional courtyard house.

The contemporary villa usually has two reception rooms (Fig. 22). The women's reception room often has traditional furniture, while the second reception room might contain imported, modern furniture.
A staircase leads from the interior hall to the second-floor balcony where the bedrooms of the family are located. Some of these rooms have additional doorways that open onto a projected exterior balcony located on the exterior wall of the villa. For privacy reasons, most people cover this balcony and use it as a storage area.
VILLA CONSTRUCTION

With the advent of new designs for houses came new construction materials and new construction methods. Instead of being a joint project of the property owner and the builder, as was the traditional house, the contemporary villa is designed by an architect. A contractor is then hired to construct the villa (per interviewee Fahed). This new house virtually becomes a finished product with little or no owner participation. The step-by-step family involvement has been replaced by involvement from professionals like electrical and sanitary engineers. Often, these professionals are non-Saudis who have no knowledge or background in traditional Saudi architecture.

The builders have a wider choice of construction materials than ever before. The villa frame uses reinforced concrete that carries the loads of the floors and roof. As Yousef Fadan (1983) notes:

Frame construction, where the loads of the roof and the floors were redistributed by the foundation, became a new phenomenon in housing construction in Saudi Arabia. In other words, the walls became a non-load-bearing element (p. 81).

The concrete is reinforced with cement, gravel, sand and steel. Machine-made cement blocks are used to build the walls of the villa, and a mixture of cement and sand holds the blocks
together. Openings are left for doors and windows. Decorative forms of brick, tile, marble and cement block are used as ornamentation on the outside facades of the modern villas. Ornamental brick and concrete also are used in fences and garden entrances. These decorative elements bear no resemblance to the hand-carved ornamentation used in the traditional courtyard house. The new decorations are foreign imports and often are machine-made.

Ceramic tile is manufactured from fine, baked mud and is decorated with patterns of color and glaze on the surface. These tiles are used to cover the floors and walls of bathrooms and kitchens.

In some of the more expensive villas, the facades are constructed of marble for aesthetic purposes. Marble also is used to cover the floors and to cover stairs and columns. Marble stairs and floors can be quite impractical because they are slippery. Many homeowners cover the marble with carpet, but the floor underneath remains hard, causing frequent injury to children and the elderly who take a spill. But salespeople, who often are foreigners and who want to make a big sale, convince the homeowners that the costly and dangerous marble is prestigious.

Cement is used for coating and reinforcing inside and outside wall blocks. This material adds smoothness to the wall surfaces. Often paint is applied as well to the walls.
Glass is another material much employed in the contemporary villa. The glass might be textured, colored or patterned. Glass is used in the villa windows to create a feeling of space, to help bring in the outdoors, to visually extend a room. Glass also appears on the villa facade in ornamental patterns.

Frequently, the exterior, first-floor windows of a villa are protected with metal security bars. The foreign builders assume such protection is a necessity. But such protection is out of place in a country where crime is rare, where many homeowners do not even lock the exterior door. These bars become a negative in the case of fire since first-floor windows can be the safest escape route. Many homeowners have attempted to remove the bars, but such a task is extremely difficult since the bars are mounted directly into the concrete.

**SOCIETY, GEOGRAPHY AND THE CONTEMPORARY VILLA**

Since virtually no new traditional courtyard houses are being built in Saudi Arabia today, the traditional builders (Stad) and craftsmen are no longer asked to practice their artistry. And more and more traditional courtyard houses are being demolished to make room for the contemporary villas and business establishments. Traditional houses in rural areas often are abandoned as families leave for urban areas. But these new villas do not serve the same function in preserving Saudi culture.
and society as do traditional courtyard houses. The new houses are unresponsive to the environmental, historical and societal factors of Saudi Arabia.

The traditional courtyard house promoted a family life that was in tune with Arab tradition and Islamic culture. The traditional courtyard house also was in tune with the hot, dry Saudi climate. As Samir Abdulac writes,

> It should now be recognized that the suitability of most present forms of public housing schemes to Arab social characteristics is questionable, and their adaptation to their natural physical environment, as well as to prevailing climatic conditions is unsuccessful (p. 300).

**Geography**

Let us first consider the appropriateness of the contemporary villa to the climate of Saudi Arabia. As noted earlier, concrete is a primary building material in the construction of the contemporary villa. While concrete may be a suitable building material in Western countries with temperate climates, it is not suitable for a country where a brightly shining sun often raises temperature above 100 degrees Fahrenheit.

As Herman Kendel notes (p. 289), the concrete elements of the contemporary villa are hit by the sun all day and become huge stoves which radiate heat towards the people not only
during the day but, because of the heat-storage capability of concrete, during the night as well. The traditional courtyard house is much better suited to the Saudi climate. In the courtyard house, thick mud walls were shaded and stored the coolness of the night. In addition, the roof of the courtyard house was made of materials, usually layers of palm leaves and thin timber, that were designed specifically to not absorb the heat from the sun that constantly beats upon the roof.

Unlike the traditional courtyard house, the contemporary villa often demands the use of air-conditioning for comfort. This use is not only expensive in terms of money but also is expensive in terms of expending natural resources in an era when environmental concerns should be felt by peoples throughout the world.

*Society*

Saudi scholars believe that many important and useful features of the traditional courtyard house were ignored in the building of the contemporary villa. As is implied by the term used to refer to the courtyard house -- the architecture of the veil -- privacy is a requirement in the Saudi's Islamic society. As discussed in Chapter II, a number of features of the traditional house ensured privacy. However, as Jamel A. Akbar writes
(1981), the Western-inspired villa does not conform to these needs.

. . . (The) Western house was developed as a "closed house." But the new type of house plan has not answered the religious-social demands, nor has it satisfactorily met climatic conditions. The once private, open-air courtyard has disappeared, only to be replaced by a garden surrounding the house and enclosed by an eye-level wall. This garden is not private in the sense to which Saudis have been accustomed; it is overlooked by neighbors who may prefer to sit on their first floor terrace in the afternoon. The simultaneous use of the garden and the neighbor's first floor terrace could lead to social tension between neighbors. In addition, the intense heat prohibits the garden from being used before late afternoon. Thus for both social and climatic reasons, all activities must take place indoors (p. 163).

The courtyard of the traditional house was an outdoor haven for women and children. Because Saudi women typically value their privacy even more than do the men, the location of the garden in the contemporary villa particularly restricts the outdoor activities of women. Young women are not likely to be allowed in the exterior garden.

Traditional houses also fulfilled the Saudi and Islamic mandate of honoring the family. In the traditional courtyard
house, the extended family was able to live and grow together. With the contemporary villa comes the disappearance of the house designed for the extended family. Today, young people are choosing to build their own separate houses or to live in apartments. The result is the breakup of the family unit which, as sociological studies show, threatens the entire fabric of Saudi society. Nader Ardalan and Peter Land (1982) write:

> A great deal of housing . . . is now being constructed in Muslim countries which is unsuitable in many ways for family life and Muslim tradition. Much of the high-rise housing constructed in Europe and the USA since World War II has proved, over the years, to be most unsatisfactory for family life, and, in some instances, these buildings are actually being demolished. Every precaution should be taken to ensure that these mistakes are not repeated in new housing in Muslim countries, which all too often imitate the images of occidental cultures in the name of modernity. Appropriate and good housing and neighborhoods are essential for human development. It is a recognized consideration today that the rising social instability in many countries is partly the result of substandard urban environments and poor housing and living conditions for a large number of people. It can be held that for long range and stable social development, appropriate housing and neighborhoods are needed for any society, especially in the dynamically changing context of many Muslim countries (p. 312).
Shirley Kay (1982) adds:

The great old family houses, which had sheltered the extended family under one roof, had usually been abandoned in the course of the past 20 or 30 years, when the old patriarch died. It was he who had held the family together and insisted that sons and grandsons ate at his table and slept under (or in summer, on) his roof. Nuclear-family villas proliferated and with them loneliness for the women and children (p. 175).

Other scholars see the contemporary villa as signifying a shift from the spiritual culture of Islam to a culture of materialism. Youssef Belkacem (1981) sees the proliferation of contemporary housing as a demand for a different standard of living — and a standard that requires an increasing need for transport. Belkacem minces no words in the following:

The Arab world has thus professed its allegiance to the consumer society, and the latter in its turn has transformed the landscape into a literal heap of Western artifacts... (The) automobile imposes its law, and traffic engineers do not hesitate to defigure the traditional urban tissue. When more urban space is needed, old buildings are sacrificed unnecessarily in order to build anew. This slow but sure destruction of architectural inheritance is hastened by speculation on property and land, and imported architectural forms, resulting from
speculative practices, emerge in the landscape, signs of a so-called progress. The addition of decorative and 'kitsch' designs to some of these projects only serves to underline the mediocrity and the poorness of their concept. All this and much more is brazenly called by technocrats 'urban renewal,' but consists of little more than the bulldozing of existing structures and the destruction of heritage (p. 10).

Scholar Said Zulficar is in agreement with Belkacem. Furthermore, Zulficar sees the new architecture in Saudi Arabia not only as disfiguring the landscape but as leading to alienation as Saudis reject their own culture for Western culture. As has been previously noted, many Saudis already think of traditional buildings like the courtyard house as backward and inferior, as objects to be laughed at. Writes Zulficar (1981):

The rapid introduction into the region of industrial technology, new models of production (and especially of transport), and alien models of development have brought about a general disorientation of the social, cultural, economic and political structure of Arab society. This is most acutely felt in the traditional cities which, already under great demographic growth and urbanization, and the resultant inadequacy or breakdown of their infrastructures and services, now have to contend with a grave loss of image and, all too often, with outright rejection of past values in favor of the Western model of city planning. Thus influenced by current notions
of material progress, the administrative and professional authorities in most Islamic countries tend to feel a sense of shame and display contempt with regard to the traditional architectural and urban environment (p. 22).

In fact, a generation has developed in Saudi Arabia that, while younger in age, I would compare to the American Baby Boomers. Like their American counterparts, these young Saudis are known for their consumerism. These Saudis are obsessed with acquiring new material objects. Furniture and automobiles must be replaced every few years for the latest styles and models. Because there is no income tax in Saudi Arabia and because health costs are paid by the government, these Saudis have a lot of disposable income for such purchases.

Less than 30 years ago, my peers and I did not own shoes. Now, we must own a luxury car to look modern and important. And it is not unusual for one family to own seven or eight of these cars, one car for each male family member of driving age.

The Saudi Baby Boomers, who were born in the early 1970s, have a name of their own. They are called the Real-Estate Bank Generation because they were born in an era when the government began making interest-free bank loans to encourage housing starts. Often, these young people are estranged from previous generations. Typically, the Real-Estate Bank Generation
wants to live in contemporary villas and high-rise apartments. Meanwhile, their grandparents are unable to adjust to the Western furniture and electrical appliances in the new villas. Often, those of the older generation spend their nights -- not in the air-conditioned comfort of their new home -- but in tents pitched around an open fire in their new gardens.

A Comparison of Values

In their essay (1980) on Al-Jarudiya, a settlement in the Eastern Province of Saudi Arabia, authors Moustapha and Costa contrast the value systems of the new urban developments in Saudi Arabia with those of traditional settlements. The authors write that the values inherent in the traditional house are privacy; socialization with neighbors; adaptation of built form to the physical environment; and continuity of building style and physical appearance.

Moustapha and Costa find that the inherent values of the contemporary villa are vehicular access; convenience of rapid movement; appreciation for foreign architectural styles; and enhancement of personal identification with housing through uniqueness in building style.

It is easy to see that the inherent values of the traditional house conform more closely with Saudi tradition, particularly in respect to Islam. The need for privacy, a respect for and
interaction with one's fellow human beings, as well a respect for the environment, are all values stressed in the writings of the Quran. In addition, the external show of wealth, as in excessive outside ornamentation, is clearly discouraged in the Quran.

In the following passage from the Quran, all of nature is seen as symbols of God. From this belief that God is in all of nature comes the importance of respecting the environment. This passage also stresses humility and moderation from which comes the belief that excessive shows of wealth should be discouraged. And this passage also notes the importance of community with one's fellow human beings, stating that the individual must serve men as well as God.

