

**THE STRUCTURAL APPROACH TO CITY IMAGE**  
**(AL-MADINAH AL-MUNAWARAH)**

Thesis Submitted for The Degree of  
**Doctor of Philosophy**  
in  
**Architecture**

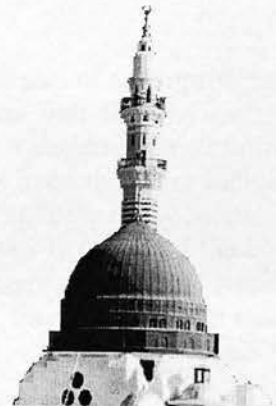
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2000



*In the Name of Allah,  
the Compassionate,  
the Merciful*



**Al-Madinah Al-Munawwarah**



## ABSTRACT

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Today there are huge and radical changes taking place in the development of almost all the cities of the Muslim world, among them the city of Al-Madinah Al-Munawarah. These have brought profound changes in ways of life, urban structure and styles of architecture which have permeated and transformed the very social and physical fabric of the cities and are destroying the quality of the urban environment and Muslim way of life. The Muslim city is in danger of becoming a mere copy of the worst elements of many Western cities: ugliness, noise, air pollution, a frenetic way of life and all the associated social problems.

Meanwhile it is felt fundamental to approach Islamic civilisation not as a mere object of investigation, with the Muslim city as its museum of historical heritage, but as a living reality, a faith and an inspiration to milliards of people in the world of Islam who do not separate their ethical values and their cultural identity from their demands for social welfare, justice and a humane quality of life within the modern process of economic development.

Since we live in the world of the mind, it follows that the problems can be seen as a battle for the mind. In this realm of persuasion and stimulation it is the image which assumes the key role and it is the image makers - the authors, controllers and artists, among them the built environment professionals - who hold a special responsibility. Furthermore it is the reasons and processes underlying the formation of particular interests and images that take on special significance. This is critical if one tries to solve the problems of the formation and development of the symbolic patterns in a historical city such as the city of Al-Madinah, which is known as the City of the Prophet Muhammad (peace be upon him).

The author aims to propound a comprehensive study of the patterns of tradition and historic events of the Prophet's time which inspired and generated the form of the city of Al-Madinah. The study focuses on the preservation of the deep images embedded in people's perception of the city in order to project them to sustain its form in the future. Therefore, the author has in mind the objective of conserving Islamic architectural heritage in general, and the necessity of impressing, on the consciousness of the powers that be, the urgency of preserving the heritage of the city of Al-Madinah before it in particular is destroyed. The City of the Prophet must be considered as being on no account expendable, regardless of the gains made in replacing the old by the new.

Finally the present study forms a sequel to the findings extracted from literature and from the case study, as related to the Islamic Legal System. Common to all these fields is the view that architecture represents a means to give man an *existential foothold*, similar to the view of phenomenological approaches. The author's primary aim is therefore to investigate the *psychic* implications of architecture rather than its practical side, although he certainly admits that there exists an interrelationship between the two aspects.

In reviewing the literature, the "structural" dimension is discussed as part of a comprehensive system in transformation. At the same time, the thesis stresses that the environment influences human beings, implying that the purpose of architecture transcends the definition given by structuralism. A discussion of perception and image has been therefore included emphasising that man cannot gain a foothold through scientific understanding alone. He needs *symbols*, that is, works of art which *represent life-situations*. It is one of the basic needs of man to experience his life-situations as meaningful, and the purpose of the work of art is to *reflect* meanings. The concept of "meaning" is also a strong theme throughout thesis.

# DECLARATION

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This thesis is my original work and has been composed solely by myself.

**Waleed Abdulrahman Kaki**

## DEDICATION

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This work is dedicated to: **Madinah tun-Nabi<sup>1</sup>** (the city of the Prophet)

*There was merriment and joy - a smile on the face of every girl and boy  
The streets of Yathrib welcomed in - the prophet of our love Muhammad  
Sala Allah Allieh wa Salam*

*A full white moon shone down upon a land - rising from the valley between hills of sand  
Being grateful to Allah was the prophet's demand spreading peace through the streets of Madina*

*Madinah tun-Nabi Madinah tun-Nabi  
The city of the prophet is like home to me  
I travelled through the world but I doubted I would see  
A city of such wonder as Madina.*

*Now the narrow winding routes are so full of history - streets check with the Azan from Masjid al-Nabi  
I feel the shadow of the prophet gently cooling me - as I walk through the streets of Madina*

*Madinah tun-Nabi Madinah tun-Nabi  
The city of the prophet is like home to me  
I travelled through the world but I doubted I would see  
A city of such wonder as Madina*

*A man who reads Quran beneath a date palm tree - and a smile from the child on a street selling tea  
enchanted me with the beauty in the sympathy - as I walk through the streets of Madina*

*Madinah tun-Nabi Madinah tun-Nabi  
The city of the prophet is like home to me  
I travelled through the world but I doubted I would see  
A city of such wonder as Madina*

*Al-Madinat al-Munawarah - Holy enlightened City - Al-Madinat al-Munawarah*

*Even in my sleep you call to me - time hurries by- time has travelled so fast - and the wisdom of the  
truth will always last  
I wish I wish I wish that I could climb to the past - and live with the prophet in Madina*

*Madinah tun-Nabi Madinah tun-Nabi  
The city of the prophet is like home to me  
I travelled through the world but I doubted I would see  
A city of such wonder as Madina*

*My heart is never apart from the home of the Ansar and  
**the city of the prophet al-Madina***

---

<sup>1</sup> This Song was Produced by Sound Vision Communications Fund: Chicago, IL60607, USA.

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First and foremost, praise to Allah in whom I totally believe and depend on. By His will the accomplishment of this study was made possible; and may His blessing and peace be upon His Prophet Mohammed who gave significance to the city of Al-Madinah Al-Munawarah and made it the first capital of the Islamic civilisation.

This thesis was carried out in Britain and Saudi Arabia and would not have been completed if not for the great help and kind assistance of many individuals and institutions.

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## SYSTEM OF TRANSLITERATION

This thesis adopted the system of Arabic transliteration from *The Encyclopedia of Islam*, by Leiden, 1986. The dot underneath the letters h, d, and z has been replaced by ather sign over each one of these letters such as ħ ḍ and ž. This is due to technical reasons.

Transliteration	Arabic Letter	Transliteration	Arabic Letter
~	ء	ṭ	ط
b	ب	ẓ	ظ
t	ت	'	ع
th	ث	gh	غ
dj	ج	f	ف
ħ	ح	ḵ	ق
kh	خ	k	ك
d	د	l	ل
dh	ذ	m	م
r	ر	n	ن
z	ز	h	هـ
s	س	w	و
sh	ش	y	ي
ṣ	ص	a; at (construct state)	ة
ḍ	ض	al	آل

### Short Vowels

a	َ
u	ُ
i	ِ

### Long Vowels

ā	آ
ū	و
ī	ي

### Diphthongs

aw	اَؤ
ay	اَئ
iy (ī)	اِي
uw (ū)	اُو

# INTRODUCTION



**Al-Madinah Al-Munawwarah**

## **Propounding the Subject**

The origin of this research goes back to the 1980s when the author was studying in the Department of Architecture in the College of Engineering, King Saud University in Riyadh. The course was about investigating the fabric of the city of Al-Madinah Al-Munawarah (Medina) located in the Kingdom of Saudi Arabia. As a student who values the traditional Islamic architecture of the historic city, the author directed his studies to searching for possible solutions inspired by the traditional settings of the design projects. The author was surprised by Governmental and professional attitudes towards those solutions, for most designers showed a preference for highly 'modern' solutions although it was acknowledged that 'people' had little appreciation towards modern developments when walking in the streets, in spite of admiring their rich and diverse façades and spaces. At that time, the author was trying to understand the City's structure and analyse the way that Islamic ideals have been employed by the ancient master builders in constructing this unique city. In this regard, the author decided to present this qualitative work to ask the inhabitants of the city of Al-Madinah the following questions: how do they see the built environment? how do they evaluate their traditional and modern settings? what do they like from both settings? do different people look at the built environment differently? if so, in what way do their perceptions differ?

The city of Al-Madinah Al-Munawarah is undergoing rapid urban expansion and growth due to its special value to all Muslims. This study aims at identifying the underlying factors, aspects, features and others that are responsible for the preserved value of the city. The City of the Prophet Muhammad (pbuh) is the culmination of concepts and ideas which have their origins shaped and maintained in the relationship between the city meaning and the City character.

The significance of the city of Al-Madinah Al-Munawarah is the result of various forces, processes of subjective and non-subjective factors. The study aims at formulating a method of drawing information about these various processes and to try to project them into a future urban structure of Al-Madinah, maintaining it as resource of inspiration necessary for Islamic

societies. Therefore, it is a conclusive study of the patterns of tradition and historical events surrounding the Prophet which inspired and generated the form of the City.

In the city of Al-Madinah Al-Munawarah, there are many places and sites which have a veritable symbolic meaning to the citizens and are a source of inspiration to Islamic society. These are substantive symbolic meanings of the historical Islamic sites and events in the city of Al-Madinah and the way they are manifested within the urban context of the city.

Pilgrims regularly visit these places to commemorate sacred events and the soul behind the sites. Unfortunately, the movement of urbanisation in the city has already destroyed many of these places. Therefore the study aims to explain how to conserve the valuable remaining sites by identifying the mighty significance embedded in the people's perception and to employ it in the urban context of the city.

**The author aims to propound a comprehensive study of the patterns of tradition and historic events of the Prophet's time which inspired and generated the form of the city of Al-Madinah. The study is designed to focus on the preservation of the deep images embedded in people's perception of the City in order to guide them to sustaining its form in the future. It is the author's intention to search for the principles that make this City unique and sacred with a special meaning and important messages. This was made possible by employing theoretical models, investigating the people's perception and their image of the City.**

## **Aims and Objectives**

The objective of this work is to give an idea about the identified research problem through the notion of the man-environment relationship. The reasoning behind this is to give a widened perspective to the various aspects of the built environment, so that one could enrich his or her interpretation of the way people of the city of Al-Madinah evaluate their city.

Therefore in a general sense, this work is about man's response to that environment, to the environments of the mind. It is concerned with exploring the subjective manner of construing

reality and with the relevance to personal and social life and behaviour of such mental representations, rather than exploring objective reality. Reality is construed differently by different people - and perhaps differently at different times by the same person. This can be readily exemplified at various scales of the urban environment.

Accordingly, the primary concern of the thesis is with the quality of the urban environment in which all but a small proportion of the inhabitants of developed countries spend by far the greater part of their lives. This concentration of population in large urban agglomerations has probably been the most important single change affecting the lives of ordinary people all over the world, both in developed and developing countries, over the past hundred years. It is true of Saudi Arabia, where the continuing shift from a predominantly rural to a predominantly urban population began only a few decades ago.

Therefore the author has in mind the problem of conservation of the Islamic architectural heritage, and the necessity of impressing on the consciousness of the powers that be of the urgency of preserving this heritage before it is destroyed<sup>1</sup>.

Considerable progress has been made in the last five years in the application of these ideas on the qualitative assessment of the image of the city of Al-Madinah, while recognising that much remains to be done before the subject will have advanced as far as has that of the assessment of Government development policy. The latter has, after all, had many years' head - start and a massive research and development programme behind it. Most of the work on people's image has, up to the moment, been concerned with the evaluation of existing situations. The techniques, however, are equally applicable to the prediction of proposed situations.

The present study forms a sequel to the findings extracted from literature including the Islamic Legal System and the case study. These all support a phenomenological approach

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<sup>1</sup> Serjeant (1980) describes the destruction of places like old Kuwait, now a concrete jungle, of much of old Jeddah, the obliteration of old buildings in San'a that the Department of Antiquities was powerless to prevent, and the driving of roads through old Aleppo. The same source admits that it is hardly possible to recognise the Damascus of 1977 from the one in 1935.

that requires from architecture an 'existential foothold' (Norberg-Schulz, 1984) in the world. This represents an investigation of the *psychic* rather than the purely functional implications of architecture, although these are related. In reviewing the literature the 'functional' dimension was discussed as part of a comprehensive system. At the same time, the thesis stresses that the 'environment influences human beings, and this implies that the purpose of architecture transcends the definition given by early functionalism'. A discussion of perception and symbolism has therefore been included, and it is emphasised that man cannot gain an existential foothold through scientific understanding alone. He needs *symbols*, that is, works of art which *represent life-situations*. The conception of the work of art as a representation of a life-situation is maintained in the following chapters. It is basic to human life that each one of us experiences our life-situations as being meaningful, in other words as located also beyond the limits of purely contingent action. One purpose of human artifacts can be said to 'keep' and transmit meanings and this is a significant belief throughout this thesis. In general, this work aims at understanding architecture in *concrete* architectural terms, an aim which the author considers particularly important. The contribution of the thesis can be summarised into:

- a) contributing to studies on city image (cognition, perception and culture);
- b) perceiving the city image as dynamic structure (applying the structuralist approach and its associated notions of structure, transformation, diachronic etc., supported by the finding of an open-ended questionnaire);
- c) defining the components that structure the city image (survey);
- d) implications for the future of the city of Al-Madinah; and
- e) drawing on the contribution of Islam as a culture to the defining quality of Muslim life.

## More about the City

Al-Madinah has 95 names, including *Ḥaybah*, *Ḥābh*, *Ḳubat Al-Islam*, *Al-Mubārakh*, *Dār Al-Abrār*, *Dār Al-Sunnah*, *Dār Al-Akhyār*, *Dār Al-Fatḥ*, *Dhāt Al-Ḥīrār*, *Dhāt Al-Nakhl*, *Al-Bārrah* and *Al-Djabirah*. It is the City of the Prophet, and also his burial place. It was the first Islamic city to support the Prophet (peace be upon him), and it joined him in fighting decisive



battles which were instrumental in the victory of Islam and its subsequent spread.

Al-Madinah is the City of *al-Anṣār*, or 'The Supporters' and their brothers the *Muhadjirīn*, or 'Emigrants', who together formed the first Islamic army which entered Makkah (Mecca) in triumph eight years after the Prophet's *Hidjrah*, or Migration. It was a city which loved the Prophet, and which he in turn loved. On its soil he built his sacred Mosque, and it is here that he is buried (Figure 1).

Al-Madinah was also the City of the Orthodox Caliphs of Islam, who shouldered the responsibility of *Jihād*, or holy struggle, fighting against renegades and propagating Islam in the countries surrounding the Arabian peninsula. It was the seat of the first Islamic state, and witnessed the Prophet's companions administering the affairs of the Muslim community, compiling the Holy *Qur'ān*, and dispatching armies to Persia, Syria and Egypt.



Figure 1: The Prophet's Mosque - Bab al-Salām (Gate of peace) - old Ottoman building<sup>2</sup>

<sup>2</sup> Al-Heraki, Ayman, 1996, *Visit to al-Madinah al-Munawwarah*, Design, Production & Implementation by Civilization Research Centre, Ontario, Canada.



## The Problem

It has often been pointed out that the modern environment makes human orientation difficult. The work of Kevin Lynch (1960) took this deficiency as its point of departure, and he implies that poor imageability may cause emotional insecurity and fear. The effects of scarce possibilities of identification, however, have been the subject of scant direct study. From psychological literature, we know that a general poverty of stimuli may cause passivity and reduced intellectual capacity (Rapoport et al., 1967) and we may also infer that human identity in general depends on growing up in a 'characteristic' environment. The environmental crisis therefore implies a *human* crisis. Evidently, the environmental problem has to be met with intelligence and efficiency. In the author's opinion, this can only be done on the basis of an understanding of the concept of place, which is explicitly referred to in Chapter Three. 'Planning' does not help much as long as the concrete and qualitative nature of place is ignored. How, then, may a theory of place help us to solve our actual problems? Before some suggestions for the answers to this question can be proposed, one must discuss the reasons for the environmental crisis.

In our case, many factors have influenced the way modern settings have evolved. Because of these, the city has witnessed a noticeable destruction of a heritage through which the people identify themselves. In addition, one of the outcomes of the social and economic changes in the built environment of the city of Al-Madinah appears in the spatial organisation and forms of new modern areas in the city centre, which disregard the traditional patterns. These commercial and monumental areas are collections of mismatched and unrelated styles which do not reflect the existing culture of the inhabitants.

That there is a stark contradiction between old and new, traditional and contemporary, is one of the issues which threaten the loss of cultural and Islamic identity within Muslim cities. Its mixture of style creates confusion about the identity of the place and its inhabitants. Moreover, the existing traditional architecture, which is regarded as a valuable Islamic heritage, is decaying. It is noticeable that many buildings in the traditional quarters have collapsed or are about to collapse.

This thesis is, therefore, about tracing the origin of these problems in the city of Al-Madinah and is concerned with examining people's perceptions, needs and expectations in order to form a framework with which to guide future developments of the city that respond to these needs and expectations. This is achieved through applying different qualitative techniques that help the researcher to understand the problem. The techniques used in this thesis are the open ended questionnaire, cognitive mapping and first image. At the core of the study is an attempt to draw out, from the people themselves, a way of responding to related problems through finding their image of the City by understanding the ways they perceive and interpret their built environment. This would provide a broad perspective from which we can gain more insight and information needed for future planning and design processes.

## **Research Methodology**

There are several approaches to understanding the meaning (image) of the city in the literature which have been considered and are being examined in the course of the present research. First, there is the straightforward approach of the social survey, of asking people what they think and subjecting the information to a statistical analysis in the hope that something of consensus will emerge. The second procedure is to employ a group of eminent specialists to decide on behalf of the people what is acceptable and what is not. The advantage of this procedure is that it can be relatively speedy and produce judgments often in advance of their time. The third is a more indirect approach making use of inductive arguments. After the proposal is put forward, the procedure is as follows: a representative population of observers are asked to assess their reactions and these are taken to be representative across a wider population. This indirect approach has a certain procedural advantage in that direct judgments are subjected to a communal critique. Finally, there is the analytical approach, based upon a study of the objective content in terms of a specific theory. This thesis benefited from the first and the last approach to form its research strategy.

Therefore the orientation of this research is exploratory and relies, as far as the research methodology is concerned, on a discourse about cognitive studies and the relation of human image on environmental quality on the one hand and on qualitative investigation of the survey on the other. For in-depth investigation, the city of Al-Madinah is selected as a case

study: this City is introduced in Part Two. The strategy for research is to start from the general and macro-level and proceed to the specific and micro-level. The data collection consists of three techniques. An open-ended questionnaire technique was applied because the issue under investigation is complex and variant. This was supported by a cognitive mapping technique. Finally the author employed the 'First Image' technique as described later. In addition, the work benefited from the author's self-experience and observations of the City.

## Structure of the Argument

The underlying assumption of the research process is modelled in Figure 2. The model indicates that the process of research always passes in a cyclic order: the modes of analysis, synthesis and evaluation, in order to identify, define and specify some aspects of the research questions. It helps to achieve an appropriate model illustrating both the Structure of the Argument and of the Research Process.

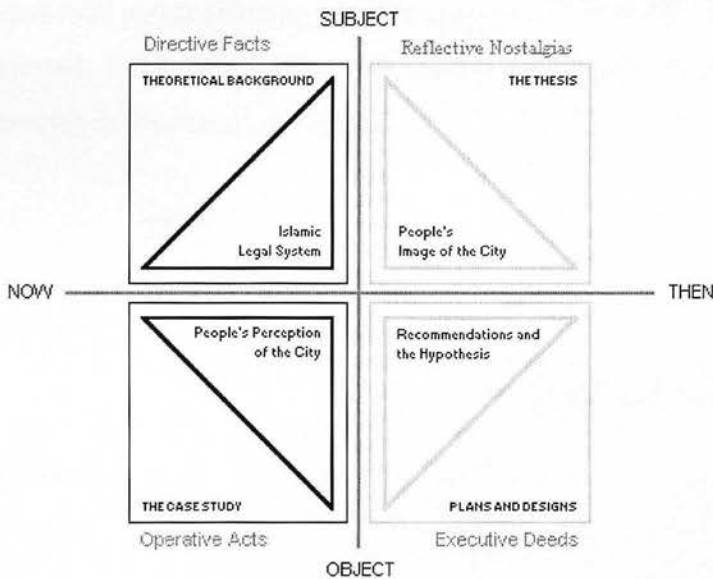


Figure 2: A Model for the Structure of Argument and Research Process (Source: the Author)

The model also illustrates people's perception, which is a specific investigation generalised from the case study, as an Operative Act; and Islamic Legal System, which is also deduced from the context of the relevant and available information, as a Directive Fact. These

available fields of information help us to envisage a new image for the future plan and novel design for the City, as the main source for transformation of its socio-spatial structure and generation of its typologies. People's image contributes to the hypothetical discovery of the study and the thesis contributes to implementation of the findings on the ground via its recommendations.

This model consists of two dichotomies: the Subject-Object (abstract-concrete) and the Now-Then dichotomy representing the flow of theoretical approach and available data from 'Now' to the new concept and hypothetical model of people's attitude to real situations, i.e. 'Then'.

## Organisation of the Thesis

Nowadays, development and change are attracting more public concern and scholarly attention that at any other time in history. Traditional urban structures have been seriously questioned and sweeping changes proposed. Simultaneously, efforts are being made to penetrate the fundamental points affecting people's image by which urban development plans can be better operated. According to this task, and in relation to research question, the strategy of the research is illustrated in Figure 3.

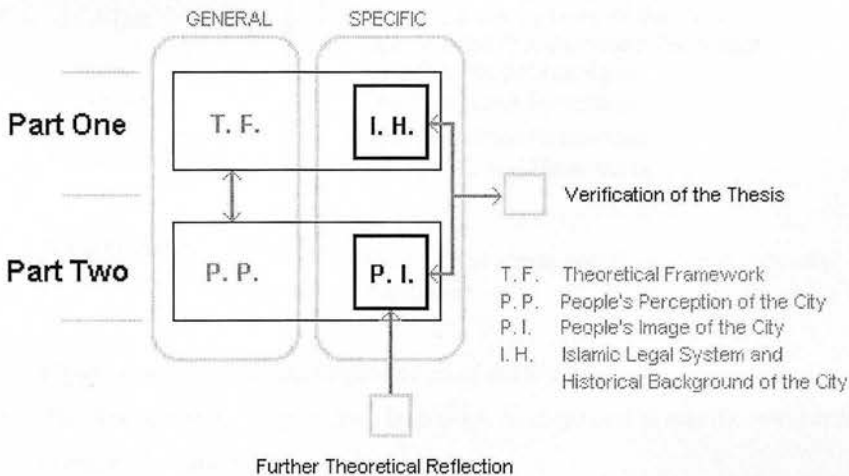


Figure 3: A Model for the Structure of the Study

In Part One, and on the abstract level, the focus of the thesis is on the Islamic Legal System. In Part Two, on the concrete level, an emphasis has been made to show the importance of the People's Image of the city of Al-Madinah (Source: the Author).

Figure 3 represents the concern of the researcher which is based on general and specific issues. Accordingly, the focus of this thesis is on the specific matters, i.e. the people's image of the City, resulted from the discussion on the concrete level and the Islamic Legal System, extracted from the abstract level.

The following is a brief summary of the various parts, sections and chapters of the thesis and their organisation (see Figure 4). The main discussion has been divided into two parts; each further divided into sections and chapters. The introduction provides an overall view of the problem, the main objective, the research methodology and a general synopsis of the contents of the thesis.

Introduction	CHAPTERS
<b>Theoretical Background</b>	Environmental Qualities <b>1</b>
	Cognitive Studies <b>2</b>
	City Image <b>3</b>
<b>Legal System</b>	Islamic Legal System <b>4</b>
	Islamic Aspects of the Built Environment <b>5</b>
<b>Image Perception</b>	Survey Methodology <b>6</b>
	Attitudes of Al-Madinah's Citizens ; (Historical Background of the City) <b>7</b>
	Open-Ended Questionnaire Technique <b>7I</b>
	Cognitive Image Technique <b>7II</b>
	The First Image Technique <b>7III</b>
Analysis of the Responses: Categories and Dimensions <b>7IV</b>	
<b>Conclusion</b>	Structure of Image and Environmental Quality <b>8</b>
	Conclusion <b>9</b>

Figure 4: A Model for the Organisation of the Study

The direction of the study is from both sides, from general to specific towards its conclusion (Source: the Author).

Part One, the Literature Review and Theoretical Framework, involves two sections. Section A, Human Perception and the Environment consists three chapters: Chapter One is about Environmental Qualities and discusses the theoretical perspective of the meaning of the built

environment. It reviews the different approaches that have been used in this discipline. The purpose of this chapter is to familiarise the author and the reader with the key issues about the principle theories and context of man-environment studies. This will be reflected in, and help with the interpretation of, the findings from people's perception. Without this, the interpretation would be unfounded.

Chapter Two is about Cognitive Studies and explores some of the theoretical models which explain how transformation changes things from one form to another. Cognitive Studies cover knowledge about observing messages and storing them as schemata. This section introduces a discussion about the traditional image of cognition and products of the human mind such as: knowledge, consciousness, intelligence, imagining, creating, generating strategies, problem solving, conceptualising, classifying and relating, symbolising etc.

Chapter Three, City Image, covers three areas of the related literature. It first deals with the abstract model of transformation based on the cognitive structure introduced in the previous chapter. The idea of transformation proposed by the school of structuralism forms a substantial theoretical support for much of this chapter. Secondly, it touches upon the subject of place and space and returns to the field of architecture and urban design. This chapter concludes by providing the theoretical grounding for the hypothesis of the role of people's image in sustaining the identity and conserving the symbolic and historical features of the city of Al-Madinah.

Section B of Part One covers the subjects related to Islamic Belief and the Built Environment and specifies the discourse on these issues via two chapters: Chapter Four discussing the Islamic Legal System; and Chapter Five which pursues the effect this legal system has in relation to the Islamic Aspects of the Built Environment.

Chapter Four therefore departs from the findings of Section A to study the Islamic Aspects of the Built Environment in relation to Islamic belief. This chapter concentrates on the basic principles of Islamic belief in relation to Muslim society. It provides a brief but concise background of the way Muslim society lives under the guidance of Islam. It also shows how Muslims consider Islam as a way of life as well as a religion.



Chapter Five then follows the study of the pattern of relationships within Muslim society, which is considered to be the basic conceptual framework of the Muslim city. It introduces the city of Al-Madinah, the context of this investigation, and gives an idea about its historical background. There is a review of images from the past followed by a description of the current structure of the city in this chapter.

Part Two is structured to discuss the issues related to the Case Study. This part consists of two sections: Chapter Six of this part refers to the Questionnaire Design and Methods. This chapter reviews the research methodology adopted during the fieldwork for investigation of the meaning of the built environment. It explains the approach to the study, the strategy for investigation, the technique adopted for collecting information and the analysis.

Chapter Seven includes four sub-chapters and traces the Public Image of the city of Al-Madinah via a humanistic approach employing qualitative techniques. Its subject is therefore the attitudes of Al-Madinah's citizens. After a brief description it analyses the survey data in four episodes: Open-Ended Questionnaire Technique in section 7I; Cognitive Image in 7II; The First Image in 7III; and Analysis of the Responses: Categories and Dimensions in 7IV. It explores people's interpretation of the built environment using an open-ended questionnaire, taking into consideration the contextual dimension. This intends to understand people's preference systems associated with their own culture, values, ideas and history as revealed either by the descriptive analysis of findings or interpretation of some of the observed aspects, dimensions and activities in the settings. The analysis will help us to understand the concepts people hold for different settings - traditional and modern. It will therefore help the author to form a holistic view of the built environment.

Finally, Chapters Eight and Nine belong to one concluding section that correlates the findings to the hypothesis and clarifies the final message of the thesis. Chapter Eight, Structure of Image and Environmental Quality, introduces certain areas and notions of concern defined and observed through the main findings of the research. The notions of communication, participation and communication, for example, are the components engaged in the system of the city's transformation, which is specific to its structure and the meaning of its natural and man-made environmental quality. Chapter Nine summarises the results of the investigation

through the research and finally presents recommendations regarding the future of the built environment derived from the different key players in the process and **final message which is the embedded spiritual meaning of the city image.**

## The Hypothesis

In the transformation of the city of Al-Madinah, the Islamic Legal System and the people's cultural heritage and customs are the major elements towards sustaining the sacred identity of the City. The result expresses itself in the City structure which is a well-organised spatial encyclopedia of Prophet Muhammad's (pbuh) time.

Al-Madinah, therefore, should be regarded from a more pragmatic perspective, esteeming it as the practising spot of the Sunnah (see chapter 4). It was established as the first Model for the Muslim Community. This is best presented in the following formula (Figure 5):

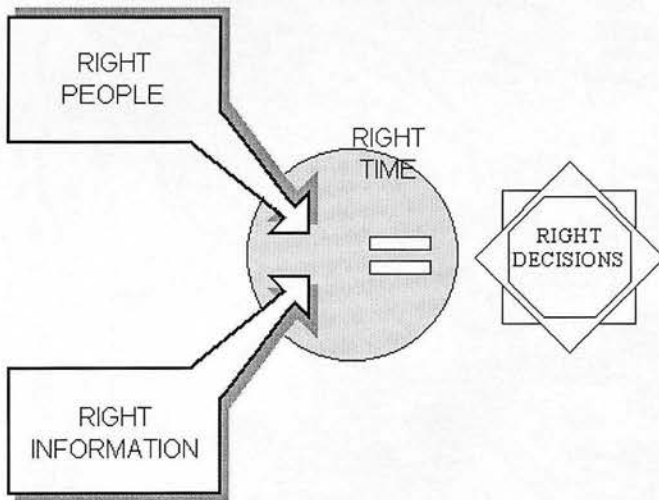


Figure 5: Formula for Successful Plannings (Interpreted by<sup>3</sup>: the Author)

<sup>3</sup> Original diagram from: Edited Wolfgang, F.E. Prelset, (E.D.), 1993, *Professional Practice in Facility Programming*, University of Cincinnati / Cincinnati, p. 35, Van Nostrand Reinhold 115 Fifth Avenue, New York, USA.



- The Right People are the Prophet (pbuh) and his companions.
- Moreover, the Prophet's biography and the actions of his companions, influenced and inspired by him, are the source of the Right Information.
- The Prophet's lifetime followed by the reigns of his Right Guided Caliphs (Prophet's successors), the period of the first struggle to establish the Islamic doctrines, which responds to the Right Time.
- The Right Decision here is the inevitable product; it is whatever the Right People decided or established as a response to certain needs of the First Community in Islam, *the Right Image* of Al-Madinah's citizens (Figure 6).

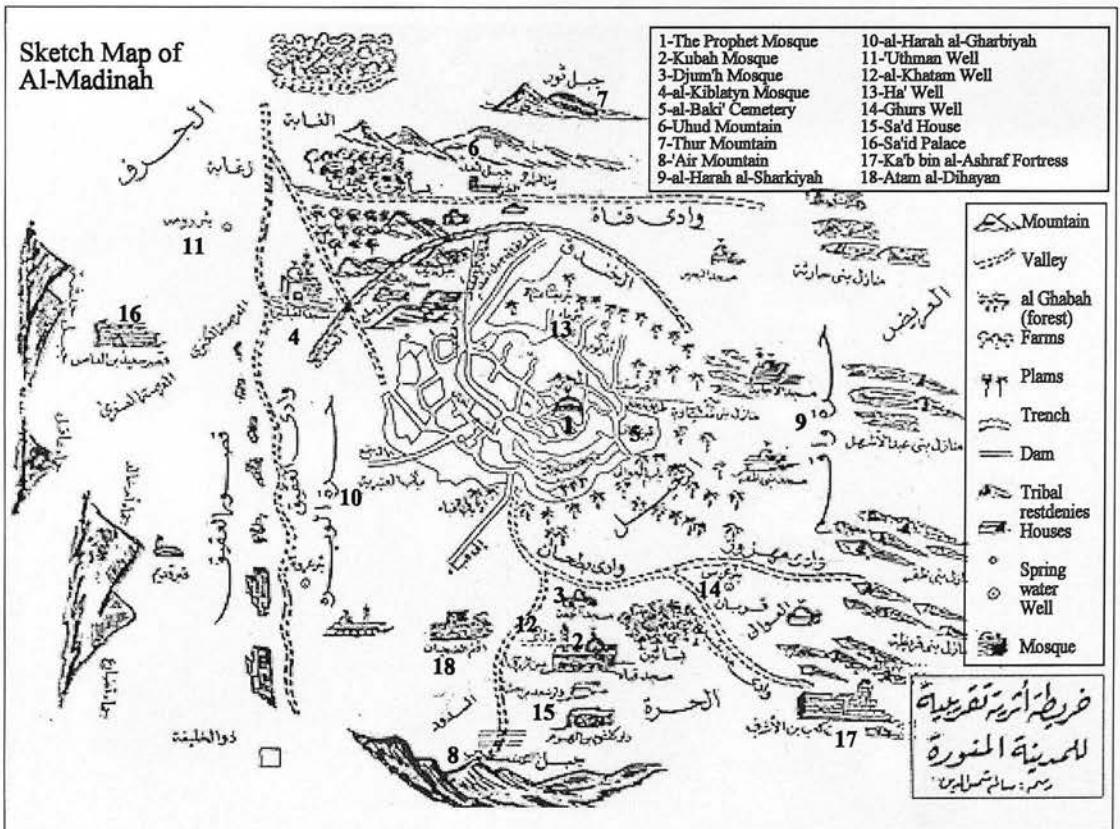


Figure 6: Archaeological reconstruction of the significant features of Al-Madinah since the Prophet's time (original drawing by Sālim Shams al-Dīn)

# PART ONE

## LITERATURE REVIEW AND THEORETICAL FRAMEWORK

### SECTION A

#### HUMAN PERCEPTION

#### AND THE ENVIRONMENT



*Al-Medineh Al-Munawarah*

### Introduction

How do people see the world around them? What does the environment mean to them? How do people recognise quality in their built environment? What kind of quality can this be said to be and what is its value to the people? Does this quality relate to spiritual, cultural or aesthetic dimensions or a combination of these? Is one notion of environmental quality universally applicable or are there some places where it has a unique value? These questions and the like are the main concerns of the author, who has sought to answer them since he began work on this thesis. As an architect, the author has observed that while governments are in favour of international solutions for their settings, people show dissatisfaction with such architecture. It is seen to lack environmental qualities and is assumed to be related to the alienation of man from his sense of spirit.