But the Signs of God are everywhere
In creation. The Sun and the Shadow,
The Day and the Night,
   the Wind and the Rain, —
All things in nature are symbols,
   and point
To the Law Divine, and the destiny, good
Or ill, of man. Will he not learn
And put his trust in Him, the Merciful?
His true servants ever adore him
In humility and fear of wrong, in faith
And just moderation in life, in respect
For duties owed to God and men
And self, in avoidance of all that is false
Or futile, in strict and grateful attention
To God's Message, and in the wish
To put themselves and their families
In the van of those who love
   and honour God (p. 936, C. 163).
The following verses from the Quran further emphasize these values:

And the servants of (God)
Most Gracious are those
Who walk on earth
In humility,
and when the ignorant
Address them, they say,
"Peace!" ...
Those who, when they spend,
Are not extravagant and not
Niggardly, but hold a just (balance)
Between those two (extremes)
(pp. 941-942, XXV: 63, 67).

Will ye be left secure,
In (the enjoyment) of all
That ye have here? --
Gardens and Springs,
And corn-fields and date palms
With spathes near breaking
(With the weight of fruit)?
And ye carve houses
Out of (rocky) mountains
With great skill.
But fear God and obey me;
And follow not the bidding
Of those who are extravagant
(p. 964, XXVI: 146-151).

The Quran relates the story of Qarun, a man who hoarded boundless wealth and thought his riches entitled him to power and holiness. His fate was that the earth opened up and swallowed him and his house. The Quran advises:
Men puffed up with wealth, like Qarun,
Are not pleasing to God: for wealth
Is for service, not for hoarding or show
In the midst of his pride was Qarun
Swallowed up in the earth, and the earth
Knew him no more! (p. 1023, C. 176).

The need for privacy and respect, particularly in regards to
women, is discussed in the following passage:

Believers should cultivate refined respect
In social and spiritual life.
As the Mothers
Of the Faithful have to uphold
their dignity,
So should all women protect
their honour
And uphold their dignity
(p. 1123, C. 189).

If the Saudi people are to retain a positive relationship with
their religion and culture, it is necessary that the Saudis learn an
appreciation for their architectural heritage, a heritage whose
foundation is Islam.

A MOVING EXPERIENCE

My own family moved from a traditional courtyard house
to a modern villa 20 years ago. I was a teen-ager when we
moved to a new neighborhood of villas built on land that had
once been an airport. The Saudi government made it easy to
move, offering families no-interest loans that were to be repaid over a 25-year period.

Our new house was a two-story villa with an exterior of beige stucco. The villa has a kitchen, a men's reception room, a traditional room, four bathrooms and eight bedrooms. Instead of an interior courtyard with garden, the villa has an exterior garden in front of the house.

In our traditional house, the family would gather under the trees in the courtyard. After the move, we generally gathered in inside rooms because the new exterior garden was not protected from the sun and was too hot during the day. The villa had air-conditioning — a necessity in the new houses that were not designed and insulated to be naturally in tune with Saudi Arabia's hot weather.

My family had electricity in the traditional house as well as in the new villa. But we had different appliances in the villa. Television was introduced in Hail in the 1970s, and a TV set became part of our new home. In the beginning, television programs aired from 6 p.m. until midnight. Instead of gathering in the courtyard, families began to spend their time together gathered in front of the television, watching local news shows, religious broadcasts and old Arabic movies. Television was a new window to the world, and families typically did not care what specific programs they watched, they just watched.
Our television set was in a room similar to an American living room. However, the room was separate from the main villa so that an open fire could burn on cold winter nights. My family lives in the northern Saudi city of Hail where winter temperatures can drop to 35°F. The villa proper was not ventilated to allow for open fires. In this detached room were vents, and often the door was kept ajar. There were, in fact, a number of Saudi fatalities when people moved from traditional houses that were designed to accommodate open fires to the villas. Some people continued to build coal fires in their new villas and, without proper ventilation, the people died from the inhalation of toxic fumes.

Today, villas generally have central air-conditioning or permanent wall units that provide both heating and cooling. Some people, however, do not use these modern systems because they believe the systems are unnatural and unhealthy.

**Bedrooms**

Instead of sleeping mats, the new bedrooms were furnished with chests of drawers, beds or entire bedroom suites — often imported from Italy. The elaborately carved wooden chests that married women kept in their bedrooms began to disappear. Many were sold to antique collectors in the West.
In the courtyard house, the roofs offered a private place to sleep on hot nights. Today, people sometimes sleep in their exterior gardens, although this garden does not offer the privacy to which Saudis are accustomed. Thus, those sleeping outside are typically older couples and children. My mother and father still prefer to sleep in the natural setting of the garden.

Reception Rooms

Western-style furnishings like coffee tables, sofas and love seats also dominate the men's reception room in the villa. Such furniture had not been a part of our traditional house. This room is used more frequently by the younger members of the family. My father rarely goes into this Western-style room. And when he does, he sits not on the couch but on the floor.

The new villas have brought the demise of the traditional coffee ceremony. In the courtyard house, the men's reception room had a hearth where the host prepared coffee in an elaborate ceremony in front of his guests. The new reception room has no fireplace, so coffee is typically made by women on the stove in the kitchen. The coffee is then brought out to the host who continues to personally pour the beverage for his guests.

The coffee ceremony used to offer boys a chance to meet with older men. I would help my father serve the coffee, and
through that, learned how to converse with adults. I regret that my son has never had the opportunity to be a part of a traditional coffee ceremony.

As for the expensive, copper coffeepots, hand-crafted by Saudi craftsmen that were once a part of the ceremony, they are now put on display in the new houses. The coffeepots in actual use are made of cheaper materials like steel or aluminum and are typically imported from Asian countries like Korea.

My family's new villa also has a reception room with traditional furnishings like rugs and cushions. This room is most often used by the women in my family to entertain their female guests.

Our traditional reception room is in what was designed as the dining room. Many families who moved to villas bought dining room tables, but such furniture was later abandoned by most families as they returned to the tradition of sitting on the floor to eat.

*Kitchen*

The kitchen in the new villa resembled an American kitchen with a stove, refrigerator, sink and countertops. In our traditional house, we had neither a stove or a sink. The once copper kitchen utensils have been replaced with cheaper, mass-produced items. Although the new villa had a kitchen inside the
villa, we converted that room to a bedroom. We then added a kitchen that is detached from the main villa. Because of the heat produced in cooking, an inside kitchen is not always practical in a Saudi house.

Social Impact

Different furnishings and appliances were not the only changes my family went through when we moved to the modern villa. Children and women, in particular, were affected by elimination of the interior courtyard. The courtyard had been an ideal playground for young people. And because of the privacy the courtyard offered, mothers were comfortable being outside supervising the children. The children now play in the exterior garden, an area shunned by women because they are not comfortable being in public view. Thus, mothers and children spend less time together.

The children are in greater danger not only because they are not being supervised as directly as before but also because the streets around the modern villas have changed to accommodate cars. The winding paths that once led from one house to another have been replaced by wide, straight streets. And with Saudi Arabia's new wealth, cars have become plentiful in the cities. Almost all males over the age of 18 have their own cars. My own daughter was struck by an automobile and
seriously injured in 1985 while playing outside our home Saudi Arabia.

It also has been difficult for girls who were accustomed to playing outside in the interior courtyard. With the exterior garden, the girls generally are required to stay inside from the age of about 10 years and on.

Families also are growing further apart because the children marry and want their own homes. With the traditional courtyard house, new additions could be built to accommodate a growing family. Of course, other aspects of modernization have separated families as well. The job market has changed, and many young people move to cities away from their parents because of employment opportunities. One of my brothers now has his own house because his job took him to Saudi Arabia's capital city, Riyadh. My other brother, his wife and their children continue to share a home with my parents.

Another tradition lost in the new neighborhood is the celebrating of religious holidays and other special occasions in the street outside the house. When we lived in the old neighborhood, where families tended to stay put for a long period of time and got to know one another, food would be served outside the home to neighbors for events like weddings. Because the villas do not encourage interaction with one's neighbors, that tradition, too, is dying.
The organic design of the traditional courtyard house that enveloped the courtyard as well as the family has been replaced by houses designed to envelop new technologies. And these new technologies also are replacing other aspects of Saudi material culture. Along with the Stad (the traditional house-builders), the crafts people of Saudi Arabia are disappearing.

For an understanding of the traditional material culture in Saudi Arabia, it is important to examine a range of traditional artifacts related to daily living in Saudi culture, which are associated with activities within the home. The following chapter illustrates and examines some of the most common traditional artifacts and their use in Saudi culture.
CHAPTER IV
A SURVEY OF PATTERNS OF MATERIAL FOLK CULTURE IN TRADITIONAL ARABIA

Architecture is but one aspect of Saudi material culture to undergo dramatic change during the 20th century. Like the courtyard house, traditional crafts have been radically affected by the process of modernization in Saudi Arabia.

This chapter illustrates many of the artifacts that are, or have been used in traditional life in Saudi Arabia. In many instances, I have explained as well as illustrated the daily use of these artifacts, I have selected the artifacts based on their relative importance for traditional food ways, clothing, textile production, and furniture.

Craft-making first began to develop as a profession thousands of years ago as the Saudi lifestyle began shifting from the nomadic Bedouin lifestyle to agricultural and urban settlements. Bedouin is from the Arabic word Bedawi which means tent-dweller. Tending their camels, the Bedouin have wandered the Arabian Peninsula for thousands of years, and they were a major political force in Arabia until the 20th century.
They provided pack animals and protection to the caravan trade that transported silks and spices from India, ivory and animal skins from Africa, and Arabia's own products like wool, woven rugs, dates and pearls to ancient Egypt and Mesopotamia. As Talib notes:

Western Arabia ... traded with the north-east of Africa, India and the East Indies from which ivory, silk, spices, timber, myrrh, frankincense and other useful commodities were imported and then sold in Mediterranean countries as well as Egypt ... Its strategic location for trading with the East made it play an important role as a gateway and a trading partner across the continents (p. 17).

For their services, the Bedouin received payment in the form of clothing, jewelry, rice, and coffee pots and bowls made of copper or brass.

Villages began to develop along the caravan route. As Talib states:

Along the well-known camel routes developed strings of caravansaries and market towns. The cargo had to be protected and the camels, loaded to their full capacity, were lined up in hundreds like a wagon trail. It was not unusual for several merchants to join together to form a single caravan. The Bedouin and merchants who accompanied these caravans tried to maintain friendly relationships with tribes whose territories
they crossed. The water holes or the oasis towns flourished as stations on such routes (p. 20).

These settlements required tools for the building of permanent dwellings and for cultivation of the land. The need for these tools led to the development of indigenous craft-making. Also, the trade with outside cultures exposed the crafts people to tools that the Bedouin were able to adapt to their own needs.
Craft-making became part of the Bedouin way of life. The development of traditional crafts in Arabia can be viewed as one
sign of the area's urbanization. Figure 23 shows the geographic locations where different aspects of material culture flourished.

The introduction of craft-making allowed the Bedouin who had become permanent settlers to trade with the Bedouin who remained nomadic. In northern Arabia, for example, crafts people made and traded woolen mats, tent-cloths, pack sacks and a thick, woolen version of the Arabian mantle (*bidi*). The northern weavers became famous and their mantles were traded throughout Arabia.

![Fig. 24 Bedouin traditional loom which Bedouin women still use to weave tent cloth and rugs](image)

The Saudi people had become divided into two basic demographic groups – the nomadic tribes of the Bedouin and the settled population.
Camels, goats and sheep were mainstays of the Bedouin lifestyle. For many years, the sale of products derived from livestock generally satisfied the Bedouins' needs. Until the 20th century, Bedouin life had undergone little change through the ages because tradition played an important role in maintaining a tribe's unity and cohesiveness. A Bedouin tribe is not merely a social structure; it is a way of life that attests to the ability of humankind to adapt to its environment.

Today, many Bedouin still inhabit the same plains and valleys as their ancestors. Tents remain the Bedouin form of housing. Easy to dismantle, carry and reassemble, the tents are made of camel and goat hair and are usually woven by female members of the tribe (Fig. 25).

Fig. 25 A typical Bedouin's tent
The tents are erected in small encampments, each encampment belonging to one extended family of the tribe. The tent is divided into two sections — one for men and one for women. The men's room (alraffah) is where the males receive and entertain their guests. A prominent feature of the tent is a hearth, typically located in or near the men's quarters. In the tent of a Bedouin of means, the hearth might be surrounded with woven rugs and cushions and with equipment like coffee pots and kettles. The women's quarters (althullah) are where the female members of the family stay and where household items are kept.

The size of the tent varies according to the size of the family. The size is indicated by the number of poles used longitudinally to hold up the tent. The span between poles is about 10 to 15 feet. The poles are made of tamarisk wood from the oases in the area. The tent ropes, traditionally braided from wool or leather, extend 20 feet or more to the stakes where they are tied.