Environmental quality is, in a very real sense, all things to all people, for the quality of an environment is judged by the attitudes of individual men to it and such judgments are likely to vary with age, culture, education, experience, income and gender - in short, with life-style, and with personality. The American Public Health Association has suggested four levels of concern in assessing environmental health:

- a) "ensuring survival;
- b) prevention of diseases and accidents;
- c) maintenance of an environment suited to man's efficient performance; and
- d) preservation of comfort and the enjoyment of living" (Stead, 1960, p. 313).

Coppock (1973) indicates that these levels (or criteria) might well form the basis for an assessment of environmental quality. Whether conceived in medical, economic or psychological terms, these criteria are all assessed on a human scale, though they are progressively more difficult to measure.

## 1.1 What is Environment?

To understand environmental quality, we have to look at the definitions of the term 'environment' itself. There are several, varying according to the subject dealt with. At its broadest, the word 'environment' can be defined as any condition or influence outside the organism, group, or whatever system is being studied, while recent ecological thinking stresses the need to consider the organism within the environment rather than the independent organism and its environment. Rapaport (1977) defines environment as a series of relationships between elements and people, each relationship having a pattern. The environment reflects and generates relations and transactions between people and physical elements of the world. These relationships in the physical environment are spatially basic; primarily objects and people are related through separation in and by space (ibid.).

Ittelson (1960) describes the environment as an ecological system with seven components:

1. perceptual (the ways in which individuals experience the world, which is a principal mechanism linking people and environment);
2. expressive (which concerns the effect on people of shape, colours, textures, smells sounds, and symbolic meanings);
3. the domain of aesthetic values of culture (one could add, the whole area of values);
4. adaptive (the extent to which the environment helps or hinders activities);
5. integrative (the kinds of social groupings which are facilitated or inhabited by the surroundings);
6. instrumental (which refers to the tools and facilities provided by the environment);  
and
7. the general ecological interrelationship of all these components.

In Lawton's words (1970), an **ecological** system can be described by four components:

1. the individual;
2. the physical environment (including all natural features of geography, climate, and man-made features which limit and facilitate behaviour, and the 'resources' of the

- environment);
3. personal environment (including individuals who are important sources of behaviour control - family, friends, authority figures, etc.); and
  4. the social environment (consisting of social norms and institutions).

These, and other models proposed, have two things in common. First they suggest a multiplicity of environments - social, cultural, and physical. Secondly they imply a link between changes in the physical environment and which provides a setting for people and changes in other areas - psychological, social and the like. Detwyler et al. (1972) give another definition of the environment. They consider it as an aggregate of external conditions that influence the life of the individual or population, especially human life. This is an ecological definition that includes both physical and cultural components.

### **1.1.1 Environment and Culture**

In any part of the world, the environment influences and is part of the human culture that develops inside it. It is important to bear in mind the way people and their culture affect the environment, and the way the physical environment affects cultures and people. Altman et al. (1984) argue that people, culture and the physical environment are a trio and cannot be understood separately.

The relations between man, culture and environment vary significantly and there have been several views on them. One simple and broad definition of culture states that it is the man-made part of the environment. This includes several components of culture which refer to beliefs, perceptions, values, norms, customs and the behaviour of the group or society. The question is: what might be the effects of culturally inappropriate environments? How serious are they and consequently, how important is the consideration of cultural variables in design?

### **1.1.2 Environment and Design**

These questions are best approached by considering briefly the effects of environments on people, i.e. the effects of a particular organisation of space, time, meaning, and



communication on human behaviour, well-being or mood. If there are no effects or if these effects are minor, then the importance of studying man-environment relations is correspondingly diminished (Assi 1998). They are also difficult questions to answer since the evidence is often anecdotal, indirectly causal, subjective, difficult to compare, contradictory and there is no consensus or generally accepted theoretical model. In this regard, Rapoport (1977) suggests three positions. The first is environmental determinism, the view that the physical environment determines human behaviour. This has been the traditional view in planning and design, the belief that changes in the forms of the environment can lead to major changes in behaviour, increased happiness, increased social interaction and so on. As a reaction, a second view of environmental possibilities suggests that the physical environment has no major effects on people but that it is the social, economic and similar environments which are of major importance. At most, to use a geographical analogy, one could accept that physical environments provide possibilities and constraints within which choices are made based on other, mainly cultural criteria. The third position is probabilism - the view that physical environments do, in fact, provide possibilities for choice but that they also constrain choice to the extent that some choices become much more probable than others in given physical settings. People, then, act according to their reading of the environmental cues, and the code or 'language' must be understood (*ibid.*).

Rapoport (1977) suggests that the design of the environment can be seen partly as a process of encoding information so that users can easily decode it. If the code is not shared nor understood, or is inappropriate, the designed environment does not communicate; its 'language' is 'foreign'. An important aspect of culture-specific environments, those that are culturally supportive, is thus in the organisation of meaning. Rapoport (1977) argues that the importance of socio-cultural variables and hence the need for culturally supportive environments makes designing with culture in mind a desirable, if exceedingly difficult, long-range goal. Activities, particularly if they include latent symbolic aspects, can provide a useful starting point and lead fairly easily to life-style, defined as the outcome of a series of choices about how to allocate temporal, material, and symbolic resources on the basis of culturally defined priorities (*ibid.*).

Design is also the result of a similar choice process, so those particular environments have qualities seen as desirable or undesirable, supportive or inhibiting. They are supportive to the



extent that the systems of settings, their cues of meanings and the rules about who is included or excluded, are congruent with the activity systems, all these judgements being subjective and culturally variable. Different organisations of space, time, meaning, and communication are needed to support rather than inhibit the given life-style (Rapoport, 1977). Therefore, the individual and the environment form a system and their mutual interaction is partly determined by the physical environment and other people or, more correctly, the individual perception and interpretation of them and their significance.

### **1.1.3 Environmental Perception, Cognition and Meaning**

Environmental perception involves the ever-present stimuli of contextual information as well as stored stimuli emerging from the interaction between each physical stimulus and the perceiver's current and stable ambitions, fears, values, and various other real and imagined elements. An understanding of this is central to the main objective of the thesis which is about exploring people's relationship with the built environment through cultural images. The study of meaning enables the author to identify and examine many parameters involved in people's evaluation. Thus, the notion of meaning is seen as a vehicle to deal with the issues related to the case study of Al-Madinah and the way its people attribute significance to their urban environment.

As is widely recognised in research on environmental perception and cognition, the environment must somehow be represented within the individual's perception, thinking and memory (Appleyard, 1970; Downs, 1970; Harrison et al., 1972; Lynch, 1960 and others). The problem of the way environment is represented is the problem of revealing a perceptual/cognitive structure, defined as patterns of organisation in the individual's representation (Bieri et al., 1966). As noted by Craik (1970, 1972), taking perceptual/cognitive structures into account is indispensable if we are ever to achieve the predictive power over behaviour in physical and social settings so badly needed by environmental and planning disciplines (Garling, 1976).

In its broadest sense, the term "perceptual/cognitive structure"<sup>1</sup> applies to representations of different types of knowledge but, for the present, its use is confined to the classification and coding of the physical environment (Bruner, 1956; Bruner et al., 1957). Nonetheless, some researchers, employing the semantic differential technique developed for the measurement of meaning, have assumed that the individual attends to and represents the environment in terms of dimensions or qualities (e.g., Lowenthal et al., 1972). The author agrees with Garling (1976), Bruner (1956) and Bruner et al. (1957) that the individual categorises the seen world into dimensions or qualities, for example, Mosque under so many categories (see chapter 7).

Jencks (1980) argues that meaning in the environment is inescapable, even for those who would deny or deplore it. Everything that can be seen or thought about takes on a meaning. Man creates objects as an attempt to maintain a significant existence, one that could express beliefs, attitudes and values. Therefore, all objects have specific meanings for people as was emphasised by particular residents of Al-Madinah who, have constantly interpreted their surroundings through spiritual associations<sup>2</sup>.

Osgood (1976) described meaning as the product of signs, which reflect the idiosyncrasies of individual experiences. Benswessi (1987) argues that meaning, like emotion, is a relational or process concept. Accordingly, the message of the sign as a cultural product resides in the use of the common features of the situations in which it is used and the activities it promotes. This significance applies to the interpretation of particular individuals, particular concepts and particular factors. Therefore, what is meaningful to one person or group of people may be meaningless to another.

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<sup>1</sup> The structural analysis of environmental perception and cognition, employed in the data analysis in this thesis has attracted interest in a number of studies (Canter, 1969; Killer, 1972; Garling, 1976; among others), using methods found to be useful in other domains of psychological research (Osgood et al., 1957; Snider et al., 1969). The aim of these studies has been to infer, from samples of adjectival scales, a semantic and/or perceptual/cognitive structure as well as to develop a useful measuring device. In contrast, the present study will be devoted to tests of structural hypotheses through the application of more recently developed methods such as multidimensional scaling.

<sup>2</sup> I.e., the Mosque of the Prophet who built it by his own holy hands as well as the important features it contained which are linked to the Prophet and his Companions such as the dwellings of the Prophet's wives, his holy grave and the houses of his Companions which were incorporated in the Mosque at different expansion stages. We should also not forget the historic role played by the Mosque in the spread of Islam as it was the seat of government and the centre of all civilian and military services. For the inhabitants, this meaning is manifested in the fact that the Prophet's Mosque is the city of Al-Madinah itself and vice versa (see chapter 7 and chapter 8).

Within the built environment, some authors consider meaning as an idea or thought that mediates between people and significant objects (Csiszentmihalyi et al., 1981 and Rapoport, 1982). In this sense, these objects are considered as communicative elements within certain societies. It appears that people react to environments in terms of the meanings that the environment has for them. One might then claim, as Rapoport (1977) did, that environmental evaluation is more an overall affective response generated by images and ideals than a detailed analysis of specific aspects; a latent rather than a manifest function.

#### **1.1.4 Environmental Quality**

The assessment of 'environmental quality' involves considerations wider and even less easy to define than those which serve to specify environments which are habitable on purely physical and physiological grounds. Psychological and aesthetic factors are relevant and these are associated with a wide spectrum of individual responses and preferences (Gloyne, 1973).

To have considered the quality even of the urban environment as a general theoretical stance, would not adequately be practicable within the space available. Discussion has therefore been restricted following Gloyne (1973) to aspects of three major themes: 1) the effects of urbanisation on the physical character of the urban environment and on the well-being of its inhabitants; 2) the perceptions and preferences of these inhabitants; and 3) the problems of achieving environmental quality.

The first theme is described by Coppock (1973) who argues that the measurement of the changing physical character of the urban environment is probably the easiest task in assessing its quality. As both the atmosphere and the hydrological cycle are substantially affected by towns and cities, the former by the shape and arrangement of buildings and by the discharge of gases, liquid and solid pollutants, the latter by the replacement of a permeable cover of vegetated soil by impermeable surfaces, the ecology of both physical and mental health and their relationship to human living conditions are receiving increasing attention. So, too, are various aspects of social pathology which may also be related, such as the incidence of alcoholism, crime and vandalism (ibid.). Discussion on this theme illuminates some of the problems which must be solved in creating an environment which will provide its inhabitants

with clean air and water, quiet and adequate spaces, and which will help to reduce the likelihood of mental, physical and social ill-health.

The second theme, the perceptions and preferences of the inhabitants of the urban environment, draws mainly on the social sciences, especially psychology and sociology. It could be said that the current concern with environmental quality is largely confined to those from middle-class backgrounds. This bias is not surprising, for such people tend to be more articulate on any subject. It may also be that, since only a small proportion of time is spent outside the home or workplace, most people are concerned primarily with the quality of the internal environments of their homes and it is only when these are satisfactory that significant attention is paid to the external environment. Nevertheless, there is abundant evidence that, even within a single country, neither perceptions of environmental quality nor environmental preferences are uniform, though the chains of causation are complex (Coppock, 1973). These perceptions of environmental quality will still need to be recognised by the architect or planner who envisages new urban forms or proposes others which have never been attempted. Policy makers will also need to decide how far the urban environment should accommodate the cultural needs of its inhabitants, as well as being thought of as being desirable by those who live there now.

The third theme attempts to define long-term goals, as it is fundamental for achieving environmental quality but there are many difficulties in the way. There is thus a need to define optimum as well as minimum standards and to base both firmly on reliable research. It also becomes necessary to recognise that long-term objectives evolve in response to rising standards of living and with technological progress. Rapid technological change has made of the standard of living a fast - moving target. Buildings and long scale projects designed to suit the evanescent needs of one day may soon find themselves empty and abandoned another day: the changing scenarios of information alters a society's habits and economies faster than its physical habitat. To see beyond the immediate and predict long-term need is becoming problematic. It is probable that present concepts of urban life will be made quite inappropriate by the digital revolution, which may make the journey to work unnecessary for large numbers of people, and by the growth of leisure, which may give pride of place to the journey to play.

Through the study of meaning, the author can identify the inhabitants' attitudes towards the city of Al-Madinah which has been chosen as a case study. One of the most difficult tasks in architectural design is to identify the various needs of people or clients, as many of these are subjective and mostly expressed unconsciously through 'unstated' preferences and desires. These deep needs can also be suppressed due to the contradictory influences and commercial information bombarding people throughout everyday life. Architects may be unaware of their own shortcomings in dealing with such complex subconscious and cultural issues. As a result, many of them seek refuge in adopting the variety of options offered by the architectural styles in the form of schools of design largely 'verified' by rhetorical conceptualisation.

#### **1.1.4.1 Environmental Problems**

The whole concept of environmental quality and the implicit 'meaning' of built forms is clearly a decisive aspect in people's preference for certain urban areas. Burgess (1978) says that, in Britain, places that are considered to be industrial, hence smoky, unhealthy and dirty, are disliked; places with a rural character, quiet and healthy, are preferred. Therefore, trees are highly valued not least because they indicate high-quality areas and evoke rural and symbolic associations.

As the problems of chemical pollution move towards some form of solution, other aspects of environmental pollution achieve prominence. Attention is now being turned belatedly to the loss of visual amenity and the demand has arisen for some method of quantifying visual intrusion comparable with the methods which already exist for the specification of tolerable noise limits (Hopkinson, 1973).

In a recent series of broadcast talks it was commented that, as a result of our concern for the preservation and the improvement of the environment, we would be forced to measure things which we had never measured before. Such things as amenity, aesthetic content and intrusion are usually related in some way to economic factors. More expensive buildings are at times perceived to be more pleasing, if only because they are able to display more costly materials and methods of construction. There is no inherent law of nature which decrees that this should be so, but hard experience demonstrates that it usually is (Hopkinson 1973).



For a solution to emerging environmental problems, Sewell (1973) suggests at least three major changes in the present approach to environmental quality management. Firstly, it will necessitate the adoption of a holistic rather than a fragmented view of the problem. Likewise, the overall effects of the adoption of any solution on the environment and on man will need to be taken into account in policy decisions. Secondly, it will be necessary to involve the public more directly in the planning process. It already seems clear that the public feels distant from this process, for the conventional means of public consultation, which invites reactions to proposals only once they have been comprehensively set out by figures of authority, do not really reflect public will. If the schemes usually reflect the values of planners then it is likely that neither option reflects values held outside the design profession. Thirdly, and as a corollary of the first two requirements, there is a need for changes in administrative structures, laws and policies to ensure that a broader view is taken, enabling the various aspects of environmental quality problems to be considered in an integrated fashion and ensuring that the public enjoys a satisfactory sense of participation (*ibid.*).

When all the required information is collected and assessed, it is difficult to escape the conclusion that the precise measure of environmental quality will always be impossible to define, since individuals have a fairly informed conception of environmental quality. Yet there is sufficient evidence that, for the most part, accepted notions of environmental quality, in not recognising and appreciating people's perception, which are generators of environmental quality, are inadequate.

#### **1.1.4.2 Perception of the Professionals**

An important theme, referred to in Coppock (1973), is that of the perceptions of the professionals themselves - whether research workers, planners, technical experts or administrators. There is no comprehensive shared picture among these professions of what the environment is nor of what constitutes good quality in the environment, and this is a matter for particular concern as it is these people who take decisions or act on behalf of others. It is difficult to see how this can be avoided but its worst consequences can be prevented by recognising its existence and ensuring that technical skill alone is not mistaken for good judgment. Five groups of participants in decisions relating to environmental quality have been identified by Sewell (1973):



1. policy-makers (the ultimate decision-makers);
2. government agencies (technical advisors and administrators);
3. interest groups (such as manufacturers' associations, trade unions, or conservation societies);
4. political parties; and
5. unaffiliated individuals.

The policy-makers are influenced in various ways by the other four groups, either because they require technical advice or because they are subjected to political pressure. The different groups are also affected by each other in their respective attempts to gain influence.

The author believes that one consequence of the increasing reliance of society upon professionals has been the alienation of the public in the policy-making process. This has led to adverse reactions on several fronts, in part because the public feels it has a *right* to be consulted, and in part because the professionals have often seriously misjudged what the public wants or how it would react to what is provided in their built environment.

### **1.1.5 The Built Environment**

The concept of the built environment comprises many factors which may independently effect various aspects of physical health. Many of these factors interact. In some cases they may have a cumulative effect, so that the relative responsibility of different factors is difficult to disentangle. Even if this were possible, the exercise might prove futile when it is the total improvement of the built environment and not that of one or another particular aspect that should be the aim (Crofton, 1973).

The urban environment comprises physical factors such as standards of housing, domestic overcrowding, density of population and atmospheric pollution. These are relatively simple to assess and are discernible by some form of measurement. But 'environment' also includes the services available such as educational, recreational and health facilities. The effect of these on the inhabitants depends partly on their ability to make use of them and this in turn is conditioned by the cultural and educational background. These factors may impose a lag between achieving physical improvements in the environment and its meaning to the

inhabitants (Crofton 1973).

The notion of the meaning of urban environment is an essential aspect of self awareness. Throughout history, the meaning of the environment has been of extreme significance in man's response to satisfy human needs. Mankind creates objects as an attempt to stress his significant existence through which he could express his beliefs, attitudes and values (Jencks, 1980).

Much of what has been written about the environment in recent years has understandably stressed what is wrong. Some critics have gone so far as to allege that these problems are the result of a market-lead agenda in which those responsible for environmental planning are deeply implicated. There are undoubtedly weaknesses in their understanding of the problems they face and in the machinery for making decisions, but constraints of cost and of existing investment in the urban fabric cannot be wished away. It would be more productive to adopt a positive approach, recognising the great improvements that have been made in the internal environment of buildings since the Second World War and considering how an external urban environment to match real needs can be achieved. As with the problem of derelict land, the technology that creates many of the most pressing environmental problems is also capable of contributing to their solution.

One of the great difficulties frequently encountered in the design of the built environment is the lack of comprehensive knowledge. It seems that architecture tends to concentrate its attention on individual buildings, while a substantial amount of planning effort has been turned away from three-dimensional planning and towards strategic issues, zoning and management. The result is that there are now few people who are both able and willing to give their undivided attention to a great number of minor projects which individually are of little consequence, but coactively create environmental chaos. Into this category fall accommodation, works for roads, the treatment of space outside buildings, the design and installation of street furniture and the design of boundary walls.

## Concluding Remarks

The environment, therefore, cannot be seen as being culturally neutral. In its physical presence it is shaped by man as man is shaped by it and this to a greater extent in the built, urban context.

This thesis, furthermore, is concerned with the quality and meaning of the physical environment. This can only emerge from within the thoughts and reactions of the perceiver and is provoked by the individual's subjective values and expectations as well as by the physical setting. When the perceiver is overlooked, environmental quality and meaning cannot be discovered; when the perceiver cannot participate in the design of his or her environment, the outcome offers only meanings that are alien to the perceiver.

The objective of the discussion of environmental quality in this chapter is to enlarge an understanding of the complexity of the factors involved and of the progress that has been made towards evaluating them. What must be appreciated are the interconnections; a piece-meal approach often provides a partial solution and heads towards another problem. Only through a more holistic understanding can such knowledge address the problems of particular environments. The intention was therefore to provide a solution-seeking attitude rather than a set of distinct solutions.

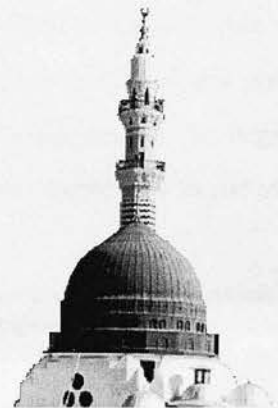
In order to establish a better understanding of the notion of meaning, it is necessary to investigate and grasp its essential aspects. This investigation will serve as a source towards the construction of theoretical guidelines that will help to develop a coherent view of the meaning of the built environment. The aim of this theoretical perspective is to formulate more clearly the outlines that emphasise inherent qualities of the built environment in relation to its inhabitants.

Meaning is understood in this thesis through schematic, cognitive, social, behavioural, and symbolic approaches. It is possible to explore meaning through understanding schemata, because schemata and cognitive structure carry meaning, and social interaction and social values all lead to the notion of meaning. In this way the meaning of the built environment is

the umbrella which helps in understanding the people's responses in this research. These issues are further elaborated within the following chapter that attempts to identify and describe people's understandings of their surrounding environment.

# CHAPTER 2

## COGNITIVE STUDIES



*Al-Madinah Al-Munawarah*

### Introduction

The types of study considered in this thesis are broadly synonymous with that area of enquiry conventionally referred to as *environmental perception*. As used by geographers, the term environmental perception usually refers to the product of sensory encoding of information, to learned and relatively stable mental conceptions of environments, which include social and economic as well as physical environments (Pocock et al., 1978). This usage of the term *perception* contrasts with that of psychologists, who more often use the term in relation to the actual sensory process. Learned and stable mental conceptions of environments are referred to as *environmental images*, mental models of environments, which can be thought of as summarising individuals' environmental knowledge, evaluations and preferences and as having implications for their behaviour. Thus, the image may be considered to possess designative, appraisive and prescriptive components<sup>1</sup>.

It is this multi-dimensional nature of the image, as much as a multidisciplinary interest in environmental images, that has given rise to various and not necessarily synonymous terms: *mental model*, *cognitive map*, *mental map*, *spatial schema* and *perceived environment* are but five of the more common examples (Pocock et al., 1978). Given due recognition of its make-up, the author is satisfied with the generic term 'image'. The same source refers to the origin of this term and claims that related ideas can be explicitly traced back to 1913 in the writings of Trowbridge. More generally, the widespread use of concepts such as 'region' and 'resource' encompasses a broader concern with questions of environmental images.

At the outset of the present work, it is appropriate to broaden the scope of enquiry to seek an answer to the question of why, given the long history of closely related ideas within their discipline, should urban designers suddenly take on both a more widespread and a more explicit concern with studies of environmental images in a particular period. To begin to answer this requires a brief and very general review of certain developments in the social

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<sup>1</sup> Images of the environment - like models in general - can be seen as performing a variety of functions. On the one hand, they serve as information storage devices and classify, categorise and thus differentiate between, and assign meaning to, locations. On the other hand, they serve as a means of explaining, and possibly predicting, behaviour (Pocock et al., 1978).



sciences in the twentieth century, particularly developments in psychology, also referred to by Pocock et al. (1978) in their discussion about images of the urban environment.

Cognitive psychology as a science became established in the latter part of the 20th century when our understanding of 'world' and 'space' was advanced by attempts to understand each other's and our own mental space. It now embraces a wide variety of particular fields, including *perception, memory, attention, pattern recognition, problem solving, the psychology of language and cognitive development*. From a psychological point of view, this chapter aims to define the *cognitive structure* (various types of schemata) by discussing its processes and activities.

Cognitive psychology is one of the theoretical models which explain how *transformation* changes things from one form to another. Cognitive structure is seen as observing messages and storing them as schemata. Individuals therefore construct ideas which can be referred to whenever they experience things and this is described below in more detail.

## 2.1 Cognition

Neisser (1976) believes that cognition is the activity of knowing: the acquisition, organisation and the use of knowledge. Arnheim (1970) refers to the traditional image of cognition (intelligence) as being the creation of concepts, knowledge accumulating, making connecting, separating, and inferring to 'higher' cognitive function of the mind. This mirrors the definition cited by Flavell (1985) in some detail. He argues that the traditional image of cognition restricts between the intelligent process and products of the human mind, and this image refers to the higher mental process such as: *knowledge, consciousness, intelligence, thinking, imagining, creating, generating plans and strategies, reasoning, inferring, problem solving, conceptualising, classifying and relating, symbolising* and perhaps *fantasising and dreaming*. However, Shouksmith (1970) describes the traditional image of cognition as *memory, mental imagery, imagination, attention, comprehension, suggestibility, aesthetic appreciation, forces of will, moral sentiments, motor skills and judgement of visual space*.

What one knows and thinks (cognition) interacts in a very substantial and significant way

with what one feels (emotion). If there is no non-arbitrary place to stop once we go beyond a narrow, purely higher-mental-process image of cognition, why go beyond it at all? Flavell (1985) asked this question and his answer was that the processes which go into *thinking*, *perceiving*, *remembering* and so on show complex interactions with one another. Each process is believed to play a vital role in the operation and development of every other process, affecting it and being affected by it. What you know, for example, affects and is affected by how you perceive; how you conceptualise or classify things influences the way you reason about them and vice versa.

On the other hand, Piaget (1977) views human cognition as a specific force of biological adaptation of complex organism to complex environment. The cognitive system he envisaged is an extremely active one. That is, it actively selects and interprets environmental information in the construction of its own knowledge rather than passively copying the information just as it is presented to the senses. While paying attention to the structure of the environment during knowledge seeking, the mind always reconstructs and reinterprets the environment to make it fit in with its own existing mental framework. The mind builds its knowledge structures by taking external data and interpreting it, transferring it, and recognising it. However, Piaget made much of the concept that the mind meets the environment in an extremely active, self-directed way.

Piaget's modeling describes how a cognitive system can interact with its environment and, by means of many such interactions, undergoes developmental change. According to this model, the cognitive system plays a generative role in its cognitive interchanges with numerous experiences in its milieu, rather than simply making a mental record of what is experienced. Each cognitive encounter with the world always has two aspects: assimilation and accommodation. Assimilation essentially means interpreting or constructing external data in terms of the individual's existing cognitive system. What is encountered is cognitively transformed to fit what the system knows and how it thinks.

The key elements of cognition are *cognitive maps* and *perceptual schemata*, which essentially constitute both the framework for, and the content of, our memory, operating on cognitive and perceptual levels, though on a large scale accepting information and guiding exploration. Culture, including social actions, informs us about ourselves as well as about the world with

which we are engaged. It creates cognitive structures that have many other uses (Neisser, 1976). In other words, fundamental cultural knowledge by which people interpret and evaluate the world, is embedded in the individual cognitive structure of people. **Culture has an important role in terms of building the cognitive structure.**

### 2.1.1 Cognition and Culture

The interaction between culture and cognition is very deep and complex. Both are strongly linked with the environment. Human cognition is partly created by the socio-cultural context and in turn it partly creates it. To connect that with the experience, Traindis (1972) argues that people living in different cultures experience the environment differently, which means that culture affects the cognitive process and, at the end, it becomes a part of it. Therefore the built environment - which is entirely generated by human knowledge and intellect - will be shaped accordingly. In other words, the socio-cultural factor is involved in the cognitive process and activities such as evaluation, selection, categorisation and judgement. Its formal characteristics explain how different societies in different places and times interpret and respond to their environments. People's cognitive images and experiences of their surroundings are heavily influenced by the values of their particular cultures.

People's experiences, understandings and memories of events are shaped by their expectations, which are obtained through a series of experiments. The most commonly used construct to account for complex organisation of expectations, is the schema. Thus a schema is a structured cluster of concepts; usually it involves generic knowledge and may be used to represent events, sequences of events, precepts, situations, relations and even objects (Eysenck 1984).

Jencks (1969) also thinks that the way people perceive the world depends on the concepts that they already have (schemata). These are not based on intrinsic information, rather they are the result of a gradual process of gathering information, gaining experience and through cultural symbols. Because people are not passive receptors of outside stimuli, they perceive things according to a former expectation mostly found over time, the schemata determine perception. One could say that 'believing is seeing'. Therefore, the initial necessity before an individual gets involved with the built environment is first to understand it. Schematic

knowledge about the environment is the main knowledge resource for everyone. Schematic knowledge itself is the consequence of long term experimental interrelation between the individual and the environment and includes information about expectations, values, norms, and so on. Grynberg (1991) links reference to the subject's knowledge systems, semantic networks, systems of categorisation, habit, etc., which are different for every individual and culture.

The concept of 'schemata' is related to one of the significant theories about the human mind identifying the people-environment interconnection. Eysenck, referring to Kant's philosophy, proposed that schemata were the innate structures for organising our perception of the world (Eysenck, 1984). Shore Bradd (1996) showed that the schemata vary with culture and things are remembered not in order of presentation but how they are assembled into schemata. In other words, schemata help to make the world a more predictable place than it would otherwise be (Assi 1998).

Schemata form that portion of the entire perceptual cycle which is internal to the perceiver, modifiable by experience, and somehow specific to what is being perceived incoming information from any of the sensory organs and place it in a relational position with stored information; thus it is categorised, recognised, evaluated and even understood. Schemata accept direct movements and exploratory activities that make more information available, by which it is further modified (Neisser, 1976). The user constructs cognitive schemata that have a predictive value because schemata are induced or abstracted from many specific experiences. In this regard, Rapoport (1977) argues that the transmission of any idea in human terms requires a shared cognitive and schematic basis.

That a shared schemata basis is a significant factor to communication highlights that culture is the main resource for human schemata. This explains the relative sameness of actions and reactions among a group of people who live under the umbrella of the same culture and how it is that, in a cultural context, entire systems of behaviour made up of hundreds of thousands of nuances can be effortlessly passed from one generation to the next. The relationship between culture and schemata is tied into the whole cultural structure. So, although the precise details inside a culture's structure may differ from one person to the other or can be forgotten in one way or another, the overall knowledge prevalent in that it forms the entire



social, mental and physical context (Neisser, 1976). For example the total meaning of a sentence or a story survives far longer than the particular words that initially established and expressed it. The structured knowledge that identifies fundamental interactions between people and their environment, their relationship with nature, ideology, and the society, for instance, cannot be changed as quickly as their ideas about, say, clothes fashions or computer technology, because it is the basis of people-environment unity.

Culture, therefore, is manifested both in people's minds and their surroundings. According to George Kelly's theory about the structure of the mind (1955), as well as to the theory of perception, cognition and schemata, individuals actively interpret the external world based on prestructured images and knowledge. Although it can be claimed that some of this knowledge is shared among almost all people all over the world as stereotype images, each person's perception is, for the most part, affected by local culture and its verbal symbols, producing differentiation and bonds of similarity between people in various societies and environments.

Equally, it is conceivable to say that the external environment in different ways is already culturised in that it holds and manifests cultural verbal and nonverbal symbols. When children learn, they are learning to perceive and recognise their particular environment through meanings and symbols. Children necessarily deal with a culturally affected environment, therefore, in developing their mental structures. This indicates that schemata are strongly influenced by the local culture and its related environment.

### **2.1.1.1 Schemata and Images**

Schemata and Images embody different definitions and meanings referring either to the actual process of representation or to the end product of this process. Some thinkers and psychologists deal with schemata and images as forming one indivisible entity, others view them as different and separate. Boulding (1956) referred to an image as what a person believes to be true according to that person's knowledge of the world. This notion is clearly expressed where he argues that a person does not understand reality directly, but instead receives selective messages from the environment. The character of the messages is determined by the transmitting mechanism and the person's receiving mechanism.

Neisser (1976) pointed out that the term 'schema' has been used with a variety of meanings. It has been used to refer to a person's intelligence for which literature in this field is replete with a series of different definitions. The term has been used to mean the perceptual input and the process of a person's intellectual development.

Moreover, schema has been referred, on one hand, to man's visual perception; and to an individual's sense modalities on the other. Vernon (1969) cited that a schema need not be purely visual but must include auditory, smell, tactile, and taste images. Hence, it can be realised that people may utilise any imagery from their sense modalities to remember and recognise, which can be known as recalling the schema. Neisser (1976) defined the schema as a "...portion of the entire perceptual cycle which is internal to the perceiver, modifiable by experience, and somehow specific to what is being perceived" (p.54). Once again Neisser, in his discussion of schemata and images, argues that internally embedded images are derivations of perception although that perceiving is not imagining, suggesting that images are the anticipatory phases of the cognitive activity which man has detached from the cognitive process for certain purposes.

Images prepare us to see any environmental object, ready to expect the information that such an object would offer. In this sense, people may be prepared to look for inappropriate information if a schema unrelated to the intentions embodied in our object has been evoked at the time of recall. In addition, Neisser (1976) argues that schemata are the result of the higher work of the cognitive process and that these are primarily social phenomena which emerge through the practices and institutions of the culture in which the person grows up. Images do not represent such characteristics or situations. Schemata begin with the exploration of the environment, coding of information, and the gradual filling in of details.

The image is the result of cognitive adaption to the potential condition of stimulus overload. That part of a city, for example, which is 'known' is made comprehensible through a process of reduction and simplification. When attention is turned to the content of the derived mental model or image, the most obvious component is the physical structure.