The traditional material for Bedouin tent cloth is camel's wool, although wool from goats or sheep is sometimes used. The color of the tent is usually black (the color of the natural wool), although some Bedouins have white or brown (also colors of natural wool) bands woven into the cloth for decoration. The
tent's main band or stripe is decorated with a series of traditional geometric designs.

THE SETTLERS

As were the tents of the Bedouin, most permanent Saudi houses were sparsely furnished. The family rooms of the traditional houses were used for sleeping. Bedding was rolled up during the day, and a few rugs and cushions were placed on the floor. Or, a mattress (doshag ) on the floor could serve as a bed at night and as a sitting area during the day. For bedclothes, the traditionally made cotton quilts (lehaff ) were used, allowing the sleeper to completely wrap himself or herself and cover the entire body. During the day, the lehaff were folded away, and hard cushions could be placed on the floor mattresses for elbow rests. Family areas were carpeted with woven mats of grass or date-tree leaves (haseer ) which were cool underfoot and easy to shake out for cleaning.

Traditional Saudi household objects included a variety of items made from wood, metal, clay and basket work. Although wood was scarce, it was available from tamarisk and date trees. While the oasis date trees have been used in the construction of roofs and basket work, the trees were more highly valued for their fruit.

Wood also was used in the crafting of agricultural tools, such as axes and shovels. And wood was used in traditional
houses to make doors and windows. Traditional door and window shutters have usually been decorated. They were made of thin, narrow strips of tamarisk wood nailed to a wooden fastening structure. The front side was incised with geometric patterns and painted in different colors such as green, red, yellow, and blue. Doors of traditional houses were locked by one or two latches or bolts made of wood and fitted with a wooded lock. The tamarisk wood lock had two parts; the upper is the path (almajra) and the lower part is the latch (alsikrah). The key was made of a combination of wood and metal. Lockcrafting was the specialty of a specific group of artisans who passed their craft to their children.

One of the traditional crafts that required special skill was the making of the wooden chest (kazznah) (Fig. 26).

Fig. 26 The traditional wooded chest (kazznah)
A woman would receive such a chest at the time of her marriage. Her most precious possessions were put in the chest. The *kazznah* was usually highly valued and impressively decorated. It was characterized by carved relief, a brass lock and decorated brass reinforcements at the corners. Brass tacks were arranged in traditional patterns, and brass plates were applied symmetrically. Sometimes carved relief design appeared on the brass.

Most kitchen ware was crafted from tamarisk. Large wooden vessels were made in the oasis areas, as were smaller wooden objects such as spoons and dishes. Wood craftsmen could make funnels for pouring or most anything needed in the preparation of food — except for the actual cookware that was made of metal. Large wooden bowls were highly valued. Some bowls were sanded down to a thin cross section and decorated with pegs of soft metal in simple rows. They are now among the scarcest of traditional crafts. More ordinary thick-walled bowls and dishes often were decorated with pegs and brass tacks.

One of the favorite traditional pastimes of the Saudi people has been the preparation and drinking of Arabian coffee. Methods of preparation, as well as the implements used, are traditional. Each step has become a ritual to be observed by the guests in attendance. Men usually received their company in the men's reception room where coffee beans and other spices were
kept in the hearth (*camar*). When a guest arrived, the host would carefully roast the necessary quantity of coffee beans in a long-handled iron pan (*mihmash*) (Fig. 27).

![Fig. 27 The traditional mihmash used to roast coffee beans](image)

The roasted beans are transferred to a shallow wooden tray (*mubrad*) (Fig. 28) which has a small opening at one end.

![Fig. 28 A typical traditional mubrad, which used for cooling hot coffee beans](image)
Fig. 29 A typical niger from northern Saudi Arabia
The tray is used for cooling the hot beans, while the opening allows the user to obtain the correct amount of coffee beans to be emptied into a mortar (*niger*) (Fig. 29).

Traditionally, the host carefully and rhythmically pounded the beans in the *niger*. This inviting sound announced to the
host's neighbors that they were welcome to join him and his
guest. Meanwhile, a coffee pot (dallah) (Fig. 30) filled with
water would come to a boil on the fire. The fire commonly was
fueled with local wood like arta and sammer in the winter and
with a local charcoal in the summer. The boiling water was
poured into a second dallah containing the ground coffee. As the
water came to a boil again, the host ground the cardamom seed.
This second pot is set aside for the coffee to settle with the
ground cardamom. Then, the pot, once again, was briefly brought
to a boil.

Date-tree fibers (kullbah) were placed in the spout to filter
any grounds which had not settled. A third brightly polished and
decorated dallah was used for serving the coffee into small cups
without handles (fanagial).

Coffee was typically served in the men's reception room.
This room often was furnished with woven, room-size Arabian
rugs. Such pieces were often found in the Bedouin tents, although
the rugs in the reception room were woven differently than those
in the tents. Unlike many Bedouin weavings, the reception-room
rugs were made specifically for floor use, employing a simple
layout and a well balanced design. Most of the reception-room
rugs consisted of two panels with matching striped designs. The
panels were sewn together. The stripes ran across the panels —
as opposed to the Bedouin striped weavings that ran
longitudinally. The background color of the rugs was typically the natural brown of camel's hair, the white of sheep's wool or the black of goat's hair.

Like coffee, incense (*bekhour*) has been enjoyed throughout the Arabian Peninsula, and it is still part of the Saudi life. Those who can afford it will pay over $300 a pound for incense that is imported from India and other Asian countries. It is used traditionally as a perfume for the house and clothing. It is most commonly used after meals, especially when guests are present. Traditionally, a member of the family carries the incense burner (*mubkhrah*) (Fig. 31) to each guest. The guest

![Fig. 31 A traditional incense burner (mubkhrah) made in Hail in northern Saudi Arabia](image)
will enclose it with his *ghoutra* or scarf and fan the scent into his beard and clothing.

The traditional cooking vessels typically were made of brass and tin. Brass was forged, molded, decorated and sold in a special section of the traditional marketplace. Most traditional kitchen utensils — plates, pots, ladles, cups and water jugs — were made of brass and coated with tin as were the various implements for making coffee.

Large traditional cooking pots (*gedder*) were used. The most spectacular were those in which a whole sheep or a large section of a camel could be cooked. The meat — perhaps two or three sheep together — was then placed upon eating trays (*sunniah*) (Fig. 32).

Fig. 32 Saudi traditional tray for serving large meal (*Sunniah*)
Such large trays were for special occasions like wedding or religious holidays. Traditional Saudis also used smaller trays for daily meals. The diners ate directly from the tray, using the fingers of the right hand, which is in accordance with Islamic law. Muslims are required to use the right hand for eating and drinking. The left hand is for cleaning the body.

The use of bronze — the result of mixing copper and tin — had become a well established craft by the time Islam emerged in the Arabian Peninsula at the beginning of the 7th century. Bronze items engraved and inlaid with silver, brass or copper were crafted in the northern part of the peninsula. The process of inlaying begins with the chiseling of designs on the metal. The engraved area is then filled with another metal, usually of a different color and a higher quality. Traditional craftsmen have created beautiful pieces of inlaid metal objects, including arms, jewelry and kitchen utensils.

CLOTHING

The traditional costume is a part of Saudi Arabia's national folklore and played an important role in the country's cultural heritage, writes Heather Colyer Ross (p. 11). Clothing, she adds, reflects the aesthetic sensibility of a people and provides the opportunity to learn more about the Arabs and their culture.
The traditional Saudi costume has changed little since antiquity. Although the basic Saudi costume existed on the Arabian Peninsula prior to the advent of Islam, the religion brought with it the requirement of modesty for both men and women. Thus, while many countries have gone through any number of fashion trends, the basic dress style in Saudi Arabia has remained constant.

Even before Islam, it was wise to cover the head as protection from the heat and to veil the face as protection against the harsh sun and blowing sand. Islam saw wisdom in such accepted practices and adhered to the custom. Saudi custom also dictates that both men and women wear a mantle, a type of flowing, body-length scarf, outside the home.

Women's Clothing

The mysterious veil is but one aspect of Arab clothing that has long caught the romantic fancy of Western nations. For example, the renowned French clothing designer Yves Saint Laurent — who has a home in Morocco — is one of many contemporary designers to include Arabian influences in both his couture and ready-to-wear fashion lines.

The veil has become a symbol of the woman's position in Arab tradition. Yet, it is worth noting that other societies, from
antiquity to the present day, have veiled their women, writes Juliette Minces.

The practice has persisted mainly in the Islamic areas, except among the Kurds whose women go unveiled. The eternal black scarf worn by Sardinian, Corsican, Sicilian and other women of the Christian Mediterranean is vestige of what was once a very widespread accouterment (p. 49).

The veiling of women was an ancient practice in a number of societies, but in the harsh desert environment of Saudi Arabia, it became essential for women to wear veils. Ross writes:

Face veiling is recorded as having begun with the Assyrians as far back as 1500 BC. Covering the head is also as ancient custom. In the Middle East it has long been a sign of modesty and respect but since the dawn of Islam, the custom has taken on an added dimension for women. Since then, and particularly during the hey-day of the Ottoman Empire, it has been considered virtuous to wear a face veil and head cloth. In any case, in the desert, without the practical aid of sunglasses, these various face and head coverings have a distinct advantage. The incredible glare on the bright sand can cause sun-blindness and do irreparable harm to the eyes, and continual exposure of delicate facial skin to the sun's rays can take a harsh toll. Sun is also harmful to the hair and sand is an irritant to the scalp (p. 46).
The Saudi women have not always been veiled. When the Saudi society strictly separated women and men, there was no need for women to cover their faces. They wore veils only when they had to leave their immediate communities and wanted to be hidden from the outsiders they might encounter. Juliette Minces states:

The practice (of wearing a veil) spread and became more or less strict when the village economy was transformed by the introduction of Western manufactured products which sold at cheap prices and ruined the old pattern of local production which had, until then, enabled village societies to be almost self-sufficient. The economically disrupted villages began to empty as their inhabitants flooded into the towns. As this anarchic urbanization progressed, the market economy accentuated class stratification; the model laid down by the urban bourgeoisie gradually became more general. The richer villages began to ape the great families of the towns who veiled their women. And in the towns, where the traditional society was threatened by prevailing conditions, the veil became a way of preserving the old structures (p. 50).

The veil (hejab) is the most distinctive element of the traditional Saudi woman's attire, attire that extends from head to toe. Not only is the veil a protection against the desert climate, but it also is a sign of modesty and respect for Islamic law. It is
essential to note the exact words in the Quran relevant to women's modesty and dress as translated by Abdullah Yusuf Ali:

And say to the believing women that they should lower their gaze and guard their modesty; that they should not display their beauty and ornaments except what (must ordinarily) appear thereof; that they should draw their veils over their bosoms and not display their beauty except to their husbands, their fathers, their husbands' fathers, their sons, their husbands' sons, their brothers or their brothers' sons, or their sisters' sons, or their women, or the slaves whom their right hands possess, or male servants free of physical needs ... (34: 30-31).

The holy Quran forbids Muslim women from looking at strange men, and the Quran asks men and women alike to cast their gazes down. As the above passage indicates, women must wear head veils and draw them over their bosoms so as not to display their bodies and beauty to anyone except the husband and close family relations within the prohibited degrees of marriage. True believers still are encouraged to continue this practice of wearing the veil. The holy Quran states:

O Prophet! Tell thy wives and thy daughters and the women of the believers to draw their cloaks close round them (when they go abroad). That will be better so that they may be recognized and not annoyed. Allah is ever Forgiving, Merciful (33: 59).
In the recent past, veils and headgear had been elaborate in design. But today, they are much simpler without any decoration.

Traditional women's headgear included a mask (burga) that was elaborately constructed on a textile base from pieces of leather, coins and charms. Some burga were made from leather and painted in gray colors. The length of the burga and its design elements convey the wearer's tribe. A burga covers the face, leaving openings only for the eyes.

Fig. 33 The traditional outer garment of the Saudi woman (abaaya)

In some parts of Saudi Arabia, Bedouin women wear thin black veils (milfa) drawn across the lower part of the face only. An
outer black wrapper (abaaya) (Fig. 33) is part of the headgear and is worn draped from the center crown. The abaaya is a practical garment, providing warmth when the weather is cool and conserving body moisture when the weather is hot and dry.

Islamic law forbids women from imitating men and vice versa, Islamic scholar Muhammad Imran states:

The dress should not be similar to that which is known to be a male costume. Ibn Abbas narrated that "The holy prophet (peace be upon him) cursed the men who act like women and the women who act like men".

It should be noted that the basic requirements of the Muslim women's dress apply as well to the Muslim man's clothing with the difference being mainly in degree (pp. 146-147).