Lynch, in his work *The Image of the City* (1960, pp. 46-90), hypothesised that an individual simplifies physical form by organising it in terms of five elements - *paths, edges, districts,*



*nodes* and *landmarks*. *Paths* are channels along which the observer moves; *edges* are non-path linear elements providing barriers to vision and outlines to areas; *districts* are distinctive areas of the city; *nodes* are strategic foci; *landmarks* are single, prominent elements. Although Lynch recognised that the image was a compound of physical characteristics and meaning, he deliberately chose to concentrate on the role of form, developing them. An individual's knowledge of the city is therefore a function of its imageability.

Legibility or clarity plays an important role in the simplification and organisation of the physical form. Defined as "the ease with which its parts can be recognised and can be organised into a coherent pattern" (Lynch, 1960, pp. 2-3), it is an important quality, particularly in regard to one's initial contact with a scene. It is not to be confused with imageability, which is a quality that implies an indelible imprint, in the formation of which legibility is but one aspect. Clarity alone may denote the simple or obvious and, ultimately, prove monotonous and boring. For continuing interest in physical form, a certain *lack* of clarity may be required. A degree of complexity or ambiguity is thus an important component of imageability (Rapoport et al., 1967).

Although physical attributes are an obvious route through which structures may be known, neither prominence nor architectural detail guarantee imageability and a place in the perceiver's mental model. It is "the attribute of significance which gives meaning to neutral environmental happening" (Ittelson, 1960, p. 34). That is to say that for *space* to become *place*, senses other than the visual, and meanings other than the concrete, may have to be invoked. Thus it is questionable whether the visual or design qualities of buildings or townscape can be enjoyed for their own sake for, except at the preliminary and temporary stage of sensation, visual experience is always accompanied by some level of meaning experience. Although it has been suggested that the perception identification of an object precedes the attribution of meaning (Vernon, 1962), logically it is difficult to separate the processes since identification is only possible in terms having experiential relevance to the individual. Physical or visual form is thus identified or given meaning through some combination of functional, emotive (value or preference involved) and symbolic (ideas represented) significance.

Attributes of physical form are more meaningful when they reinforce usage or activity

patterns. As an example, a mosque's physical appearance should suggest the potential activities that may take place both within the building (praying) and outside the building (social gathering). Congruence between form and activity is particularly important in the early learning stage and in terms of general orientation and comfort. When form does not visually express an activity pattern, then it is the latter which will dominate a person's meaningful knowledge, perhaps even eliminating the attributes of form (Steinitz, 1968). Thus, both complexity and ambiguity may be reduced, and coherent structuring made possible, by identifying with the behavioural significance of the form. For similar reasons, the symbolism of an artefact achieves intended recognition and behaviour only if it is congruent with an individual's cognitive symbolism.

Symbols play a vital role in making the city comprehensible in that, by increasing the number of connections between 'bits' of information, they correspondingly increase both redundancy and predictability. The complexity of sensory information is reduced accordingly (Rapoport, 1969). Whole cities may thus be 'captured' by a summary of particular attributes, analogies or personifications (Pocock et al., 1978).

Whether seen as a whole or in its constituent parts, the city is a symbol of our culture and group cultures, reflecting its values, expectations, hopes and fears. This has been so since the beginning of urban life. The dwelling units of ancient cities, their temples, and over-all forms were all designed with an archetypal symbolism, an expression of religious or cosmological order in contrast to the complexity of nature. Even city walls acted initially as a religious bounding of space before they were used for defensive purposes. The modern city is no less an artefact of symbolism, reflecting in particular the emphasis placed by urban man on material and economic values. Witness the status element in the competitiveness to erect tall - preferably the tallest - buildings in downtown locations, and the prominence given to shop fascias, to house and car ownership and to material possession generally (Pocock et al., 1978).

Image, symbol and sign are often used interchangeably. An image is an imitation, reproduction or a similitude of something. A symbol is something that stands for something else, as a result of an association, a convention or even an accident (Burchard et al., 1966); a symbol is the result of a cognitive process whereby an object acquires a connotation beyond

its instrumental use. An 'object' may be an environment, a social activity, a ritual or a person as well as a material artefact the meaning of which is derived from what an observer imputes to it (Kepes, 1966). A sign in contrast, is a conventional figure or device that stands for something else in a literal rather than an intuitive sense.

The image may also be considered an integral part of the behavioural approach to the understanding, and thus predicting, of human *spatial behaviour*. This is self-evident from the observation that decisions are taken on the basis of what is *believed to* be the best - however this is defined from among *known* alternatives. This is applicable whether the behaviour concerns work, recreation, shopping or choice of residence. Such behavioural links will be discussed where relevant although the emphasis of this work will be on the image.

Image research studies should always be seen in the broader context of citizen participation and dominant patterns of social relationships. Ultimately, therefore, the problem is one of learning and communication. While not operating in a social vacuum devoid of constraints on both ideas and actions, for planners there is nevertheless, the responsibility of making proposals and choices comprehensible to the public, and not mystifying them through technical jargon or over-reliance on statistics and mathematical models. Whether it be a housing project, road plan, new industry or local government reorganisation, "all forms of information about our urban environment should be made understandable" (Wurman, 1971, p. 6). Again, the ideal should be dialogue rather than research strategy, whereby pre-determined alternatives are discussed and selection consensus sought through. Whether the ideal is attainable, given present patterns of social relations, is debatable. The public, in turn, have no less a responsibility in this process of dialogue (Pocock et al., 1978).

From the above discussion, certain characteristics of the image may be summarised. Firstly, it is a partial and simplified representation. Secondly, it is also distorted, being schematic or constructed to psychic or social metrics which do not necessarily reflect the objective environment. Thirdly, the image is idiosyncratic, the environmental stimuli having evoked different responses in each individual. This means that, at one level, there are as many images as there are individuals, with each living in "a personally apprehended milieu" (Lowenthal, 1961, p. 249). On the other hand, the individual's perceptions and attitudes are influenced by the society and place to which he or she belongs. Moreover, the sharing of needs, ideals and

loyalties induces common or group images. This theme runs through *The Image*, Boulding's (1956, p. 64) early work, where the term 'public image' was used and defined as the "basic bond of any society, culture, sub-culture or organisation". The same premise underlies the work of Lynch, who sought 'collective images'. More exactly, the overlap or correspondence between individual perceptions may be considered a measure of the proportion of 'common image' derived from group norms, compared with the proportion of 'unique image', which is idiosyncratic and unpredictable (Harvey, 1973).

There are also knowledges of things embedded in our minds we have never experienced at all, such as mystery, unity, complexity and many cosmological features that we do not understand. For example, our tendency to appreciate uniform shapes, universal colours etc. shows that our schemata contains non-experiential elements.

In the case of Islamic religion, there was no separation between earthly and heavenly life. To live one's life was to worship, and vice versa. Islamic teachings also urge us to envisage the environmental phenomena through schematic inferences and knowledge and thus, when Islam was taught within an environmental example, it was learned by children from its deepest cultural and spiritual roots. This unity is no longer typical. Therefore, the current paradigm of the separation between the religious teachings and the practical sciences is not of the orthodox principles of the religion.

### **2.1.2 Cognition and Environment**

Rapoport (1977) defines the term 'environment' as a series of relationships among elements and people. These relationships are orderly; they have a pattern. The environment therefore has a structure and is not a random assemblage of things. It both reflects and facilitates relations and transactions between people and the physical elements of the world. These relationships in the physical environment are primarily spatial, meaning that objects and people are fundamentally related through separation in and by space.

People's membership of families, groups or institutions affects their roles, the way in which they communicate and their ways of handling social networks, kinship systems, values and many other social group characteristics. These influence the form of the built environment



and are, in turn, affected by it. For instance, the house is both a feature made of physical/environmental materials, and is also largely a socio-cultural fabrication. However, 'physical environment' is a term with several dimensions. It can be subdivided into: 'natural environment' and 'built environment'. It includes the geographical features (topography) and the climatic conditions (temperature, wind, rain, etc.) and the results of people's alterations of environments, cities, communities, farms and houses (Rapoport, 1977).

Although people's preferences for places only recently became a subject for research, and while much remains to be done, a number of people have thought about the images that individuals have of their local environments. Usually these environments are urban areas and interest has focused on the way in which people perceive certain landmarks, routes, boundaries and neighbourhoods. One of the first people to comment upon such things was Charles Trowbridge (1913), who noted that some people in a city always seemed to have a good sense of orientation, while others are usually subject to confusion when emerging from theatres, subways, etc. Some people, he thought, had informal, imaginary maps in their heads centred upon the locations of their homes. They were able to move around the urban landscape as long as they remained on familiar ground but quickly became disoriented in unfamiliar areas. Others appeared to be egocentric, and saw directions in relation to their own position at any given moment. These people seemed to be able to navigate much more surely.

Kevin Lynch (1960) raised the question of environmental perception once again by asking a group of people about their feelings for prominent landmarks in Boston, Jersey City and Los Angeles, and questioning them about major routes and areas they drove in around, he was able to build up a general image of the city that pulled out the basic elements of the urban landscape. Interestingly, Lynch's concern for the information people have about the city of Boston has been translated into practical planning terms in Birmingham (Gould et al., 1974). The same source cites an example and refers to Brian Goodey who, with the help of the *Birmingham Post*, asked people to cooperate in a study investigating their perception of the city centre. He asked readers to send in maps that conveyed the major impressions they had of the area. Accuracy for its own sake was not required and no published maps were to be used by readers in drawing the sketches. What was wanted was a quick, unaided impression to give the basic pieces of information that people had in their heads and which they used in moving around the centre of Birmingham. By combining many hundreds of



responses, the planners were able to build up a weighted mental image that seemed to emphasise a marked preference for things at a human scale. Such a map, and the large number of comments about the area, proved very valuable to planners trying to think through the future appearance of this city (*ibid.*).

A mental image of a particular area may reflect much more than just the knowledge of landmarks and routes. The concept of a neighbourhood is an important mental image, both to the town planner and to geographers who are involved in planning. There is much evidence today, from many of the world's cities, that breaking up a cohesive neighbourhood can have many detrimental social and psychological effects. The question of measuring this social space, which has such an important degree of familiarity for a particular group of people, has been examined in some detail by Terence Lee (1968) in England. He investigated the belief that the town-planning concept of a basic neighbourhood unit was really an appropriate one for modern urban living. What he discovered was that social space and physical space are so closely linked that most people simply do not distinguish between the two. On average, people tend to define their neighbourhoods as areas whose size seems to be quite independent of the density of the people living in it. Neighbourhoods in outer middle-class suburbs and high-density slums are thus perceived as having approximately the same size. In other words, people do not think of their neighbourhoods in terms of figures, as planners often do, but only as amenable and familiar spaces (Gould et al., 1974).

The images that people have of places are not confined simply to local areas within the city. We all have opinions about various parts of the country we live in, and we tend to view the people who live around us in decidedly different ways.

### **2.1.3 Cognition and Perception**

Arnheim (1969) argues that, without information of what is going on in time and space, the brain cannot work. However, if purely sensory reflections of the things and events of the outer world occupied the mind in their raw state, the information would be of little help. The endless spectacle of ever-new particulars might stimulate but would not instruct us. Nothing we can learn about an individual thing is of use unless we find generality in the particular. Evidently then the mind, in order to cope with the world, must fulfill two functions. It must

gather information (perceive) and it must process it (conceive). The two functions appear to be neatly separate in theory but in practice they are not.

Cognition and perception need each other but are different in principle (Arnheim, 1969). By establishing a definition of cognition, including all the modes of knowing (thinking, imagining, reasoning, judging, remembering etc.), Hart et al. (1970) argued that it would also seem to include perception. In comparison, Rapoport (1974) stated some differences between perception and cognition corresponding to those between direct (perception) and indirect perception (cognition). In addition, cognition involves perceiving, sensing, remembering, deciding and other types of psychological processes. Neisser (1976) describes perceiving as a basic cognitive process.

Some commentators also view perception and cognition as opponents, in need of each other but quite different in principle. Cognition consists of intellectual operations performed on perceptual materials. The material becomes non-perceptual from the moment cognition has transformed the raw prospect into a concept. Arnheim (1970) criticised the last point, arguing that the "operation called thinking is not the privilege of the mental process above and beyond perception but an essential ingredient of perception itself" (p.13). For Arnheim, there is no difference between what happens when a person looks at the world directly and when he or she sits with his or her eyes closed and 'thinks'. It is difficult to separate the cognitive and perceptual process in his work.

Neisser (1976) suggests that perception and cognition are both parts of one unified cycle. He sees the cognition and the perceptual processes as being successive and affecting each other, whereas the function of an expected stimulus is to initiate the cycle of perception. The different views on perception and cognition are complimentary, in fact, as Neisser concludes. Hence those who treat perception and cognition as two functions in need of each other are right; those who find them embedded are also right, as are those who suggest that cognition and perception interact. Each of these views focuses on a single aspect of what is normally a continuous and cyclical activity.

Cognition is a broader term, which includes perception. It is associated with the psychological process by which human beings obtain, store, use and operate upon

information. It consists of sensing, perceiving, remembering, deciding and other types of psychological processes and is intimately related to experience. Perception, by comparison, is a more specific term. It is the psychological function that enables the individual to collect sensory stimulation into organised and coherent experiences.

## 2.2 Perception

Frank George (1970) defines perception as "the process of interpreting stimuli in the environment. This involves classification of novel stimuli or novel combinations of stimuli, and the recognition of familiar stimuli or sets of stimuli, where the interpretation of the input is now clearly with the process of recall" (p.38). This definition recognises that any new stimuli cannot be perceived or recognised unless they are compared with what is stored in one's memory and some kind of correlation is made. In other words, "no perception and, as a result, no intelligent behaviour, can occur in any automation which is not able to store information from the past" (Minai 1989, p.121). The same source indicates: "If similar things are done by an organism, as well as artificial intelligence, then the difference would be in the innate input in part of the organic system. As Gestalt psychologists point out, the organism's innate input in a perceptual process is important. But George adds to this that whilst the structural consideration is a relevant factor, the more significant factor is the method of perceiving which must lie in a comparison between the present and the past" (p.121).

Levine et al. (1981) suggest that perception refers to the way in which we interpret information gathered and processed by the senses. In other words, we *sense* the presence of a stimulus, but we *perceive* what it is. This process of interpreting sensory information is complex and involves a considerable variety of processing mechanisms (Eysenck, 1984). At the very least, perception depends upon a basic physical system associated with each sensory modality, together with central brain processes that integrate and interpret the output from these physiological systems. Hence, it is suggested that the quality of perception itself depends on the skill and experience of the perceiver, on what he or she knows in advance (Neisser, 1976).

One could say that perception and preference are no more variable than any other aspect of

human experience and behaviour. As with everything else, there is regularity and there is variability. By identifying some of these regularities, we may suggest some ways in which they might be understood. The perceptual process is itself influenced by all those cultural, experiential, and individual factors that are supposed to underlie interpretation.

**Environmental perception is achieved through the senses (vision, hearing, touch, smell and taste), and some believe that expectation is a sixth sense.** The term "perception" is commonly used in a number of different ways. It can refer to responses of the nervous system to external stimulation (sensation), to primitive awareness or to more complex and higher-level thought processes (cognition). Until recently, psychologists defined perception as an intermediate step in the upward relaying of primitive sensations to higher levels of processing, in accordance with a traditional simple-to-complex hierarchy of sensation/perception/cognition (Bloomer, 1976).

Regarding the relation of perception to sensation, the psychologist Gibson (1969) and others have pointed out that people are not consciously aware of their sensations, the excitation of nervous tissues. For instance, we hear sounds but we do not feel the eardrum vibrate, when we pick up a teacup, we feel the cup but not our fingers. We are not aware of sensations themselves, but rather of the meaningful information that these sensations represent in our consciousness. Hence, although sensations are physiologically predictable, disturbances in how they are perceived can cause the same sensations to be experienced as different in significance or meaning.

As stated earlier, the term perception is a broad one embodying a multitude of definitions and meanings, "whether referring to the actual process of perceiving or to the end product of that process" (Warr et al., 1968, pp. 2-4). The author will discuss the meaning of perception, focusing on its social aspect - rather than to its neurological and physical aspects - concerned with the cognitive structuring of social stimuli for the physical, and associated social, environment as influenced by the perceiver's genetic structure and cultural characteristics.

Perception is, therefore, akin to cognition, awareness and even understanding. Such a definition, incidentally, is consistent with the Latin origin, 'percipere', to comprehend (Goodey, 1971). The image is thus the sum of direct sensory interaction as interpreted

through the observer's value system and accommodated in the existing memory store, where inputs from indirect sources may be of at least equal importance (see also Pocock et al., 1978). Often it may also relate to spaces more extensively than can be apprehended in the narrow, perceptual sense.