Although the woman's dress shares some of its basic form with the man's dress, the two differ in principle. According to Saudi tradition, a man's dress reflects his place in society. A woman's dress, on the other hand, incorporates no specific marks indicating the woman's status. A woman can more easily adopt the dress of a different region or economic group than can a man.
Fig. 34 Men's traditional headgear — Ghoutra usually worn in the summer and Shmag worn in the winter

*Men's Clothing*

The headgear of the traditional Saudi man has remained the same for centuries. Ross writes:

The internationally familiar Arabian headgear is virtually the same today as it has been for centuries — no doubt because it is a very practical arrangement for Arabia. The head and neck are protected from the scorching sun and it insulates by trapping air within the folds, allowing the wearer to retain moisture and a bearable temperature (p. 39).

The *ghoutra*, a common type of men's headgear, is a square made of practical cloth, large enough to be securely wound.
around the face (Fig. 34). The square generally is folded diagonally in half to form a triangle with a pressed peak formed at the middle of the fold. This peak is worn center front with the sides falling to just below the shoulders. The *ghoutra* protects the head and neck from the sun and insulates by trapping air within the folds. This allows the wearer to retain moisture and maintain a bearable temperature.

![Diagram of a thawb]

Fig. 35 The Saudi man's thawb which is worn all over Saudi

Another type of men's headgear is the *shmag*. It is similar to the shape of the *ghoutra* but is red-checkered and usually worn in winter. Saudi men also wear an *igaal* which circles the head, using a double coil bound with wool. This covering is a combination of black goat hair and sheep's wool. The purpose of the *igaal* is to hold the head cloth in place. The third part of the traditional Saudi headgear is a skullcap (*taagiyyah*) that is worn
under the head cloth. The taagiyyah prevents natural hair oils from spoiling the head cloth. It is made of cotton and is sometimes embroidered and called a magassabeh. The embroidery often is done with white silk, although gold and other colored threads are sometimes used.

The main item of the Saudi traditional men's costume is the thawb (Fig. 35), an ankle-length, shirt-like, long-sleeved garment without darts or zipper. The thawb can be seen today throughout the Arab world where it has been worn for centuries. As Ross notes:

(The) long body-shirt is a very ancient garment. It seems likely that the Arabs, who went forth in the eighth century from the Arabian Peninsula to spread their Islamic faith, were responsible for influencing tailors. Wherever they went, they apparently ... enrich the indigenous cultures of the land they entered (p. 41).

In the recent past, a type of thawb known as a merodan (fig. 36) was worn. It had large, open sleeves with underarm seams; the sleeves formed a point when they reached the floor. The merodan lost favor in the 1950s when men took jobs in the ministries and found the style cumbersome and impractical. Today, the merodan is reserved for special occasions. The thawb most Saudi people now wear has straight sleeves, and the body of
the garment is less full than its predecessor. Most modern *thawbs* are white or cream-colored cotton or silk mixed with synthetic fibers. For cool months, the *thawb* comes in a variety of fine worsted fibers.

Fig. 36 The Saudi traditional merodan, which was worn mainly in the Central (Najd) and Northern regions

Though seldom worn by the modern, urban Arab, a belt is often placed over the *thawb* by men in isolated areas. The belt may be purely decorative or may be used to hold a knife or cartridges. Made of goat skin, the belt often is cut with a design of leather lacing. The belt also might employ a punched design of metal studs.
The outdoor costume of the traditional Saudi male is complete only when an outer mantle is added. The men's mantle (bisht or mishlah) (Fig. 37) is identical in concept to the mantle worn by women. It differs only in textile, color, embellishment and in the way that it is worn. While women drape the abaaya from the center of the crown, men wear the bisht on the shoulders. Textiles used for the bisht range from camel hair and wool to cotton and synthetics. Colors include black, brown, cream and white. Today, only the men's bisht is embroidered with gold or silver. The metal-thread work is secured to form a band about
the neckline that ends in two decorative, tasseled tie-cords. Gold trim also is used along the shoulder line and the hand openings.

ACCESSORIES

Leather shoulder pouches once were common accessories for both men and women. Shoulder straps might be decorated with soft metal beads or laced edges. Pouches of goat skin, painted with simple designs, have been used to carry grain and dates. Today, few men or women carry a pouch.

Men continue to wear the traditional open-heel sandal. The soles are flat and are made of cow or camel hide. Bands or straps fit around the big toe and the instep. The sandals often are colorfully embroidered.

CHANGES

Today in Saudi Arabia, traditional crafts made by the Saudi people are being replaced by imported, mass-produced items. For example, Korea and China are able to imitate and manufacture by machine traditional household items at a price that cannot be matched by the local crafts people. At one time, the traditional Saudi craftsman was the only supplier of the coffee pot used in the ceremonial brewing of coffee. Now cheaper -- and usually lower quality -- imported housewares abound. Saleh Zayer states:
Industrial countries such as Japan and China have responded to the public taste of Arab-Islamic society and have begun to reproduce traditional clothing along with other objects that borrow motifs and form from traditional crafts (p. 7).

In addition, the discovery of oil brought numerous foreign workers to Saudi Arabia. Although the Saudi government has made efforts to retain traditional Islamic values and customs, foreign influences have subtly crept into the Saudi culture.

For example, the Saudi women have started to buy and wear modern clothes that are either imported or made locally by foreign tailors. Most Saudi men still wear traditional clothes, but like women's clothes, they are made by non-Saudis.

Clothes, today, are rarely tailored from locally-spun, hand-woven textiles. And the availability of sewing machines has all but ended the making of dresses by hand. Even the Bedouin women of the desert now have access to sewing machines. And as industrialization quickened the pace of life in Saudi Arabia, few women have time for embroidery and other needlework.

Although the Bedouins still account for about 20 percent of the population of Saudi Arabia, the process of settlement is accelerating. A significant number still live in tents and tend animals, but they are buying more and more manufactured products instead of relying on traditional craft-making. Perhaps
the most significant sign of the times — many nomadic animal breeders and herders now roam the range in pickup trucks.

Economics played an important role in the decline of crafts-making the in Western world. One wonders if the crafts of Saudi Arabia will follow a similar path. And the traditional courtyard house seems to be taking this same path to oblivion. This, too, is related to cost but in a different manner. To receive a government real-estate loan, the borrower must follow strict building codes. These codes regulate the design and construction materials that can be employed. Since the 1970s, most new housing has been financed by these government loans. As a result, the traditional courtyard house that still dominated new housing in central and northern Saudi Arabia before the '70s lost favor.

As Ross notes (p. 9), the loss of a people's traditional costume is accompanied by the loss of self-identity and security. With the demise of traditional crafts and traditional courtyard houses, the people of Saudi Arabia are suffering an extreme loss of identity. Surrounded by imported clothing, imported houseware and imported house design, the Saudis have become strangers in a strange land — without leaving home.

The rapid introduction of alien artifacts and house designs has stimulated an evolutionary social change that has affected the Saudi educational system. Courses stressing technological
subjects and international languages like English have been added to the current curriculum. My proposal, as the next chapter details, is to make additional changes to the curriculum. I believe that through art education the Saudi students can reconcile the past with the present — and with the future.
CHAPTER V
THE CASE FOR TEACHING TRADITIONAL CULTURE IN TODAY'S CLASSROOM

SOCIETY AND EDUCATION

The courtyard house has been a Saudi Arabian tradition for hundreds of years. But the discovery of oil in my country during the 1930s opened our closed society rapidly to Westernization including major influences on Saudi architecture. This has led to neglect, or even destruction, of historic areas. As Rattan Kumar and Falah Al-Kubaisy (p. 322, 1988) write, the importation of Western culture and technology resulted in the rejection of the traditional by many Saudis. The old and the indigenous became dirty words falsely associated with the reactionary and the conservative.

Many Saudi Arabians now look upon the traditional courtyard house as backward, inferior structures. Yet those who created these traditional houses invested considerable effort in the design and decoration of the structures, adapting the houses to the people's societal and climatic needs or values. The design
and decoration of the interiors and exteriors of the houses are important elements of self-expression. The design and decoration are symbols through which a people project who and what they are. A house is a way to communicate feelings and moods from one person to another, writes Steen Eiler Rasmussen (p. 32, 1970). The best buildings, Rasmussen continues, are those that have a distinctive stamp of their cultural milieu, those that are created in a special spirit, those that convey that spirit to others.

The traditional courtyard house -- distinctively created to express the spirit of the Islamic peoples living under harsh climatic conditions -- meets Rasmussen's criteria of outstanding buildings. However, one might say the traditional courtyard house is currently undergoing a crisis in its ability to "convey that spirit to others." The "others" who no longer respond to the spirit of the traditional courtyard house are not foreigners but are the Saudi people themselves -- particularly the growing middle class.

(Ironically, a number of foreign Western cultures are singing the praises of the traditional courtyard house, recognizing the structure for its human scale and ecological integration with nature. In fact, private, enclosed, open-air spaces that resemble traditional courtyards are becoming increasingly popular in a number of industrialized Western countries. Samir Abdulac [1982, p. 302] notes that courtyard-housing schemes have been built in the West for more than half a century, citing projects in
Britain, Germany, Denmark and France. Abdulac states that the European families were initially surprised by the architectural design but quickly learned to appreciate and enjoy the privacy afforded by the internal courtyard. In America, Abdulac adds, the solar courtyard house is gaining popularity.

How does one reawaken the Saudi people to the special spirit of the traditional courtyard house? Education is the answer. Through education, write Kumar and Al-Kubaisy (p. 321, 1988), comes self-actualization and social integration. "(The) right kind of education helps man to experience the integrated process of life and enhances his capabilities of understanding and performing his role in society," the authors note. The authors also state that education can generate new values in a human being.

How do these educational goals relate to teaching students about traditional courtyard houses?

Self-actualization: Saudi students cannot reach their full potential without a knowledge of and respect for their own cultural history — of which the traditional courtyard house is a part. Without respect for their past, a people can fall prey to feeling of cultural inferiority. Teaching an appreciation for the traditional courtyard house and its accomplishments — its advanced passive heating and cooling system, for example — can help students have pride in their own history.
Social integration. As noted in previous chapters, the traditional courtyard house, unlike Western houses, is designed to be in agreement with the teachings of Islam. By appreciating the traditional courtyard house, the student will better understand basic Islamic values — the same values that are the foundation of Saudi social law and government.

Creation of new values. In this case, an appreciation of the traditional courtyard house would not so much create new values as reacquaint the student with traditional values — for example, respect for the extended family and respect for the privacy of the family, values that are literally built into the courtyard house. One value that might be considered "new" that could be learned from the study of the traditional courtyard house is respect for the environment and the conservation of resources.

According to William A. Porter (p. 258, 1982), education is the most positive force for bringing beneficial development to most societies. But, he writes, that education must be value-based as well as knowledge-based.

ART EDUCATION

Can art education attain such lofty goals? At one time, art education was deemed primarily a developmental activity, rather than a subject-centered activity. But in 1964, Manual Barkan noted a shift in viewpoint, writing that the primary purpose of
art education rested in the teaching of humane and aesthetic values — values that could not be obtained from developmental activity alone. By presenting a subject for study in an intellectual way, students should be able to perceive both personal and societal values meaning and relevance in the material.

In Planning a Balanced Comprehensive Art Curriculum for the Middle/Secondary Schools of Ohio (p. 8, 1992), three overarching purposes for art education are listed: the fostering of personal development; the transmitting of cultural heritage; and the improvement of the social order. It is interesting to note how similar these three educational goals are to the educational goals, mentioned earlier, of Kumar and Al-Kubaisy — even though Planning a Balanced Comprehensive Art Curriculum is written by educators in Ohio, while Kumar and Al-Kubaisy are professors in Iraq.

Keeping in mind the educational goals of the Americans and the Iraqis — as well as the Saudis — my reasons for making the study of the traditional courtyard house part of the Saudi art-education curriculum follow. (Please see Appendix D for my detailed lesson plan.)

A. Modern trends of art education place special emphasis on transmitting artistic heritage, such as the traditional courtyard house, as a major objective. Students' awareness of their own
culture will be improved as a result. Scholars such as Chapman (1978), McFee (1980), Feldman (1970) all agree that artistic heritage should be the focus of art education. The Saudi art education guideline (1978) emphasizes that the teacher should introduce study about traditional art. However, the traditional courtyard house — which is an important part of Saudi tradition — is not included in the guideline. It is the role of art educators and school authorities to preserve and raise students' awareness of this aspect of Arabian cultural heritage.

B. Since traditional Saudi courtyard houses are being destroyed and are disappearing in great number — in most cases to be replaced by modern Western-style villas and apartment buildings which do not reflect the Islamic values inherent in Saudi culture — the introduction of the traditional courtyard house through art education is a necessity. The knowledge the students stand to gain will help them distinguish, value and appreciate the aesthetic merits of these houses.

C. Traditional courtyard houses of Saudi Arabia are not only a reflection of the traditional values, symbols and social needs of the indigenous people, but they also are a manifestation of the continuation of Islamic architectural tradition.

D. The design, plan, material and decoration of the traditional courtyard house came from the environment in which the
house was created and strongly express the aesthetic values of the people who built the structure.

E. The study of traditional art in general – and the courtyard house in particular – insure the transmission of this art form from one generation to another.

Saudi students need to be taught that their domestic environment was not created in a vacuum. It was built upon the cultural history and folk-design concepts of structures that have been passed down through history. Many people live in the houses of their fathers and grandfathers. Even when they have decided to build their own houses, they are affected by a spiritual environment that includes physical objects and psychological contexts. The choices of design, floor plan, furniture, color and other elements of the house are very important because these elements of interior design provide the house with a spiritual essence. The physical and psychological needs which are the most demanding play an important role in directing a human being's behavior toward self-satisfaction. And this is reflected in the type of traditional houses that are chosen.

Satenig S. St. Marie (1973) discusses the role of the house as follows:

The role of home as an environment for human growth is a significant one. It has the
potential to support human life in a meaningful way, influencing the development and behavior of individuals and families and improving their quality of life (p. 5).

St. Marie continues by saying that the home and its decoration can be a significant experience in creating an environment in which people live, both as individuals and as members of a family — an environment meaningful in human terms that can influence each individual to grow and develop to his or her fullest potential.

St. Marie's contention is that the home should form a background for culture, family and self-interest. It should provide the supplies and equipment needed for the family's activities. The comfort and convenience of the individual and the welfare of the group also must be considered. These are not obvious factors, but they are the outcome of cultural identities inherited from the past. There also are many other factors that influence Saudi development outside the home: interaction with different cultures, work, communication, travel, admiration of others and the media. The function of home design, therefore, is to help us accept the outside influences which we believe will help us improve ourselves. The house forms a microcosm within a society which creates a link between the individual and the outside world.
Architectural design, of course, may be viewed as a form of art. As is noted by McFee (1978):

We need to understand how people use art forms to maintain and transmit their cultural value systems. This is necessary because unless we understand this important cultural function we are missing part of art's meaning and our aesthetic response will be limited by this lack of knowledge (p. 47).

TEACHING TRADITIONAL CULTURE

As an art form, the traditional house is meaningful when seen, not only in terms of style and craftsmanship, but also in its socio-cultural context (Chalmers, 1973).

In order for Saudi students to understand the traditional courtyard house, they have to look at the Arab-Islamic civilization. They need to study the Islamic and Arab heritage which plays a key role in the making of cultural values found in the home. Knowing about their past can help them to more carefully construct their future.

In order to do this, the past and the present must be explored. Evidence must be brought forward to show all of the contributing influences on the present. Furthermore, the study of the characteristics of our domestic buildings and their interior design also can contribute to knowledge of line, form, texture, color and arrangements for beauty and efficiency. This helps
students to begin to understand personalities and collective characteristics within the home. It also sharpens their understanding of the many aesthetic and functional elements that help create expressive meaning in all aspects of a student's life. Arthur Efland (1992) discusses the transmission of cultural heritage as follows:

The work of artists, craftsmen, architects, and artisans, both in the past and present, comprise a significant portion of our cultural heritage. Some works of art baffle and amuse while others provide forms and symbols rich in meaning. The various ideas and feeling they express often reflect different personal and social concerns that have served to motivate the work of artists. Hence, the artistic heritage is a record of humans' efforts to make sense out of their existence. Art education helps transmit the artistic heritage when it helps children understand the works produced by artists and craftsmen (p. 10).

To rephrase Efland as regards the traditional courtyard house -- architectural design can express the social concerns that motivated the artists and architects involved. The traditional courtyard house, then, is a record of human efforts to make sense out of existence and, thereby, a significant part of the Saudi cultural past. But this traditional house is being replaced by the imported contemporary villa that records, not the Saudi
transmission of cultural heritage, but a Western transmission of cultural heritage.

Including the study of the traditional courtyard house in Saudi art education will help ensure that students understand the works of their own artists and craftsmen. But art education in the classroom is not the only avenue to preserving the memory of the traditional courtyard house. And should the courtyard house become only a memory? The next chapter includes additional ways to keep the courtyard house a viable part of Saudi Arabia.
CHAPTER VI
THE FUTURE OF THE TRADITIONAL COURTYARD HOUSE

Before exploring avenues to keep the traditional courtyard house a living part of Saudi culture, let us first consider if and why this preservation should be a priority. To do this, I have attempted to provide thorough answers to the original questions posed in the objectives of this study. (See Chapter I.)

My answers to the questions are based on three factors: my own experiences and observations as a Saudi citizen; the responses of the interviewees; and my reading of a wide array of research materials. Let me point out that a certain bond exists among these three factors. I am an educated Saudi who has studied my country's architecture since childhood. The interviewees also are educated and/or experienced professionals who long have studied their Saudi architecture. And the authors of the research treatises also are those educated in design and architecture — although among the authors are both Arabs and Westerners. Also, because I interviewed (or read books by) professionals in the fields of housing construction and architecture, those involved tended to be at least 30 years of age.
Although we are a disparate group in a number of ways, we do have in common an education in architecture — whether that education be gleaned in the field or in the classroom. Does that common bond make our answers biased or unacceptable? As an educator, I must answer with a resounding no. As noted in Chapter V, through education comes self-actualization, social integration and the creation of values. Thus, the educated are precisely those whose responses I sought. As I answered the questions, however, I made every effort to consider other Saudi points of view.

Finally, before turning to the questions from this study's objective, I must add that education does, in fact, appear to be having a positive effect on one's valuation of the traditional courtyard house — as evidenced by the thoughts of the interviewees and researchers, as well as myself. But high levels of education are a recent phenomenon in my country. And I must say that many older Saudis who have not been a part of my country's modern emphasis on education share the aesthetic and social appreciation of the traditional courtyard house. While much remains to be done if the traditional courtyard house is to be preserved, a movement to do just that undoubtedly has achieved a certain momentum.
QUESTIONS AND ANSWERS

Question 1) What is the role of tradition in contemporary (Saudi) culture?

Traditional culture in Saudi Arabia is largely influenced by the religious tenets of Islam and includes an emphasis on a need for inner privacy that co-exists with a need for a feeling of community with one's neighbors (i.e., the need to separate the public world from the private world). The Saudi woman, in particular, is veiled in privacy through Saudi social norms. Another important Islamic tenet that has become a cultural tenet is respect for and care of the extended family.

Although Islam remains a major force in contemporary Saudi culture, spirituality is now tempered with a new materialism. Oil brought wealth to Saudi Arabia, and wealth brought a desire to consume. Many of the material goods for consumption are imported from foreign countries — cars, for example.

The result is a combination of the new with the old. Cars (the new) proliferate in modern Saudi Arabia. But because of the status of women (the old), only men can drive the automobiles. Women must be taxied about by male family members or male chauffeurs. One might say that the material culture of Saudi Arabia has changed more rapidly than the philosophical culture.
If left unreconciled, this division could threaten the Saudi psyche (pages. 9-13).

Question 2) How have modern houses evolved from their architectural past?

With a few notable exceptions (and one will be discussed at the end of this chapter), modern architecture in Saudi Arabia has not so much evolved from the past as broken with the past. The construction materials have changed to reflect modern technological advances from the West. Construction methods have similarly changed. The furniture and housewares inside the house have changed as craftsmanship has been replaced by mass-produced imports.

Certainly, a few design elements of the traditional courtyard house appear in the new villa — the reception room and the separate female and male quarters. But the feature that defines the traditional house, the inner courtyard, is missing from the contemporary villa. The courtyard house is an introverted structure; the villa is an extroverted structure (pages. 61-91).

Question 3) How does the traditional courtyard house exemplify the historical culture (of Saudi Arabia)?
As noted above, the interior of the traditional house is defined by the courtyard. This inner sanctum reveals the historical separation of private life and public life in Saudi Arabia. This courtyard, with its trees and plants, also reveals a desire to live harmoniously with nature. — a desire also reflected in the natural shading and cooling devices that are a part of the traditional house.

The need for privacy also is reflected in the exterior of the traditional house. The outward-facing section of the house has only very small windows or openings so that the residents cannot be seen by neighbors and passersby. The exterior door also is designed for optimum privacy. Decorations on the house's exterior are minimal, reflecting a Saudi tradition that frowns upon external ostentation. The more elaborate interior decorations reveal a desire to display hospitality to guests inside the house. With its carved floral and geometric patterns, the men's reception room is meant to convey a feeling of welcomingness, reflecting the ancient Bedouin tradition of sharing what little food and drink one could find with one's tribe. Similarly, the interior door to the reception room is heavily decorated to extend an air of hospitality.

As for how much today's Saudis know about — and care for — the traditional house, the answer depends on age and education. The older generations know these houses from
personal experience; they grew up in them. And many of these Saudis miss the traditional house so dearly that they pitch tents in the yards of their contemporary villas rather than sleep inside the new structures. And, as previously noted, a growing number of Saudis who have studied the traditional house are championing it.

But for Saudis about 30 years of age or younger, the traditional courtyard house is about as foreign as the villa is to their grandparents. The younger generations know little, if anything at all, about why the traditional courtyard house evolved as it did. The young people often view the traditional house as old-fashioned, as a sign of backwardness. Such attitudes are responsible, at least in part, for current mass demolition of the traditional courtyard house (pages 24-60).

4) How have external influences affected Saudi architecture?

Foreign influences have brought to Saudi Arabia the contemporary villa and the high-rise apartment that are based on Western tradition. These new houses use new designs and construction materials — for example, large glass windows that do not take into account the privacy historically valued by the Saudi. Western influences also can be seen in the front and/or side gardens that have replaced the inner courtyard, in the
imported Italian furniture and marble, in the electric appliances and air-conditioners.

As with the previous question, the feelings of Saudis about these influences and houses often is determined by age. Thus, the generation gap continues to grow in Saudi Arabia.

SUMMARY AND PROPOSALS

The traditional courtyard house in Saudi Arabia is an indigenous house design developed over centuries. Traditional builders and crafts people continuously improved the traditional house through a process of trial and error. The courtyard house evolved into a design that met the social, religious, environmental and economic needs of the Saudi people. These basic needs of the people remain the same. Therefore, the traditional courtyard house should not be dismissed as irrelevant to modern urban development simply because the design is old-fashioned.

The traditional courtyard house remains as a living part of the architectural heritage of Saudi Arabia, a design from which the new generation can learn. The design and decoration of the traditional house are symbols through which generations of Saudis have projected their identity. The houses create a special spirit that can still be communicated to the new generations of Saudis.
Education

As an educator, I see schools as a primary way to communicate the spirit of the traditional courtyard house to young Saudis. The school system can be an arena of interaction between my country's past and present. Through school, we can establish relevant principles for our future. An awareness of the features of the traditional courtyard house will give the students a cultural inheritance that will assist in the reinforcement and maintenance of the Saudi identity.

School teachers, in general, should be trained to recognize and use the techniques, patterns and colors in traditional crafts so that this knowledge can be shared with students. The sharing of such information would be appropriate in classes ranging from history to religion to geography. And the traditional patterns and carvings easily can be incorporated into the drawing, silk-screening, printing and sculpting done in art classes.

More technical information — methods and materials used in the building of traditional courtyard houses — should be included in the curriculum of vocational schools. This would allow future crafts people and builders to incorporate traditional technology with modern technology.
I also propose that universities more closely research the relationship between architecture, aesthetics and social behavior. For example, how is the contemporary villa affecting family relations? Do families living in the villas develop family ties differently from families living in traditional courtyard houses? How does house design affect interaction between neighbors? Does house design affect population density, and does population density affect anti-social behavior? As noted in previous chapters, housing has been tied to family and social problems in other countries. Through research and implementation of the research findings, Saudi Arabia may be able to prevent some of the social problems other countries have, or are currently, experiencing.

*Preservation Societies*

But education cannot be limited to the classroom. We can increase public knowledge of traditional housing through other avenues as well. To do this, we first must stop the indiscriminate mass-demolition of courtyard houses since the physical presence of the house is the first step in awareness.