The most fundamental point to emerge from the above definition is the interdisciplinary nature of the field. Environmental perception is a term for one of a series of different approaches which are contributing an increasing corpus of knowledge at the boundary zone of disciplines as traditionally conceived. Given the common interest both by professionals in the built environment and psychologists in man-environment relationships, and in view of increasing interdisciplinary team work in which concepts and techniques may be shared, any distinctive physical viewpoint may seem irrelevant. However, the built environment's planner or designer should be involved in the man-environment relationship in order to better understand man's use of, or behaviour in, the environment. The psychologist, on the other hand, studies the field from the point of view of man's psychological processes in order to explain how the environment is known. As a result, there is a different interpretation put upon the concept of the image. **To the designer or planner the image is a filter between man and the environment.** Taking a strong positivist view of knowledge and reality, a person seeks to elicit this image and to compare its isomorphism to the objective or real world, often by means of mapping. To the psychologist, on the other hand, the objective environment is 'unknowable', being a personal construction (Pocock et al., 1978). In the words of Neisser, "we have no direct, immediate access to the world, nor to any of its properties ... Whatever we know about reality has been *mediated*" (Neisser, 1967, p. 3).

Turning to the individual, perceiving is considered to take place in a 'tuned' organism already "to some extent *prepared* for seeing, hearing, smelling, tasting" (Bruner, 1951, pp. 123-4). The process is thus one of categorisation, of developing generalised concepts, built up from a hypothesis - forming and testing attitude to the environment which can be also explained by inductive inference (Islami, 1998). The alternative to this inquisitive attitude is what Popper (1972) has called the 'bucket theory', with the mind an empty receptacle for receiving impressions from the environment.

Perception, however, is more than a mechanical process, passively recording the physical



properties of stimuli through some inborn organising action of the nervous system. From the general nativism-empiricism debate, it is evident that the registered image is as much a concern of the mind as of the brain: of things experienced and learnt as of things given. Perception is thus an active process of interaction between the receiver and the environment in which differences in physical, functional or emotional significance of the latter lead to highly personal responses. A deliberate, culturally induced choice or selection from the total stimuli is made. Two cultural or interpretive components are postulated at the perceiving stage, distinguished according to whether the selection relates to enduring or momentary conditions (Pocock et al., 1978).

Places, then, are seen through acquired cultural filters of standards, expectations, and so on, an approach equivalent to 'believing is seeing' rather than the reverse, 'seeing is believing', mentioned above. Such an attitude, indeed, underlies the whole deductive approach of scientific method, with the scientist engaged on a path of specific discovery rather than of general exploration. In this sense, therefore, a patchwork of inner city neighbourhoods, concentric town structure or a hexagonal distribution of a settlement, for example, are not so much 'there to be seen', rather require a particular perspective on the part of the researcher.

### **2.2.1 Perception and the Built Environment**

Man perceives the world around him through all his senses simultaneously. All human beings share common perceptions, a common world, by virtue of possessing similar organs, but the ways in which they perceive and evaluate objects are different. No two persons see the same reality. No two social groups have the same views of the physical environment, these being deeply influenced by many considerations such as motivation, human age, gender and life-style, where culture conditions environmental perception and values. In this section the study will investigate some of the cultural factors, placing emphasis on how people with different experience and different social and cultural values perceive the world and the built environment.

For instance, perception is affected by traditions, customs, education, life-style and by 'culture', which refers to all the previous aspects. From early infancy, Man starts learning about the world. An infant develops its body coordination by moving about, touching things,

discovering the reality of objects around him and the structuring of space (Tuan, 1974). This learning from environment implies that culture plays a major role in shaping people's lives and, in this connection, can influence perception to the degree that people may 'see' or 'believe in' things that are non-existent.

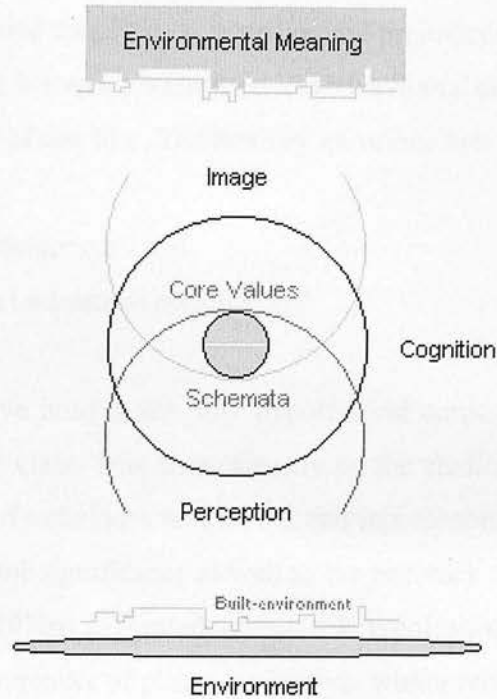


Figure 2.1. The Process of Cognition

Source: The author

Williams (1954) has summarised five different categories of perception based on various ways in which the city can be observed - *panorama*, *skyline*, *vista*, *urban fabric*, *open space* and *experience in motion*. Any deep or balanced appreciation, however, is an accumulation of a variety of contexts knitted together in a sequential experience. Thiel's (1962, p. 33) suggestion that architecture may be considered as 'frozen music', like a phonograph record, with man "the pickup whose movement realises the experience", is but one analogy to the city being a work of art. Others liken it to a poem or to a language to be read (Pocock et al., 1978). The unifying element is that appreciation is dependent on time and movement with the consequent accumulation of experience.

## 2.3 Cognitive Mapping

Following a subjective approach, a further development was the interest in spatial imagery and cognitive mapping. Boulding's (1956) concept of 'image' was the picture of the world carried around in the mind of the 'actor' which became the reference point for his behaviour. The form which the image takes is moulded by external conditions of socialisation, experience and context and also by internal factors such as values and prejudices. For many urban researchers, image formed the link between phenomenal and behavioural environments but there is no consensus on the nature of this link. The two key questions are:

1. does an image underlie human behaviour? and
2. can we use known behaviour to understand preferences?

Jackson et al. (1984) say that cognitive images are only hypothetical constructs whose relation to actual behaviour is far from clear. This bears directly on the studies of mental maps and images of the city. A variety of techniques to tease out and represent mental maps now exists but doubts are expressed on the significance as well as the accuracy of cognitive mapping in the literature. Downs, R. (1970a) suggested a three-fold typology of cognitive studies: structural, which measures awareness of place; evaluative, which recognises the qualities of place; and preference which expresses levels of desirability.

There is one thing we must recognise when we start thinking about man-environment relationships. Human behaviour is affected only by that portion of the environment that is actually perceived. We cannot absorb and retain the virtually infinite amount of information that impinges upon us daily. Rather, we devise perceptual filters that screen out most information in a highly selective fashion. Our memories, far from holding every sensory impression from our environment, select and retain only small portions. Our views of the world, and about people and places in it, are formed from a highly filtered set of impressions and our images are strongly affected by the information we receive through our filters. This is why filter control is so crucial, both on an individual and social basis and further on a larger governmental scale. For example, good education should help to open up a child's filter on the world so that his or her opinions and impressions are not based upon a highly selected

and biased set of information that can lead to unfounded prejudices such as nationalism, racism, a snobbery and 'cognitive dissonance' (Gould et al., 1974).

Many behavioural studies in urbanism have focused on notions of urban imagery and cognitive mapping and refer to the earlier writings of Boulding (1956), who argued that human behaviour depends upon images or the pictures of the world which we carry in our heads. Boyle et al. (1979) are critical of this over-reliance on Boulding and the tendency to conceive the image as synonymous with subjective knowledge, although the possibilities of identifying cognitive maps which depict an individual's subjective (filtered) view of environment rather than total reality has a great deal of appeal to researchers.

The argument suggests that mental maps have little place in routine activities which dominate normal patterns of urban living. Yet special activities, such as a visit to a new shopping centre or the search for a new home, prompt particular responses which may include consulting maps or some formal information-seeking. Subjective images of the city which are generally held may be influential but are not likely to be relied upon in a detailed way.

The task of identifying cognitive maps has raised a number of measurement problems. Measurement can be based upon verbal responses. However, researchers have aimed at 'graphic' responses and people's ability to draw images of a city. Lynch (1960) demonstrated the potential for sketch maps which gave some insight into the subjectified forms of Boston. He provided systematic ways of approaching the measurement of urban images and his typology of *paths*, *landmarks*, *nodes*, *edges*, and *districts* has been widely adopted.

More generally, attempts to identify images of the city have been numerous applied, such as in Francescato et al. (1973) through investigating both the images of Milan and Rome and found them both to be highly legible but in different ways. The Milanese emphasised work, activity, dynamism, active recreation and sport; the Romans saw their city in terms of its art, culture and history and most frequently mentioned its monuments, buildings, and museums.

## Concluding Remarks

The theoretical background concerning 'meaning' has been addressed here at different levels. This introduced the mechanism of experiencing the built environment, which occurs through perception and cognition. It also discussed perception and cognition as discrete mechanisms of experiencing and interpreting the built environment. The human cognitive structure selects and interprets environmental information in the construction of its own knowledge that is embedded deeply in the psychological structure. The concept of schemata was introduced within cognitive psychology to explain some controversies in the field of accepting, restoring and processing information. To understand the cognitive system will enable one to see how people structure the world conceptually, as people construct systems for handling the world that are based on past experience, knowledge and expectations.

In this study, cognition appears to be not just the activity of knowing but also of attributing meaning to the environment and interacting with its different elements. Man's schemata accept new inputs but these have to be made to 'fit in' with his existing cognitive structure which is to a large extent affected by his socio-cultural context. However, man does inherit a system of innate knowledge which explains how to interact with everyday life and with the natural world. Cognition is, therefore, the ultimate mechanism which links us to our environment where the latter becomes embedded with values and meanings.

Our mental images of other places and other people are also slowly changing as we must accept the reality of a closely connected world. Distant, isolated and protected communities from former times have lost their effectivity. The permeability of geographic space is increasing, not simply for the diffusion and movement of goods and people, but for flows of communication and information. As we tamper with delicate and little-understood physical systems, we create environmental stresses that directly affect human behaviour and mental health. Today we know that parts of our cities present peaks of psychic stress in our perceptions that describe images of geographic space. This research cannot solely address the various cognitive processes without the use of theoretical tools in order to address a multitude of dimensions that would connect aspects that configure the nature of a city. The following chapter attempts to link between various parts of the city structure and the perceived images



of a city. Therefore various concepts that help study the interrelated dimensions are explored by introducing holistic concepts that deal with phenomena as an interconnected structure that changes and transforms over time.

# CHAPTER 3

## CITY IMAGE



### Introduction

This chapter addresses the transformation of the role of people's image of a city as a force behind its development and change. It starts with a general background on theories of change and the media through which transformation can happen. It therefore aims to complete the discussion of the theoretical grounding for the hypothesis of this thesis 'the role of people's image in sustaining the identity and conserving the symbolic and historical features of the City of Al-Madinah'. The abstract model on which we rely to explain how transformations change things is based on: the study of cognitive structure; the idea of transformation within the school of structuralism; and theories of motivation, all providing the substantial theoretical support required by the following sections.

### 3.1 Theories of Change, Evolution and Transformation

The Oxford Dictionary (1995) defines *change* as the act or instance of making or becoming different, *evolution* as a gradual development or the process by which species develop and *transformation* as the act or an instance of transforming, the state of being transformed. That can be applied to almost every phenomenon, for instance, in mathematics a change from one geometrical figure, expression, or function to another of the same value or magnitude; in linguistics a process, with reference to particular rules, by which one grammatical pattern of sentence structure can be converted into another. Relating this to our subject, the built environment is a system of transformation of its physical elements including socio-cultural aspects. There are numerous theories of development and transformation, but for the sake of the study, the theories of *motivation* and *cognitive development*, with an emphasis on the theory of structuralism, will be discussed in this section.

#### 3.1.1 Motivation

Motivation as a psychological and behavioural study is an enormous field. Many researches and books have been written about this subject, each defining it from a particular point of view. Therefore, this section will review some of these definitions. Motivation is understood

to be the purposeful search for conditions that determine the activities of any organism (Young, 1961, in Cofer et al. 1964). Maier, in the same book links motivation to expressing certain behaviours the consequences of which are understood to meet certain requirements. However, Murphy (1947) sees the congruence of the actions of an organism to its inherent internal structure as defining motivation. Against all these concise definitions, Maslow (1954) cautions that, while motivation is a universal factor throughout organismic biologies, it itself is constantly fluctuating and complex.

Certainly, each person appears to have a uniquely different set of motivational needs; there are no simple dominant motives common to all. Everyone is unique, just as each culture is unique (McClelland, 1985). Maslow was one of the most interesting pioneers who wrote about this subject. His theory of motivation assumes a hierarchy of basic needs and further assumes that for higher needs to function there must be a prior satisfaction of the lower needs. At the base of his proposed hierarchy are *physiological needs* like hunger or thirst. These needs are the most potent ones and, if unsatisfied, can dominate the individual. Next in line are *safety needs*, which also may dominate behaviour. These are clearly seen in children's reactions to strangers, sudden noises, the threat of being dropped etc. Usually, adults are not dominated by safety needs, especially in well-ordered societies except in times of unusual stress associated with war, disease or crime (Maslow, 1954). *Belongingness and love needs* arise when the physiological and safety needs are relatively quiescent. *Esteem needs* follow in the hierarchy. They are the needs of an individual to be held in high esteem in his own eyes as well as those of others. Maslow says that the gratification of these needs brings the feelings of self-confidence, worth, strength, capability, and adequacy. However, these are the needs that fall in the hierarchy beneath *self-actualization* and the highest need of the hierarchy, the *cognitive and aesthetic needs* (ibid.).

Despite of the universality of these needs, the products of the built form differ from place to place. This is not only because places differ in climate and topography but because the users are different in their evaluation of their needs, and these can be to a large extent informed by their cultures, social life, values and appreciation<sup>1</sup>.

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<sup>1</sup> For instance, in the city of Al-Madinah one of the dominant motives is the need for conservation of all the things and events related to the Prophet Muhammad (pbuh) which is precisely explored by them in their responses to the questionnaire (see Part Two: Case Study, Data Analysis and Discussion). However, in the

### 3.1.2 Cognitive Development Theories

As reviewed in the previous chapter, cognitive development is the subject under which psychologists study a wide range of topics such as perceptual development, the changes in functioning of memory during human life, development of thinking and intelligence as described by Piaget, the acquisition of language and knowledge, and many other topics. Generally, theorists in this field can be categorised into two kinds. One group argues that cognitive development merely involves changes in the amount of knowledge available and the efficiency with which that knowledge is used in thinking. According to such theories, the thought process of man differs only quantitatively, i.e., there are no fundamental differences in cognition during development. The second group of theorists claims that there are dramatic qualitative changes in thinking after childhood (Eysenck, 1984). Piaget can appropriately be regarded as the foremost member of the second group.

### 3.1.3 Structuralism

Structuralism provides another fundamental theory of transformation. In architecture and urban planning, structuralism is seen as the most important avant-garde movement since the early 60s (Arnulf. L, 1981). The same source indicates that structuralism emerged as a reaction to the functionalism which was the most significant philosophical movement between 1920 and 1960. However, in the very beginning, structuralism has grown from a working method known to and practised only by the specialist fields of linguistics and anthropology, while its wider applications came later on. It began as an attempt to uncover the internal relationships which give language its form and function, an area explored by linguists. Structuralism has subsequently been applied to anthropological inquiries, in particular to the study of myths which are of the nature of a language, to the structures of the unconscious, as they are discovered in psychoanalytical discourse, to the structures of literary language and of the plastic arts with their language of forms, and finally to the rest of science (ibid.). Ehrmann (1970) suggests that structuralism, before being a philosophy, can be defined as the method of analysis. A structure is a combination and relation of formal

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study by Francescato et al. (1973) as mentioned in Chapter Two, inhabitants of Rome are more concerned for their artistic heritage and those of Milan are more driven by ideas of work and productivity.



elements which reveal their logical coherence within given objects of analysis.

Due to its many forms and uses, structuralism became subject to various interpretations and debate. No single definition applies to it except in very general terms. Many structuralists would describe a structure roughly in the following terms: it is a complete set of relationships, in which the elements can change but in such a way that these remain dependent on the whole and retain its meaning. In this regard, Arnulf (1981) says that the whole is independent of its relationship to its physical elements. The relationships between the elements are more important than the elements themselves. The elements are therefore interchangeable, while the relationships remain.

Structuralism is first and foremost a theory of social sciences but its entry into urban theory had the more pragmatic catalysts of civil disorder and public unease in the late 1960s (Herbert, 1990). In relation to the social sciences, structuralism is a generic term but two meanings in particular are assumed to be significant for Herbert (1990). Firstly, relationships amongst component parts are more significant than the individual parts themselves. Secondly, all human actions are underlain by 'hidden structures' which influence and condition these actions. Explanations, therefore, cannot be found in observed phenomena or spatial outcomes but must be sought in the general structures to which these relate.

The author recognises the notion of hidden structures as being particularly central to structuralism. One source of such hidden structures may lie in the cultural/symbolic traditions; structural symbolists talk of the 'rules of the mind' which govern actions and are embedded in the mores of a society. From an economic base or economic structure develops a super-structure of social and political institutions (legal systems, religions, customs). Finally, the notion of structure comprises a number of key ideas that the author discusses in the following sections.