In the Saudi capital of Riyadh, a state-supported historic preservation group revives traditional buildings, crafts, farming techniques, dances and other folk arts. An entire cultural village is being built that recreates, in detail, traditional forms. I
recommend that a preservation society be developed in every major city in Saudi Arabia. Through the society, traditional builders and crafts people can train others in traditional crafts and house construction. From this, there would develop a network of builders and crafts people who can be hired to repair and rebuild traditional houses. Low-income families who reside in decaying traditional houses could, with government assistance, hire these newly skilled workers to repair the houses. Thus, the traditional courtyard houses could become living testimony to the Saudi cultural past.

Also, I propose that the Department of Antiquities choose a large and well built traditional house in each city as a museum. These museums would house all aspects of the traditional house, from the structure itself to cookware and clothing. The museum would emphasize the crafts that developed in the particular region in which the museum is located.

In some areas of Saudi Arabia, historic or traditional buildings already have been repaired and are being used as libraries or public halls for celebrations like weddings and religious holidays. This is an excellent program and should be continued.
MECCA'S UMM AL-QURA UNIVERSITY

Time, of course, does not stand still. And I am not proposing that the Saudis ignore modern architecture and technology. We have learned much from Western countries, particularly in the areas of electricity and sanitation. In addition, some of the modern building materials can make new housing starts stronger and more durable.

I see the major task for Saudi architecture as a valuation process. We must determine what features of the traditional house are desirable for the contemporary house in terms of social, religious, aesthetic, environmental and economic value. These features can be incorporated into the modern structure. We must wed the old with the new, the Western with the Arabic, to forge an architecture that belongs to the Saudis. To accomplish this, we will need the cooperation of architects, art educators, engineers government planners — those from Saudi Arabia as well as the many foreign professionals working in our country.

The design and construction of the Umm Al-Qura University in the western Saudi city of Mecca is one such cooperative project that can serve as a shining example to others. The project was massive — a university for 10,000 men and 5,000 women that could be expanded when necessary. The university also was to provide housing for about 65 percent of the students and faculty.
Following Islamic tradition, there was to be a total separation between the facilities for males and females.

The objective of the university planners, notes writer Fazlur Rahman Khan (p. 317), was to design and construct a university with a sense of purpose, a sense of quality and a sense of place—a university of world rank that would remain true to the spirit of Islam.

As noted in other chapter, Western or Western-trained architects, planners and engineers working in Saudi Arabia too often have ignored the Saudi architectural heritage. This was not the case with Umm Al-Qura University. Before any conceptual design was undertaken, key members of the design team from the Western-based architectural firm of Skidmore, Owings and Merrill visited numerous Arabic centers of culture and heritage. They absorbed, directly, the forms and spaces that make Arab architectural design different from the Western world. In addition, many of the project-review sessions were held in traditional Saudi structures so that concepts could be physically compared and evaluated.

After intensive research, writes Khan (p. 319), the following were among the ordering principles established on the basis of the form and structure of Islamic-Arab cities:
* The courtyard house is the most relevant form of building relating to the need for privacy and protection from the harsh desert climate.

* The urban form was to be inward-looking with the distinction, quality and identity of space inside the buildings (with little emphasis on the outside expression of buildings that is so often the character of Western architecture).

* Shaded pathways are essential for the pedestrian in the desert environment and, therefore, wide streets are contrary to the character of Arab cities.

Window openings both into the court and out onto the streets should be protected from the glare and heat of the sun. And at the same time, these openings should allow the flow of air as needed. This form of windows called *mushrabiya* had developed over the centuries in the Arab world. Timber, with its quality of coolness and its infinite possibilities in patterns of openings was the material found most appropriate.

* Compositions of openings on the walls should not be monotonous but should reflect the various possibilities of handicrafts and designs.

* Plants and water fountains should be used in a balanced way so that the plants are supported by the fountains and, because water is scarce, do not need additional water.
The design team's master plan, notes Khan (p. 320), incorporated the needs of 15,000 students at a modern university with the spirit and character of Islamic institutions from the past. Most important to the design was the traditional inner courtyard. The university's main entrance leads to a large reception courtyard around which are administration buildings. Classrooms, themselves, have small interior courtyards. Some of these courtyards are covered; others are left open with open-air landscaping. Each faculty also has its own courtyard. These courtyards give each university division its own individual sense of identity, while, at the same time, providing a sense of belonging to the whole.

The Ceremonial Court, a large landscaped courtyard with fountains and a covered rest area, provides a space for large gatherings. In the main library, interior courtyards are designed to allow patrons to read with natural light. The housing is built in clusters with each unit having a small courtyard that leads to a semi-private courtyard that, in turn, leads to a still larger one.

The window openings in the dormitories were given a contemporary flair by designing them with a seating area and under-seat storage. Seating in the dormitories employs the cushions found in traditional Saudi houses. Although built of contemporary materials, writes Khan (p. 325), the housing with
its traditional details, gives the students a sense of belonging without being outdated, a sense of heritage.

Writes Khan:

> These and many other aspects of the design of the Umm Al-Qura University are presented here as an example of the opportunities and challenges in evoking the spirit and heritage of the Islamic-Arab architecture in planning of the new towns and facilities for the future needs of Saudi Arabia. The entire Arab world, and Saudi Arabia in particular, is increasingly becoming conscious of the need for maintaining the continuity of the cultural heritage of the past while going ahead in full earnest with developments of new towns and facilities. It is hoped that responsible planners, architects and engineers in the West as well as those in the Arab world will continuously strive to interpret that glorious architectural past in creating solutions for ever growing and ever changing newer needs of the present and future (p. 325).

The discovery of oil in Saudi Arabia during the 1930s has ushered in a new era for the Saudis. And this era has brought many innovations, particularly ones based on Western technology, to the Saudi people. But the Saudis need not lose their heritage, their cultural past.

Through education, the Saudis can learn to discriminate between the useful and the irrelevant, or even dangerous,
innovations. Through education, the Saudis can develop their
own housing designs, designs that are technologically modern yet
spiritually traditional, designs that combine the best of modern
architecture and technology with the best of the traditional
courtyard house.
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Appendix A

LIST OF SIGNIFICANT INFORMANTS
The following is a list of the most significant informants who were interviewed for this study. As a Saudi Arabian, I, of course, also am an informant, although I did not list myself. Obviously, I have interviewed many additional people whose information I used in my understanding of the problems but who are not listed as "significant informants." Many of these interviews have been ongoing since 1986 where I began this project.

1- Abdulkarime:

   Abdulkarime is about 40 years old and lives in Riyadh. He is director of the publishing department in the Ministry of Defense, Saudi Arabia. Interviewed 1986 - present.

2- Abdulrahman:

   Abdulrahman is about 60 years old and lives in Riyadh. He is director of information in the health department, Ministry of Defense. Interviewed 1987 - present.

3- Ali:

   Ali is about 30 years old and lives in Riyadh. He is a Saudi architect who is now practicing his profession in different cities in Saudi Arabia. Interviewed 1992 - 1994.
4- Sulaiman:

Sulaiman is about 80 years old and lives in Hail, Saudi Arabia. He is a retired traditional carpenter who used to build traditional courtyard houses. Interviewed 1989.

5- Ibrahim:

Ibrahim is about 82 years old and lives in Hail. He runs his own furniture store and used to be a traditional craftsman who specialized in making doors and windows for traditional courtyard houses. Interviewed 1988 - 1994.

6- Hejer:

Hejer is my uncle. He was 79 years old when he died in 1993. He was a mixer of mud for traditional courtyard houses in Hail. Interviewed 1986 - 1993.

7- Ibrahim:

Ibrahim is 84 years old. He runs his own real-estate company and used to buy and sell traditional courtyard houses. Interviewed 1991.

8- Mohammed:

Mohammed is about 75 years old and lives in Riyadh. He was a traditional master builder (Stad) for about 25 years. Interviewed at his houses in 1993.
9- Mohammed:

Mohammed is about 57 years old and lives in Riyadh where he runs a traditional crafts store. He used to make traditional farm equipment. Interviewed in 1993.

10- Abdulah:

Abdulah is about 75 years old and lives in Riyadh. He was a master builder (Stad) before he retired in 1971. Interviewed in 1993.

11- Salem:

Salem is about 45 years old and lives in Riyadh. He is an architect who studied modern architecture in Italy. Today, he runs an architectural firm in Saudi Arabia. Interviewed 1988 - present.

12- Mubarak:

Mubarak is about 36 years old and is a graduate student majoring in English literature at The Ohio State University, Columbus, Ohio. He is a journalist and is interested in Saudi traditional culture. Interviewed in 1994.
13- Fawaz:

Fawaz is about 37 years old and is a graduate student majoring in Art Education at PSU in State College. He was an art-education teacher in Saudi Arabia. Interviewed in 1994.

14- Fais:

Fais is about 31 years old and is an art-education teacher. He is interested in history of traditional architecture in Saudi Arabia. Interviewed in 1993.

15- Fahed:

Fahed is about 45 years old and lives in Riyadh. He is a housing contractor and is interested in traditional Saudi architecture. Interviewed in 1993.

16- Ibrahim:

Ibrahim is about 52 years old and lives in Riyadh. He works in a government office and recently built his own villa. He is interested in integrating some of the features of the traditional courtyard house into his new villa. Interviewed in 1993.

17- Mitib:

Mitib is about 35 years old and lives in Riyadh. When I interviewed him, he was trying to find a contractor to build his
house. He wanted a house with the traditional concept of design but employing modern materials. Interviewed 1990 - 1993.

18- Mohammed:

Mohammed is about 40 years old and is a graduate student majoring in art education at The Ohio State University, Columbus, Ohio. Interviewed in 1994.
APPENDIX B
SAMPLE OF RESEARCH QUESTIONS AND ANSWERS IN ENGLISH AND ARABIC

165
These are samples of unstructured interviews that I conducted with four groups of people with different professions and backgrounds. Most of these interviews took place in the central region (Najd) of Saudi Arabia from 1987 - 1994.

1- I met Ali several times, the first time through common friends in 1988 at his office in Riyadh. At this meeting, I explained to him my interest in traditional courtyard houses and indicated to him that I was planning to study these houses and would like his help in the near future to collect data relating to this project. In 1993, I telephoned Ali to interview him for this study. I went to his house where we set in a traditional reception room furnished with different types of traditional furniture. Ali designed and built his house in 1992 using a combination of traditional courtyard-house features, including an interior courtyard, and modern materials. The following is one of my questions along with Ali's response.

Question:

Do you think a Saudi architect like yourself can design and build a house combining traditional courtyard-house features with modern architectural materials; and would this house be suitable to today's living and aesthetic functions?
Answer:

"We, as Saudi architects, should develop our own architecture," Ali said. "I think that the traditional courtyard houses have the aesthetic and workable qualities of traditional elements, which create a unique design atmosphere when placed alongside contemporary elements. Traditional elements express cultural and heritage aspects. The house design is prompted by an effort to reconcile a form and its context with the individual's experience and belief. My attempt to use contemporary elements in design and decoration along with traditional courtyard-house elements creates a design that is characterized by a look that is modern yet communicates elements of Saudi culture and heritage."

Mohammed is 75, a retired traditional courtyard-house master builder. I met Mohammed in his oldest son's modern villa in Riyadh. Mohammed indicated to me that he built around 80 traditional courtyard houses before he retired 25 years ago. I knew Mohammed through his son Abdulah who I met when I was in college in Riyadh 16 years ago.

I asked Abdulah to invite me to his house so that I could talk with his father and ask some questions about housing in Saudi Arabia.
Question:

Do you think, Mohammed, that the new style of villas are appropriate for the Saudi society and that they fulfill the climate conditions and Saudi people's needs as compared to traditional courtyard houses?

Answer:

Mohammed responded that young Saudi people like his son have no idea about the old houses and how traditional houses were very suitable to the harsh climate. Because of the way these houses were designed, he explained, they required only very cheap insulation materials like mud and tamarisk and date-tree wood. Thick mud walls were very low in conducting heat in the summer and cold in the winter. Old houses were designed so that the courtyard could serve as a private area for females and a playground for children under the supervision of their mothers, Mohammed added. He said Western educated Saudi architects should be aware and knowledgeable about the traditional courtyard houses and their social and climatic suitability for the Saudi people. Saudi architects should not copy Western forms of housing, he noted, but rather learn from their ancestors who developed their own unique architecture that was consistent with social and environmental needs.
He expressed his dislike of his son's villa and of other villas. He said that the new villas are impossible to live in without noisy air-conditioners because of the concrete used in building the villas. The concrete is a fast conductor of heat in a hot climate like that of Saudi Arabia. He suggested that the outside gardens of the new villas be inside as in traditional courtyard houses. He indicated that he cannot enjoy the outside garden except at night because the garden is too hot during the day.

Hejer is my mother's oldest brother. I lived in his traditional courtyard house in Hail for about two years when I was 12 years old. When I was living with him, he took me several times to help in preparing and mixing mud for traditional courtyard houses. It was at that young age I first became interested in traditional methods of building houses. As a teenager, I started to work part time with traditional master builders. Summers, when I was out of school, was the peak season for building houses. My uncle taught me much about traditional courtyard houses and the techniques of preparing and using local architectural materials. When I told my uncle in 1986 that I would be studying traditional courtyard houses, he was very happy that a young member of his family appreciated his traditional profession. In 1993, I brought several photographs of traditional courtyard houses to my uncle. These photographs
were taken by myself in 1981 of traditional courtyard houses, almost all of which have since been demolished to build new roads or new villas.

Question:

Please identify from these photographs the traditional Saudi architectural features and explain to me how craftsmen like you build traditional courtyard houses?

Answer:

Hejer explained to me all the details of the building process of traditional courtyard houses — from digging the foundations to building the walls to crafting windows and doors which are decorated and painted using available local materials. Interior doors are decorated and painted, but exterior doors are decorated only with black paint. He explained the technique of decorating the men's reception room using carved plaster.

He identified the traditional features of the traditional courtyard houses. With the aid of the photographs, he pointed out the different motifs in house decoration that employ different geometrical and floral designs. He explained how these designs are related to other motifs in Bedouin's crafts. He showed me the differences in size and decoration of doors and windows depending on their location in the house. Exterior-facing windows are small, he said, while interior-facing windows are
large. But the exterior door is large both to show hospitality and to accommodate large deliveries like bags of rice or bales of hay.

The light-brown, natural mud color of the traditional house's walls resembles the color of the desert where these houses are located. He added that the shape and the color of traditional courtyard houses are in tune with the surrounding environment. The bright sun turns the natural mud color into a golden brown, a color that gives a pleasant feeling.

Abdulkarime is a part-time businessman in addition to his job in the Ministry of Defense. Abdulkarime was my neighbor when I was a student in King Saud University. Abdulkarime and I used to live in the same apartment building in Riyadh. Abdulkarime is interested in Saudi traditional material culture and owns a sizable collection of traditional crafts from different regions of Saudi Arabia. He is concerned about the decline of traditional crafts production and the impact of cheap imported imitated-crafts from other countries. In 1989, Abdulkarime decided to build his own traditional courtyard house (with modern utilities added) in which to live and to display his collection of crafts. However, he could not find any skilled builders to combine the old methods of architecture and construction with modern facilities. For this study, I interviewed Abdulkarime in his new villa in 1993.
Question:

Do you think Saudi architects should combine traditional features, like interior courtyards, with modern features. If yes, would you like to have a courtyard in your new house?

Answer:

When I went to interview Abdulkarime, he and his family had just moved to their new villa. He told me that even though he was happy the family had moved to the new villa, he was sad that he could not fulfill his dream of building a traditional courtyard house to display his craft collection. He had also wanted his children to enjoy and live in a house that related to their traditions. Even though this new villa had comfortable facilities, Abdulkarime said that he and his family felt like "strangers living in a strange place."

He added, "I agree it is a great idea to combine traditional and modern features in one house — including a courtyard. In order for Saudi architects to do this, they need to be more educated and better appreciate traditional courtyard architecture. We as a society have to look back to our architectural tradition and see how our ancestors created their own housing, housing that was suitable for their environment and still is for ours."
قائمة بالأسماء وبعض الأسئلة والأجوبة المقدمة لهم

هذه بعض من أهم المعلومات التي حصلت عليها من بعض الأشخاص السعوديين، وإنها تشير إلى إمكانية وجود منهم ولا داعي ذكر أسماء شخصية، وبناءً على الأسماء في هذه القائمة، كثير من هذه المقابلات أجريت في عام 1981م حيث بدأت النظرية في هذه الدراسة.

1- عبادةكريم:

عبارة كريم يبلغ حوالي 40 سنة من العمر ويعيش في مدينة الرياض ويعمل في قسم النشر في وزارة الدفاع.

وقد حصلت على معلومات منه من عام 1981م إلى الوقت الحاضر.

2- عباد الرحمن:

عبادة الرحمن يبلغ من العمر حوالي 60 سنة من العمر ويعيش في مدينة الرياض ويعمل في الشئون العامة في البرنامج الصحي في وزارة الدفاع. وقد قام مقابلته من عام 1987م إلى الوقت الحاضر.

3- علي:

علي يبلغ من العمر 60 سنة تقريباً ويعيش في مدينة الرياض. و يحمل درجة البكالوريوس في العلوم ويعمل في مجال إنتاج النقل، وقد قام مقابلته من عام 1991-1994م.

4- سليم:

سليم يبلغ من العمر حوالي 80 سنة ويعيش في مدينة حائل. ويعمل سابقاً كصاحب نادي ونافذ للمساكن الشعبية القديمة. وقد قام مقابلته في عام 1981م.

5- إبراهيم:

يتحور عمر إبراهيم 82 سنة ويعيش في مدينة حائل. في الوقت الحاضر يعمل بتجارة الآثات. وفي السابق كان يقوم بتجارة إبراء ونافذ للمنازل الشعبية القديمة. وقد قام مقابلته من عام 1988-1994م.

6- حمزة:

حمزة يتحور عمر 77 سنة من عام 1993م. وقد كان يشتغل في السابق حالياً في المنازل الشعبية القديمة. وقد قام مقابلته من عام 1982-1986م.

7- إبراهيم:

يتحور عمر إبراهيم 82 سنة يعمل في تجارة الفنون وكان في السابق يعمل بتجارة المنازل الشعبية القديمة.

وقد قام مقابلته عام 1991م.

8- محمد:

يبلغ عمر محمد من العمر حوالي 75 سنة ويعيش في مدينة الرياض. كان يعمل ببناء المنازل الشعبية قبل حوالي 25 سنة (سنين)، وقد قام مقابلته في عام 1993م.
حيدر:
بلغ من العمر حوالي 57 سنة ويعيش في مدينة الرياض ويعمل في محلة بيع الأدوات الشعبية وكان في السابق يقوم بصناعة الأدوات الزراعية الشعبية. تمت مقابلته في عام 1993م.

علي:
بلغ من العمر عيد الله حوالي 55 سنة ويعيش في مدينة الرياض. وكان في السابق يقوم ببناء المنازل الشعبية (سناء). تمت مقابلته في عام 1993م.

سالم:
بلغ سالم من العمر حوالي 45 سنة وينجز بكالوريس في العصرة من ايطالي. في الوقت الحاضر يدير شركة المصارعة في السعودية. تمت مقابلته من عام 1988-1993م.

مبارك:
يتراوح عمر مبارك حوالي 27 سنة وهو طالب دراسات عليا في مجال الأدب الأفنيزي في جامعة عمان. وهو مهتم بالروث الشعبي السعودي. تمت مقابلته في عام 1994م.

فواز:
بلغ من العمر حوالي 37 سنة وهو طالب دراسات عليا في جامعة عمان يبنغتيفاي، وكان مدرساً مهايا العصرة الفنية بالمدارس العامة في السعودية. تمت مقابلته عام 1994م.

فايز:
بلغ من العمر حوالي 31 سنة وهو مدرس تربية فنية. ومهتم بتاريخ العصرة الشعبية القديمة. تتم مقابلته في عام 1993م.

هده:
بلغ من العمر حوالي 45 سنة ويعيش في مدينة الرياض. ويعمل مزارع ومهتم بالعصرة الشعبية القديمة في السعودية. تمت مقابلته في عام 1993م.

ابراهيم:
بلغ من العمر حوالي 54 سنة ويعيش في مدينة الرياض وهو موظف حكومي. وقبل مدة من الوقت شيد قلبه الخاصة. ذو اهتمام بالأشكال المعمارية الشعبية. تمت مقابلته في عام 1993م.

مهبه:
175

- محمد:

يبلغ من العمر حوالي 30 سنة وهو طالب دراسات عليا في جامعة ولاية أوراغو-تخصص تربية قتيبة.

وقت مقابلته في عام 1994م.

هذة عينة من الاستماع والأجوبة التي تمثل بهذا الحوار.


1- تم مقابلة عليا أكثر من مرة، وقد تم التعرف عليه في عام 1988م عن طريق بعض الاصدقاء في الرياض، في أول مقابلة استمر في 45 دقيقة ثم أجريت له أخرى في الجامعة في الرياض، وفي عام 1993م أجريت له مقابلة في الرياض، وفي عام 1994م أجريت له مقابلة في جدة. هذه القائمة تتم من خلال اجتماعات الأخلاقية للعلامة محمد.

سؤال:

هل تعتبرك كمختص معماري أنك يمكن أن تصمم وتشيد منزلًا يجمع المكوّنات الشعبية القديمة مع خانات وأدوات البناء الحديثة التي يصبح هذا المنزل مناسباً لتطبيقات الحياة الحديثة؟

الجواب:

نحن كمolders سعوديين يفترض أن توجد عمارتنا دائمة، فقد كان اخراج التصميم العربي القديم مع مزج البناء الحديث واستخدامه في التصميم، ونستطيع أن نقول أننا نحتاج للتصميمات الحديثة التي تجمع بين البناء القديم ووجوده.

- محمد كان في السابق معمارياً شبيهاً (ستاد). تم مقابلته في فترة أكبر أولاده في الرياض، وتم التعرف عليه عن طريق حتى الذي كان ندرس فيه في نفس الجامعة، فقد أجريت محمد عبارة في مجد البناء السابق حيث أنه قد ينفق عن العمل من حوالي 45 سنة.

سؤال:

دُعي إلى منزل محمد لطرح عليه بعض الاستماعات التي تتعلق بهذا الدراسة، وهذا واحد من الاستماعات الرسمية.

عليه.
هل تعقد يا عمر محمد أن هذه المساكن الحديدية مناسبة للمجتمع السعودي وتلبس طبقتنا الخارجيّة والاحتياجات المكانية بالبيئات الشعبية القديمة؟

الجواب:
قال في محمد أن شاب اليوم مثل أنبي ليس لديهم فكرة عن المنازل الشعبية القديمة وكيف أنها كانت نوعاً من الممارسة النشطة للقضاء على الراحة قديماً. تسمى تلك البيئات الشعبية القديمة نفد على استخدام القلاب وأشجار النخيل والقرود المتوفرة محلياً، والتي تساعد في محاولة المنزل على جدار الدعام في الدهر، ودرجة حرارة مفيدة في الصيف. قد صمت المنازل الشعبية القديمة حيث يوجد الحوض الداخلي مكاناً مناسباً للنساء والأطفال. يجب على المعماريين السعوديين أن يلقو على قيمة المنازل الشعبية القديمة وممارساتها لأجور وطبيعة المجتمع السعودي المحافظ. كما يجب عليهم أن ينظروا المنازل العربية على عاهلتها بل يجب عليهم أن يستفيدوا من تجارب إنجذابهم الذين مروا ومعاملتهم خاصة والممارسات الاجتماعية والسياسية. قد أظهرت هذه المقارنة بين المنازل الشعبية في هذا النوع من المنازل نين الكيف النزيف. أن الكيف البارد بما في استخدام الأسند الساخن الذي يرفع درجة حرارة المنازل في البلدان الحياة مثل المنازل التي يعيش فيها هذا المنازل غير عملية. فقد كان له السكنية غير مناسبة المفترض أن تكون منزلاً ملماً في تصنيف الممارسة الشعبية القديمة. حتى أن بعضهم لا يستثنى بالممارسة الخارجية إلا في الأماكن بسبب حرارة الشمس في النهار.

3 حجر رحلة الله. لقد شهد في منزله الشعبي في مدينة حائل لمدة ستين يوم كان عمره 12 سنة. وقد احتُلت مهنة أكثر من مرة لساعدته في بناء المنازل الشعبية في تلك الفترة. منذ ذلك الوقت بدأ إختمامي بالمنازل الشعبية. بعد ذلك بدأ التعلم في الهندسة العمرية. أتُدمري خليج الكيف عن طريق بناء المنازل الشعبية والأجزاء النباتية المستخدمة في بناءها. ولقد كان ينبغي يومان أن أخبرته في عام 1986 من تعلم على دراسة الممارسة الشعبية. في عام 1986، أ렷 مجموعة من الصور المتعلقة بالمنازل الشعبية إلى حجر والتي صورتها في عام 1986، للإشراف عليها والاستعراض والإستفادة من ملاحظاتنا، وابن الأفغ مجمع هذه المنازل قد حددت الأفكار في شمالي المرأة.