### **3.1.3.1 Wholeness**

Wholeness is a defining mark of structures since all structuralists - linguists, mathematicians, psychologists or others - are at one in recognising as fundamental the contrast between *structures* and *aggregates*, the former being wholes, the latter composites formed of elements

that are independent of the complexes into which they enter. This distinction does not deny that structures have elements only that the elements of structure are subordinated to laws, and it is in terms of these laws that the structure *qua* whole or system is defined. A whole is not the same as simple juxtaposition of the elements. It is the logical procedures or natural processes by which the whole is formed that are primary, not the result which is a consequence of the structural laws (Piaget, 1971).

Accordingly, in the built environment, particularly in architecture, it is essential to study the history of how elements and features have evolved and how they have become ordered into the overall structure of the physical and social environment. This became clear in the questionnaire done in the historic city of Al-Madinah when people chose some places, buildings or such architectural elements because of their historical, traditional, social and cultural values (see the case study in Part Two).

Through studying environmental qualities (introduced in Chapter One), it was suggested that environmental qualities are holistic in their nature. They combine features and properties reflecting the physical environment which at the same time emphasise the socio-cultural aspects of the inhabitants. Referring to the hypothesis, observed changes in architectural elements can only be understood through people's images, as far as these are the outcome of social transformation, hence the subjective values and the symbolic meanings which emerged from social transformation to become manifest parts of the whole structure. Consequently, in order to achieve a deep and comprehensive understanding of these qualities in the built environment, one should discover and trace all the implications of the different changes, evolutions and transformation process which reveal in these elements their meanings. However, these associated meanings of any structure cannot be limited to its appearance or visual characteristics. They are the output of a transformation process occurring as a result of the historical continuity through socio-cultural media.

### **3.1.3.2 Transformation**

Every known structure - from mathematical groups to kinship systems - are, without exception, systems of transformation. For instance, linguistic and psychological structuralism, since their beginnings, were associated with the dawning of ideas of

transformation (Piaget, 1971). However, the very centrality of the idea of transformation makes the question of origin, that is, of the relation between transformation and formation, inevitable. The elements of such structure must be differentiated from its transformation laws which apply to them because it is the elements which undergo the transformation or change.

The moving elements in a city, and in particular the people and their activities, are as important as the stationary physical parts<sup>2</sup>. We are not simply observers of this spectacle, but are ourselves a part of it, on the stage with the other participants. Most often, our perception of the city is not sustained but rather partial, fragmentary, mixed with other concerns. Nearly every sense is in operation, and the image is the composite of them all (Lynch, 1960).

Accordingly, the elements in the built environment (buildings and spaces) are systems of transformation, underlying socio-cultural aspects and manners. People's myths and legends are good examples of structures in which nature has been transformed by the time into images and cognitive structures. Once again, the architectural components, as parts of the structure, emphasise their contents, meanings and symbolic values (Abdalla, 1998).

Structuralism as a methodology can be considered appropriate for the examination of phenomena in a holistic way. The concept of structuralist transformation helps researchers to study social phenomena not only diachronically but also synchronically.

### 3.1.3.3 Synchronic and Diachronic Approaches

*The Synchronic approach* can be defined as describing a subject, an object or such a phenomenon as it exists at one point in time. *The Diachronic approach*, on the other hand, is concerned with its development (Allen, 1990). A diachronic perspective considers the influence of time as an essential factor in the transformation process of any cultural aspect. However, culture is not a static but an evolving phenomenon and in its changes may introduce relativities into the history of its knowledge development. Lang (1988) argues that

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<sup>2</sup> For instance, when the central area around the Prophet's Holy Mosque was demolished, all the services and markets were relocated to the outskirts of the city. Consequently, those services were dispersed and the inhabitants find it difficult to reach them. This disappearance of the historical dimension and social life shows that they were linked into one image.

cultures all over the world are unique because they have their own historical backgrounds. In each instance, culture is the result of the long term involvement of people with their physical and social environment and it is not possible to find even two societies in the world with completely similar situations in the historical perspective<sup>3</sup> (ibid.).

### 3.1.4 Culture

Culture, from the diachronic perspective, can be described as a system of transformation. For example, the Arab Muslims in their culture transformed water and greenery into values, giving them meanings associated with this life and the hereafter. They associate the tree with 'woman' and the shadow with 'husband', symbolising protection. The Chinese symbolise wind and water into 'feng shui', the mountain into 'dragon' and the valley into 'tiger'. This occurs because culture as a system makes people to transform things into different entities through language, symbols, myth and traditions (Abdalla, 1998). Nevertheless, culture reflects and presents what people believe to be true of the world, their lives and the environment, including people's values or views of good and bad, what is acceptable and unacceptable. A part of this is the cultural is a body of rules, codes and beliefs about how to behave or to do things (Altman et al., 1980). Thus, the term culture is used to imply that cognition, perceptions, feelings and behaviour are shared among a group of people in a consensual way. It shows that there are common methods to perceive the world, explains the environment as phenomena and provides teachings on how to behave (ibid.). Furthermore, culture indicates that these shared values and beliefs are transferable to others, from one generation to the next, albeit with subtle changes. Accordingly, society's values, beliefs and practices involve more than 'mental' and 'behavioural' processes. Culture, however, appears in all objects in the physical environment. Regarding the role of the built environment in "reinforcing socially important values and goals. Buildings have this capacity because, like all inanimate objects, they are *symbols* representing ideas and practices in the social realm" (R. Gutman, 1976, p.43).

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<sup>3</sup> Generally, the terms synchronic and diachronic have been used in disciplines such as linguistics, economics and sociology (see Piaget, 1971), but have been rarely applied to architecture and town planning. However, an interesting exception was attempt made by Hillier and Leaman (1972-73) in their paper *Structure, System, Transformation: Sciences of Organisation and Sciences of the Artificial*.



People consider the reality of the outside world, as well as its symbolic meaning as being highly significant. There are relative symbolic 'realities' which are embedded in people's culture. People, through millennia of interaction with the outside world, have developed a concept that every single phenomenon in the environment, significantly, has to have a symbolic meaning that represents its relative existence in the mind. These symbolic meanings make it possible to cope with our environment, acknowledge its meaning and develop it. Moreover, symbols, which could be seen as a kind of human knowledge, are not unique to every person but are shared by a whole culture. In this sense, the way a person sees and interprets various elements in the environment depends on their symbolic meanings which have already been associated with them through convention. This social co-understanding is one of the most important bases for communicating with other members of the community as well as interacting with the environment itself (Barati et al., 1997)

#### 3.1.4.1 Symbolism

Although symbolism has been adopted as the name of an artistic and poetic movement which involves the use of symbols to denote propositions, to present ideas and indirect suggestions and to express emotions and values, the history of symbolism shows that everything can assume symbolic significance: natural objects (like man, animals, plants and the natural elements), man-made things (like houses, cars, or boats) or even abstract forms (like numbers or geometrical shapes). The whole universe is a potential symbol (Abdalla, 1998). Man, with his symbol-making propensity, unconsciously transforms objects or forms into symbols, expresses them in culture, customs and religion, in the built environment and art, in daily life and in manufactured things. Oliver (1987), in his book *Dwellings: The House Across the World* writes that:

"People may develop a symbol which includes virtually all their experience of the present and embraces their history: myths are symbols of their unknowable past. Through the myths and legends, love, and customs of a society its values may be transmitted, communicated repeated and learned..., the dwelling readily becomes the symbolic model of the greater universe of time and space in which they are seen to exist".



Symbols carry living archetypes according to definite rules, and reveal their essence through form. Symbolic fidelity evokes inner beauty and truth in a way which purely formal creation does not, or if it does, only does so accidentally (Mann, 1993). Therefore, it is appropriate to refer to myth as a structure in which particular forms of nature have been changed over time into mental structures which symbolise the initial forms. Havfland (1990) mentioned that culture consists of all the abstract values, beliefs, and perceptions of the world that lie behind people's behaviour and that their behaviour reflects.

In his model of human motivations, Maslow (1954) argues that people are concentrating on basic survival, the symbolic aesthetics of the environment will not be the priority. The physical environment will still communicate messages and the people concerned may be very aware of this, but they will have less energy, thus, less inclination to act intentionally to alter the environment and consequently its meanings. For people whose main concern is with security, architectural variables, particularly those associated with symbolic barriers representing territorial demarcations become more important. It is in fulfilling people's affective needs and their needs for a sense of belonging and esteem that the symbolism of the built environment is particularly important.

Today, and due to the appreciation of the role of symbolism, interest in architectural symbolism has been renewed, oriented towards promoting symbolic forms. Amin (1994) categorises this role into three approaches: the first approach is explicit in the new language of architecture which is based on the use of artificial architectural elements traditionally used to express individuality rather than communal values. Unfortunately, this is a very superficial use of meaning. The second approach is an attempt to reuse some distinctive architectural elements from the past, which may remind people of their historical continuity. The third approach is mainly based on the conservation of the historical buildings and the cultural symbols as reference points, which could keep people's preferences and maintain their cultural identity and is the closest approach to the concern of this thesis. However, in all cultures, symbols can be seen as words and rules that make unique languages, ensure their history and reflect their values. Therefore, for this language to be understood and meaningful, symbols should be simple in their form, clear in their message and must be recognisable within the people of the culture.

### 3.2 Space and Place

"Space is one of the most direct symbols of Being. It is primordial, all pervading and, in the cosmology of Islam, the 'locus' of the Universal Soul" (Ardalan and Bakhtiar, 1979, p.11). "Shape results from the delimitation of structured space.... Proportion is to space what rhythm is to time" (ibid, p.21).

The term 'space' is frequently and easily used in different contexts. We use it as if the meaning revealed is free from any problems and contradictions, as if we all agree what space means. However most people would be astonished by the multiplicity of its meanings when we refer to our own usage of the term (Madanipour, 1996). *The Oxford English Dictionary* (1995) gives no less than 19 meanings for the term, including a "continuous expanse in which things exist and move" an "amount of this taken by a particular thing or available for particular purpose" and an "interval between points or objects". These meanings reveal some aspects of the term's common understanding as used in daily life. They also show the intricate nature of the concept and the deeply rooted debates about it, which have been going on for a long time.

Abstract arguments concerning the 'relationship' of spaces to each other in architectural discourse (e.g. Moretti, 1974) reflect the seducing visual qualities of physical 'space'. Sometimes, there is an assumption that, by switching attention from the architectural exterior or plan to the 'space' inside a three-dimensional model, the 'meaning' of that space will be accounted for by default. Peterson (1982) writes: "We must make space the generator, not the plan and certainly not the façade. The plan is the generator of order. The façade is the generator of signs. Space is the qualifier of both, the generator of complete meaning and comprehension".

The emergence of the idea of space coincided with the first movement of Modernist architecture, Art Nouveau (Van de Ven, 1993). To the modernists, the concept of space, the relations between interlocking spaces, became accepted as the essence of architecture. Sigfried Giedion (1967) was one of the most influential advocates of modernism and of the concept of space as the essence of architecture. He identified three stages in the conception

of space throughout the history of architecture. In the first stage, as exemplified in ancient Egypt, Sumeria and Greece, architectural space was created by the interplay of volumes, paying less attention to the interior space. In the second stage, which began in the middle of the Roman period, architectural space was synonymous with the hollowed-out space of the interior. The third stage started at the beginning of the twentieth century with the abolition of the single-view of perspective, which brought about an optical revolution. The profound consequences of this development on our perception of the architectural and urban space were the appreciation of the 'space-emanating qualities of free-standing buildings', and finding an affinity with the first, ancient stage of space conception (Giedion, 1967, pp. 1v-lvi).

The concept of space has been questioned since the 1970s by post-modernists, who have shown a renewed interest in corporeal mass and its meanings (Van de Ven, 1993). This reflects the long-lasting dilemma between mass and void, between empirical and conceptual, between real and abstract. It is a dilemma between physical space, which can be understood immediately by the senses, and mental space, which needs to be interpreted intellectually. Despite these, the concept of space as the essence of architecture remains powerful and the question of the relationship between container and contained, between mass and space, an open one.

Colquhoun (1989, p. 223) defines the term urban space in two senses: *social space* and *built space*. Social spaces are "the spatial implications of social institutions" and are studied by sociologists and geographers. This is a viewpoint that tends to see the physical characteristic of the built environment as 'epiphenomenal'. Built space, on the other hand, focuses on physical space, "its morphology, the way it affects our perceptions, the way it is used, and the meanings it can elicit", which is the concern of architects. "This view", Colquhoun maintains, "is subject to two approaches - that which sees forms as independent of functions, and that which sees functions as determining forms". It is in this interconnection of function and form that the latter perspective tends to approach that of the geographer and sociologist. Unlike them, however, "the architect is always finally interested in the forms, however these may be thought to be generated" (ibid, p. 224).

Another manifestation of the debate between absolute and relational space is mentioned by

Madanipour (1996) to be the one between *mental* and *real space* concepts (see Bernard Tschumi, 1990). In this debate, real space, as understood through the senses, is differentiated from human beings' intellectual interpretations of the world, which create a mental construct and the relationship of concepts to experience are the main paradox of architecture. In order to state the nature of space, architecture becomes dematerialised, a theoretical approach or concern to understanding and transforming space, in which the modernist avant-garde felt free to act (Madanipour, 1996).

Against this theoretical approach, there is a sensory approach to space. From this perspective, our experience of space is 'a sensuous event'. This involves movement, a movement that creates "a kaleidoscope of changing impressions, of transitions between one spatial sensation and another" (Porter et al., 1988, p. 6). Tschumi uses the image of a labyrinth to represent this experience of space from within. From this viewpoint, "space is real, for it seems to affect my senses long before my reason" (Tschumi, 1990, p. 20). This view, that "seeing comes before words", had been known by Surrealists: "The child looks and recognises before it can speak" (Berger, 1972, p. 7). This gap can be traced in another sense in that "It is seeing which establishes our place in the surrounding world". Yet there is an unsettled relationship between what we see and what we know: "Each evening we *see* the sun set. We *know* that the earth is turning away from it. Yet the knowledge, the explanation, never quite fits the sight" (Berger, 1972). This gap between words and seeing, between reason and senses, was vividly portrayed by the Surrealist painter Magritte in his paintings such as *The Key of Dreams* (Madanipour, 1996, p.14).

Sack (1980) argued, within a geographical domain, that discussions about the duality between ideal and real space should be broadened to contain the differences in our understanding of space. Our meanings of space are different because our perception and description of the spatial relationships among things are different in different situations. In his survey of the concepts of space, he regards both the absolute and relational aspects of space as its objective meanings, distinctive from subjective approaches to space. His broadened outlook includes the aesthetic, the child's view, the practical, the mythical-magical, and the societal views of space. To explore the interrelationship of these conceptions, he relies on two sets of distinctions to build up a general framework: distinction between objective and subjective and between substance and space. He then identifies two



broad patterns: one in which these distinctions occur (sophisticated-fragmented) and one in which they are absent (unsophisticated-fused), signifying their differences in their different use of symbols.

The term 'place', as opposed to space, implies a strong emotional tie, not temporary but longer lasting, between a person and a particular physical location. Sime (1986) refers to the 'place' ascribed to a physical location, which elicits a positive, satisfactory experience. Creating places, according to him refers to 'places' which the architect and /or potential users of the 'space' actually like.

The concept of place can be traced back to the ancient philosophical writings of Aristotle. Place or 'topos', in his view, was the 'where' dimension in people's relationship to the physical environment, conjuring up a feeling of 'belonging' i.e., the ties between the place and its people, woven to get them as an integral constituent of the place equilibrium (phenomenon). The Romans, centuries later, used the term 'Genius loci', the 'spirit of a place', a 'genius spirit' of a physical location. Recent years have seen a revival of the concept of place in many disciplines. The concept of place should encourage architectural theorists and environmental psychologists to not only consider the semiotic meaning of the external façade of buildings, but also as the meaning of the spaces behind the walls. Venturi's (1966) definition of complexity and contradiction in architecture depends on the tensions caused when the interior forces, such as use, architectural language and resource meet the exterior force of space.

While space is seen as an open, abstract expanse, place is part of space that is occupied by a person or a thing and is endowed with meaning and value (Goodall,1987; Mayhew et al.,1992). It is the interaction of people with this immediate environment that gives it characteristics distinct from those of the surrounding areas (Clark,1985). Place is a locus of 'felt value', linked with security and stability, where biological needs are met. This is in contrast to the openness and freedom of the undifferentiated space. If space is the allowing of movement to occur, place provides a pause. However, despite this contrast between place and space, between security and freedom, the meanings of the two concepts often merge, requiring each other for their definition, as "we are attached to the one and long for the other" (Tuan,1977, pp. 3-6).



The problem of defining space appear to lie in the way we relate to it: the way we understand and therefore transform it. The debates between absolute and relational space, the dilemma between physical and social space, between real and mental space, between space and mass, between function and form, between abstract and differential space, between space and place, between space and time, can all be seen as indicators of a series of open philosophical questions, which were asked also by Madanipour (1996):

- a) how do we understand space and relate to it?
- b) does it exist beyond our cognition or is it conditioned by it?
- c) do we relate to it by our reason or our senses?
- d) is space a collection of things and people, a container for them, or are they embedded in it?
- e) does it represent openness or fixity?
- f) do we understand and transform space individually or socially?
- g) how do we relate space and time?