سؤال:
أرجو أن تعرف من خلال هذه الصور ملاحظ الممارسة الشعبية السعودية القديمة. أرجو شرح الطرق المستخدمة في بناء هذه المنازل؟

الجواب:
لقد شهد في جميع مراحل البناء بالطين من حفر الأساس إلى بناء الجدران وعمل النار كل المواد وطريقة زخرفتها. ذكر لي الفروض مادة زخرفة الأبوب الخارجية والداخلية حيث أن الأبواب الداخلية تتسم بأن تكون معتادة والطينية، ويستخدم زخرفتها اللون الأسود فقط، لذلك حرفي الصور الزخرفية استخدم الرمال والزئبق (المجلس). يُستخدم الصور الصورية نظاماً لكثرة عنا تلبين الأشكال الطبيعية مبيناً هندياً، ونبطي كيف أن هذه الأشكال تسمى مع الأبواب المصورة في الخف البدوي، كذلك ذلك في اختلاف مفاتيح الأبواب الخارجية والداخلية وكذلك الزئبق.

لقد وجه اثنان منها إلى لون جدران المنازل الشعبية، وذلك لأن ينbee البني يتسم بريقاً نوعاً من الأسلوب مع لون
الصرخاء الشابه. إن شكل ولون هذه المباني عند انعكاس أشعة الشمس عليها يعطيها لونًا ذهبيًا يخلو جوًا شاعراً للمحيط.

٤ – عينالزريتي كان أحد الجيران عندما كنت طالبًا في الجامعة وكنا نسكن في نفس المنزل في مدينة الرياض. عينالزريتي من المهتمين بالتراث الشعبي السعودي ويدخل مجموعة كبيرة من الآداب الشعبية من مناطق عديدة في السعودية ومن الذين يبحثون على انتزاع الآداب الشعبية السعودية وتأثير الآداب الشعبية المثقفة وال.compodium في الخارج. في عام ١٩٨٨م حاول أن يبني منزله الشعبي التي تتوفر فيه مستلزمات الحياة العصرية الحديثة. وذلك للسكان فيه وعرض مجموعاته الشعبية. وسبب عدم العثور على من يدف مشاريع قيو أن بني فيه حديثة التصميم.

سؤال:
هل تعتقد إنه مناقض أن يجمع المعماريين السعوديين معاً عمارة الشعبية السعودية مع العمارة الحديثة؟ إنه الجواب بتعم هل ترغب أن يصمم منزلك المدرج حقا؟

الجواب:
في وقت مقابلتي لعينالزريتي كان قد انقل إلى فيله الجديدة. لقد اجترب ببناء ملائكة الحديقة على الطراز القديم وقبله يعيش فيه ببناءها. كذلك لعوض مالديه من الآداب الشعبية تناسب الطراز المعماري الشعبي الذي يتطلب من مكونات ماضيتنا الغريب. وأضاف قائلاً أنه يشعر بالحرية في هذه البيئة الحديثة. واستشعر قائلاً أننا نشعر معقلاً أن نعم على الإستفادة القصيرة من العمارة الشعبية القديمة في بناء مساكن تجمع بين العمارة الشعبية القديمة والحديثة. ولكن ليؤم المعماريين السعوديين يعمل كهذا فإنه يحتاجون أن يستمعوا بالعرفة المعمارية الشعبية السعودية وتحمل كمجتمع سعودي مصدرنا ننظر كيف استطاع اجادةنا أن ي褐وا عمارة تناسب مع عاداتنا وتقاليدنا وأجواء بلادنا وهذه الحاجة باقية إلى الوقت الحاضر.
Appendix C
SAMPLE FIELD DRAWINGS
House 1: Residence of Alhammed family in Riyadh that was built in 1962. After the family moved to a new villa in 1981, the house became a storage facility for a local merchant.

Fig. 38 Residence of Alhammed family
House 2: Residence of Alobaid family in Hail. This small traditional courtyard house was built by my uncle Hejer in 1958. Along with other traditional houses, this house was demolished in 1985 to make way for a new road.

Fig. 39 Residence of Alobaid family

House 3: A large, two-story traditional courtyard house located in Riyadh. This house was built in the late 1940s by a
wealthy Saudi family. In 1984, a new owner demolished this house and built a shopping center.

Fig. 40 Traditional courtyard house built in the late 1940s.
House 4: Residence of Alagial family in Burayda. This small traditional courtyard house is still occupied by a member of the same family. The house was built in 1959 and is in good condition.

Fig. 41 Residence of Alagial family in Burayda
House 5: This traditional courtyard house was built in Unayzah around 1949. Attached to the house are animals quarters for goats, sheep and chickens that provide milk and other animal products for the residents.

Fig. 42 A traditional courtyard house was built in Unayzah around 1949

House 6: This large traditional house with two courtyards was built in Riyadh in 1954 for a large, extended family. The house was demolished in 1981.
Fig. 43 Traditional courtyard house which was built in Riyadh in 1954 for a large, extended family
Appendix D

PROPOSED UNIT FOR STUDY WITH LESSON PLANS
In Saudi Arabia, pre-college education is divided into elementary school, middle school and high school. In the 1980s, art education was dropped from the formal high-school curriculum. My proposed unit of study is designed for middle-school students. However, I believe that some of the reading materials that are included in my proposed unit for study could be incorporated into high-school history classes.

Making the traditional courtyard house an interesting subject for students could prove a difficult task. The issue of symbolism is fairly easy to portray in everyday items; however, some students may have trouble considering traditional houses as cultural symbols. It is important to show the traditional courtyard house as an object with meaning. The teacher can begin by introducing students to easily understood symbols before moving on to more complex ones like the traditional courtyard house.

Photos of some characteristics of the traditional courtyard house are in the appendix, and they could be used as the initial conversation pieces. After students view the visual characteristics of the traditional courtyard house, the instructor can elaborate on the meanings behind these cultural distinctions.
UNIT THEME:
The construction and design of traditional courtyard houses in Saudi Arabia.

PURPOSE OF THIS UNIT:
This unit is planned for use with secondary-school students in Saudi Arabia. The way that Saudi people developed their own traditional architecture using the available materials will be emphasized, along with the Saudi people's need to create suitable shelter for protection against the hot, dry climate. Students also will learn about symbols. When students look to their environment, they can begin to see symbols in many forms. Students may then have a better understanding of symbols in relationship to their everyday lives. Students will familiarize themselves with symbols in their own traditional culture. Students will study and identify traditional courtyard houses as symbols of Saudi traditional heritage and will participate in discussions and class critiques.

LESSON ONE
How did Saudi people design traditional courtyard houses?
LESSON OBJECTIVES:
• Explain how Saudi craftsmen built and decorated traditional courtyard houses.
• Explain how builders and craftsmen were limited by the building materials available.

ACTIVITIES:
Introduce students to traditional courtyard houses and modern villas by showing a video tape, displaying slides of the interior and exterior of these two different types of structures, including doors and windows. The teacher should point out the differences between the two houses. The students also will take a trip to an area where traditional courtyard house still exist where they will be encouraged to study the decoration. Bedouin artifacts such as carpet, clothes and jewelry will be presented and discussed with students in order to show the similarity between Arabic geometric design and the decorations in traditional courtyard houses.

Students will be asked to speculate on the advantages and disadvantages of the two types of construction (traditional courtyard house and villa). For example, a traditional courtyard house is more suitable for the Saudi hot climate, but it is not suitable for modern utilities such as central air-conditioning. The modern villa has a very strong concrete construction, but that increases the sun's ray in the hot days of the summer. The students will write one or two paragraphs about traditional courtyard houses.
Since most of the students are familiar with the villa, they will be asked to draw a different one using the traditional courtyard house exterior decorations. They will build a model of the traditional courtyard house using clay and date-tree sticks.

ART MATERIALS:
Pencils
Tempera paint and brushes
Clay
Straw
Date-tree sticks

VISUAL MATERIALS:
Video tapes showing different aspects of traditional courtyard house available from the Antiquity Department in Saudi Arabia.
Photographs of the following:
1. The traditional courtyard house plan.
2. Different types of windows.
3. Different types of decorated doors.
4. Some aspects of the interior decorations.
5. Photographs of the two types of houses from different angles.
LESSON TWO

The influence of Arab heritage on the Saudi traditional courtyard house.

LESSON OBJECTIVES:

- Students will familiarize themselves with visual symbols in their own traditional culture.
- Students will study and identify traditional courtyard houses as visual symbols of Saudi traditional heritage.
• Students will create traditional courtyard houses using materials available.

ACTIVITIES:
To prepare the students for the field trip, they will be shown slides or photos of traditional artifacts. The students will go on a trip to the local museum or the town market (soug) in order to encourage discussion and analysis of traditional artifacts, such as traditional cloths, furniture and kitchen wear. Discuss the various functions of these traditional artifacts, what meaning they had to people who used them, and why Saudi people developed their artifacts in this form.
The teacher will explain to the students how the climatic, economical and cultural conditions shaped the design of traditional courtyard houses. The techniques and the materials used to build traditional courtyard houses will be described. The students will be asked to design a traditional courtyard house. Plans will be made for the students to meet and talk with the builders and craftsmen of traditional courtyard houses. The students will begin to write about some of the characteristics of the houses that they creating. The students also will write about the people who built or lived in the houses.
ART MATERIALS:
Mud plaster
Date-tree leaves
Clay
Chopped wheat straw

VISUAL MATERIALS:
Photographs of the following:
1. *Dallah:* Brass and copper coffee pot.
2. *Filjan:* Woven strips for making Bedouin tents.
3. *Gata:* Decorative divider to separate women in Bedouin tent.
4. *Huwairiyah:* Boat made from date-tree stems and fibers.
5. *Howdag:* Decorated tribal camel litter.
7. *Sahhara:* Woman's treasure box.

LIBRARY MATERIALS:
LESSON THREE

The differences between traditional courtyard houses and modern villas.

LESSON OBJECTIVES:

• Clarify the differences between the traditional courtyard house and the villa.

• Students will discuss and describe the conditions that influence the characteristics and design of both types of houses.

ACTIVITIES:

The students will look at photographs of different types of traditional courtyard houses and villas and will be asked questions about what they see in these houses. What do they think about the symbols they are viewing? Why do they think these specific shapes of houses were used by those who built them?

Following the questions will be a class discussion concerning the economic and social reasons that led Saudi people to build Western villas instead of traditional courtyard houses and what might be the consequences of this practice.

The students will design a new house model which could be more appropriate to the Saudi cultural and climatic conditions,
yet is different from the modern villa. As the students start to develop the model, they will be reminded to consider the social and cultural needs of the people who might live in the dwelling.

ART MATERIALS:
Tempera paint and brushes
Local mud
Date-tree leaves
Plywood
Glue

VISUAL MATERIALS:
1. Different photographs of the monumental rocky caves of Madain Saleh.
2. Detail of mud plaster decoration.
3. Different views of landscape showing date trees.
4. Views across the traditional courtyard house.
5. Different views of modern villas.

LIBRARY MATERIALS:
INSTRUCTION EVALUATION:

The objectives of the instruction have been clearly indicated, and it is assumed the objectives are reasonably attainable and suitable for the age group designated. These objectives will be the center of evaluation; therefore, students are assumed to acquire the following: concepts, knowledge and skills.

Concept

A. The value and importance of traditional courtyard houses in Saudi Arabia.

B. The characteristics of traditional courtyard house.

Knowledge

A. The aesthetic and artistic values of traditional courtyard houses for the people of Saudi Arabia.

B. The methods of designing and building traditional courtyard houses.

C. Cultural symbols manifested in traditional courtyard houses.

D. The materials used in building traditional courtyard houses and the materials' suitability.
Skills

A. Making decorations for traditional courtyard houses.
B. Building a model of traditional a courtyard house from clay and other materials.
C. Designing the exterior of traditional courtyard houses, like doors, windows and other elements.
D. Using the decorations of traditional courtyard houses to create patterns.
Appendix E
Photographs of traditional courtyard houses
Fig. 44 Partially destroyed house exposing the tree trunk, mud and palm leaf and twig layers of roof and staircase.
Fig. 45 Exterior doors framed in mud plaster.
Fig. 46 Columns supporting the balcony/roof in the courtyard
Fig. 47 Parapet designs along inner wall of roof of courtyard and along the exterior wall.
Fig. 48 The "open living" area below the balcony along the courtyard
Fig. 49 Hearth area (camar) in men's reception room
Fig. 50 Dates tree design carved in mud plaster