Responding to these questions, we may find ourselves divided between rationalism and empiricism, between materialism and idealism, between objective and subjective<sup>4</sup> understanding, between reason and emotion, between theory and practice, between uniformity and diversity, and between order and disorder (ibid.). In this sense, space could be seen as an abstract substitute for the world around us, for what we generally mean by our built and natural environments.

### 3.2.1 The Phenomenon of Place

Our everyday life-world consists of 'phenomena'. It is composed of people, animals, flowers,

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<sup>4</sup> As the spatial analysts threatened to transform geography into a geometry of space and to characterise place as an isotropic surface, subjectivists sought to reassert the role of human values in the way in which space is regarded and to study the meanings which underlay a sense of place. Following the above description Herbert (1990, p. 138) refers to Location Theory and claims that it is not to be regarded as a series of equations which weigh cost and distance but as a complex and subtle process of decision-making in which the 'black box' itself - why and how a decision is made - is a central focus for research. Subjectivism has led to a number of important strands of study in urbanism.

trees and forests, stone, earth, wood and water, towns, streets and houses, doors, windows and furniture. And it consists of sun, moon and stars, of drifting clouds, of night and day and changing seasons i.e, the meanings elicited from the environmental components. In addition it comprises more intangible phenomena such as feelings. This is what is 'given', this is the 'content' of our existence. Many other notions, such as atoms, numbers and all kinds of 'data', are abstractions or tools which are constructed to serve other purposes than those of everyday life. Today, it is common to give more importance to the tools than our life-world.

A concrete term for environment is *place*. It is common usage to say that acts and occurrences *take place*. In fact it is meaningless to imagine any happening without reference to a locality. Place is evidently an integral part of existence (Norberg-Schulz, 1984). What, then, do we mean by the word 'place'? The same source identifies it as something more than abstract location. It means a totality made up of concrete things having material substance, shape, texture and colour. Together these things determine an 'environmental character', which is the essence of place. In general a place is given as such a character or 'atmosphere'. A place is therefore a qualitative, 'total' phenomenon, which cannot be reduced to any of its properties, such as spatial relationships, without losing its concrete nature (ibid.).

Various attempts at a description of natural places are offered by current literature on 'landscape', but the usual approach is too limited, being based on 'functional' or perhaps 'visual' considerations. As a first fundamental distinction, Heidegger (1971) introduces the concepts of 'earth' and 'sky'.

Like many fundamental insights, the distinction between earth and sky might seem trivial. It is also important to add Heidegger's (1971, pp. 97-99) definition of 'dwelling': "The way in which you are and I am, the way in which we humans are on the earth, is dwelling...". But 'on the earth' already means 'under the sky'. He also calls what is *between* earth and sky *the world*, and says that "the world is the house where the mortals dwell". In other words, in places where man is capable of dwelling, the world becomes an 'inside'. In Norberg-Schulz's (1984) words, nature forms an extended comprehensive totality, a 'place', which, according to local circumstances, has a particular identity. This identity, or 'spirit', may be described by means of the kind of concrete, 'qualitative' terms Heidegger uses to characterise earth and sky, and has to take this fundamental distinction as its point of departure. There are

subordinate places, as well as natural 'things' such as an individual, identifiable 'tree'. In these things the meaning of the natural environment is 'condensed' (ibid, p.10-11).

Norberg-Schulz (1984) argues that the man-made parts of the environment are first of all 'settlements' of different scales, from houses and farms to villages and towns, and secondly 'paths' which connect these settlements, as well as various elements which transform nature into a 'cultural landscape'. If the settlements are organically related to their environment, it implies that they serve as *foci* where the environmental character is condensed and 'explained'. The buildings bring the earth as the inhabited landscape close to man, and at the same time place the closeness of neighbourly dwelling under the expanse of the sky. The basic property of man-made places is therefore concentration and enclosure. They are 'insides' in a full sense, which means that they 'gather' what is known. To fulfill this function they have openings which relate to the outside.

Our introductory remarks give several indications about the structure of places. Some of these have already been worked out by phenomenologist philosophers and offer a good point of departure for a more complete phenomenology. A first step is taken with the distinction between natural and artificial phenomena or, in concrete terms, between landscape and building. A second step is represented by the categories of earth-sky (horizontal-vertical) and outside-inside.

A final and particularly important step is taken with the concept of 'character'. Character is determined by *how* things are, and gives our investigation a basis in the concrete phenomena of our everyday life-world. Only in this way we may fully grasp the *genius loci*: the 'spirit of place' which the ancients recognized as that 'opposite' man has to come to terms with, to be able to dwell (Norberg-Schulz, 1984).

### 3.2.2 The Character of Space

'Space' can mean many things. In current literature we may distinguish between two uses: space as three-dimensional geometry and space as perceptual field (Norberg-Schulz, 1971). The same source indicates that none of these however are satisfactory, being abstractions from the intuitive three-dimensional totality of everyday experience, which we may call

'concrete space'. The outside-inside relation, which is a primary aspect of concrete space, implies that spaces possess varying degrees of *extension* and *enclosure*. In general any enclosure becomes manifest as a 'figure' in relation to the extended ground of the landscape. In a wider context any enclosure becomes a *centre*, which may function as a 'focus' for its surroundings. From the centre, space extends with a varying degree of continuity (rhythm) in different directions (Norberg-Schulz, 1984, p.11-12). "'Character' is at the same time a more general and a more concrete concept than 'space'" (ibid., p.13).

Character denotes both a general comprehensive atmosphere and the form and substance of the space-defining elements. It is intimately linked with the character of the human 'psyche' (Bollnow, 1956). Different actions demand places with different characters. Norberg-Schulz (1984, p.14) suggests that a dwelling has to be 'protective', an office 'practical', a ball-room 'festive' and a church 'solemn'. When we visit a foreign city, we are usually struck by its particular character, which becomes an important part of the experience. Landscapes also possess character, some of which are of a particular 'natural' kind. Thus we talk about 'barren' and 'fertile', 'smiling' and 'threatening' landscapes (ibid.). In general all places have character, and this is the basic mode in which the world is 'given'.

Character is determined by the material and formal constitution of the place. How a boundary is depends upon its formal articulation, which is related to the way it is 'built'. Places are designated by nouns. This implies that they are considered real 'things that exist'. Conversely, space, as a system of relations, is denoted by prepositions, as things that are 'over' or 'under', 'before' or 'behind'. Character, finally, is denoted by adjectives in a complex totality.

Symbolism, as discussed before, implies that an experienced meaning is 'translated' into another medium. A natural character is, for instance, translated into a building whose properties somehow make the character manifest (Norberg-Schulz, 1963). The purpose of symbolization is to free the meaning from the immediate situation, whereby it becomes a 'cultural object', which may form part of a more complex situation, or be moved to another place. Truly symbolic architecture seeks to make the natural structure more precise and to complement the given situation, by adding what it is 'lacking'. Finally, it is to symbolise man's understanding of nature (including himself).



As a rule places change. This does not necessarily mean, however, that the *genius loci* changes or is lost. How then is this stability compatible with the dynamics of change? First of all, place has the capacity of receiving different contents, within certain limits (*ibid.*). Secondly, it is evident that a place may be 'interpreted' in different ways. To protect and conserve the *genius loci* in fact means to re-concretise its essence as the historical context changes. What were there as possibilities at the outset become 'kept' in works of architecture which are simultaneously 'old and new' (Venturi, 1967).

### 3.2.3 The Spirit of Place

Man is simultaneously located in space and exposed to a certain environmental character. The two psychological functions involved, may be called 'orientation' and 'identification'. To gain an existential foothold, man has to be able to *orientate* himself; he has to know *where* he is but he also has to *identify* himself with the environment.

"The problem of orientation has been given a considerable attention in recent theoretical literature on planning and architecture. Again we may refer to the work of Kevin Lynch, whose concepts of 'node', 'landmark', 'path' 'edge' and 'district' denote the basic spatial structures which are the object of man's orientation. The perceived interrelationship of these elements constitutes an 'environmental image', and Lynch asserts: 'A good environmental image gives its possessor an important sense of emotional security'. Accordingly, all cultures have developed 'systems of orientation', that is, 'spatial structures which facilitate the development of a good environmental image'. 'The world may be organised around a set of focal points, or be broken into named regions, or be linked by remembered routes'" (Norberg-Schulz, 1984, p.19).

Environments that cannot be readily characterised, and therefore do not translate well into adjectives that the individual will recall as being generally 'positive' do not offer orientation or a foothold. These create a disorientation that Lynch (1960) likens to an experience of terror. Such contexts (the author hesitates to refer to them as 'places') do not have imageability. Their concrete phenomena resist structuring in the human mind. In primitive societies even the smallest environmental details are known and meaningful, and they make up complex spatial structures (Rapoport, 1975). It is therefore needed to arrive at a fuller



understanding of the concepts of 'identification' and 'character'.

The *identity* of a person is defined in terms of the schemata developed, because they determine the 'world' which is accessible. We understand that human identity is to a high extent a function of places and things. It is therefore the author's emphasis that not only our environment has a spatial structure which facilitates orientation, but it consists of concrete objects of identification. **Human identity presupposes the identity of place.**

Genius loci, or the spirit of the place, is that quality or characteristic which makes one location of the landscape different from any other, i.e. unique and individual. The concept is somewhat abstract and intangible and tends to be more commonly understood on an emotional and subconscious level. It is, however, a most important attribute in a place and may be fragile and vulnerable when changes take place in or around the particular location. Several people have written about the subject, most notably Norberg-Schulz (1984) in his book "Genius Loci". Place is very important to us and in our lives. Our sense of identity may be bound up with a particular place and we may refer to ourselves by this, for example, 'I am Ĥidjāzī', the western part of Saudi Arabia. The location itself marks the position of the place, but place itself consists of the totality of the natural and man-made things, assembled in a unique way and may well include the **history** and associations attached to the place by the **people** who identify with it. While all places have a **character**, this in itself is not adequate to induce genius loci. **It is the uniqueness which makes it meaningful and with which we can readily associate and is the main hypothesis of this research and the author's main emphasis.**

One of the difficult aspects of genius loci is that we may instantly sense its presence but be unable to identify what has created it. That is why it can be so vulnerable. Often the essence of genius loci can be teased out by an artist or writer who understands it in an emotive, often very personal way. Drawing on the philosophical writings of Heidegger, Norberg-Schulz has espoused a theory of place which emphasises the quality of a person's existential existence or 'being in the world'. He argues that the concept of 'existential space' is of central importance to architecture (Norberg-Schulz, 1971). More recently, he has used the concept of 'place' to define the characteristics of 'existential space' (Norberg Schulz, 1984). He argues that architecture should direct itself to the 'meaning' as well as physical properties of the

environment. The modern movement, according to Norberg-Schulz, has concentrated on the properties of physical flowing space at the expense of more 'enclosed' spaces regarded as an important feature of a place.

In keeping with a 'phenomenology of architecture', Norberg-Schulz (1984) is opposed to an empirical dimension. Phenomenology is conceived as "a return to things as opposed to abstractions and mental constructions". Adopting the Roman concept of 'genius loci', a place is defined by Norberg-Schulz as "space plus character" (how things are). The existential purpose of building is therefore to make a site become a place, that is, to uncover the meaning potentially present in the environment.

Lynch (1960) lists a number of physical features of urban settings which, on the basis of people's sketch maps of cities (projected cognitive maps), he regards as a basis for orientation in space: *node*, *landmark*, *path*, *edge* and *district*. Norberg-Schulz uses the terms *paths*, *places* and *boundaries*. Two psychological functions are considered important in a place: 'orientation' and 'identification'. He writes: "To gain an existential foothold, to identify himself with the environment, that is he has to know how he is in a certain place". While Lynch considers a good environmental image gives its possessor an important sense of emotional security, he does not concern himself with 'meaning' of this image for the individual. In this respect the arguments of Norberg-Schulz are an extension of the early work of Lynch into the realm of existential meaning<sup>5</sup>.

### 3.2.4 Pattern of Place

Christopher Alexander's development of *pattern language* arises from the design disciplines

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<sup>5</sup> In this part of the discussion, the author would like to refer to the explicit and implicit discourse about the natural and man-made places within which there is a brief talk about Romantic Architecture, Cosmic Architecture, Classical Architecture and Complex Architecture in chapter eight. The investigation of the thesis is that Complex Architecture is the best catalyst to illuminate developments of the City of Al-Madinah. In our case study, the City landmarks belong to the Prophet (pbuh) time and depend on the Islamic Legal System, but transcend their attachment in the natural environment. In the interior of the Prophet Mosque, for example, atmospheric light is translated into a Divine manifestation, and the systematically subdivided structure represents a visualization of the ordered cosmos described by scholastic philosophy. The Mosque therefore unites romantic and cosmic qualities. In the City itself, man-made and natural place are united to form a comprehensive whole, with romantic and cosmic implications as well as a built form of classical derivation in the palace itself.

of architecture and planning. It is an attempt to catalogue a comprehensive set of patterns which, when employed in the design process, will ensure the creation of places with "the quality without a name" (Alexander, 1979, p.33). Each pattern consists of three elements: 1) the definition of particular context; 2) the identification of the system of forces which arises in that context; and 3) a solution which is both described verbally and presented in the form of a diagram, "configuration which allows these forces to resolve themselves in the context". The pattern language is intended to be used by non-experts just as much or more as by architects; and writers such as Sime (1995) suggest the patterns are "more prescriptive than descriptive". Nevertheless, Sime argues that the pattern language concept serves as "an extremely articulate and evocative expression of the dangers in ignoring the relationship people have to places".

The quality imbued in places which have adhered to "the timeless way" of designing and building is "the quality without a name". Alexander uses the analogy of language to delineate the patterns, both physical and experiential, which lead to creation of places. The quality without a name is undoubtedly akin to the spirit of place. The timeless way of building outlines the rationale and theory of a pattern language. Each pattern is more prescriptive than descriptive, introducing what is defined as a problem and the field of physical and social relationships which are required to solve the stated problem.

Alexander considers that a creative part of design exists in choosing the combination of patterns to use in a particular design. Each pattern is a predesignated element of a language in which "you yourself are only the medium for the creative spark not its originator" (Alexander, 1979). Sime (1995) argues that the links between patterns are not articulated in the form of rules of grammar, as they would be in real language. Specifying these rules might be seen by him as an unnecessary restriction on the creative freedom of the designer. Yet for a language to work, it seems insufficient to restrict the theoretical framework to the individual parts.

Alexander's approach was criticised by others. Juhasz (1981), for example, suspects that the first three volumes of his treatise on architectural design were not published chronologically (Vol. 1, 1979; Vol. 2, 1977; and Vol. 3 1975), which suggests that the unearthing of the patterns and formulating the philosophy was, in fact, "more **inductive** and personal in nature

than it being a question of **deduction** from first principles". Broadbent (1973 and 1979) has been particularly critical of the apparently "personal, idiosyncratic, stylistic preferences" shown in some patterns. Seamon (1985) regards a pattern language as an approach which, although requiring more exploration and experiment, offers considerable scope in providing a direction for environment-behaviour research. Whereas Sime holds that the degree to which the patterns are acceptable as a basis for design and research depends on the criteria for validity that are used, Alexander suggests using the criteria of conjectures, environment-behaviour hypotheses, and design premises.

### 3.2.5 Sense of Place

The subject area in which the concept of place has seen the greatest revival, and the most prolific increase in literature, is humanistic geography (e.g., Tuan, 1977; and Buttimer et al., 1980). Criticisms are made by its exponents of the spread of technology, the destruction of natural landscape and the repetitive nature of modern urban design (e.g., Relph, 1976, 1981). The focus of this work tends to be the landscape and the loss of a sense of place. Humanistic geographers emphasise the dangers of geographers preoccupying themselves with the 'objectives' physical environment. This concern has been shared in other areas of human geography which concentrate on the cognitive aspects of people's relationship to the environment through statistical measures. The general starting point in humanistic geography is the phenomenological experience of landscapes. Relph (1973) used the term 'placelessness' to refer to physical locales which no longer have an identifiable 'sense of place' or character which make them individually distinctive.

Saarinen et al. (1982) describe a 'sense of place' as a "unifying concept bringing together a number of separate strands of geographic research in the general environment-behaviour design field". Essentially, the term 'place', by definition, extends the focus of attention beyond geographic space to the experience people have of being in a particular landscape environment. The value of the term 'sense of place' is in highlighting the 'sense of identity' of particular environments. Most of the examples Relph gives of placelessness are North American in flavour. The importance of preserving landscapes, historical sites or public urban settings which contribute to people's self-identity is, however, an important message to planners in other countries as well. Sime (1995) argues: "A place is a whole phenomenon,



consisting of the three intertwined elements of a specific landscape with both built and natural elements, a pattern of social activities that should be adapted to the advantages or virtues of a particular location and set of personal and shared meanings".

One exception is an earlier study by Canter et al. (1975) which examined architectural elements of a room (roof angle, window and furniture layout) in relation to rating of its friendliness (on a semantic scale). In general, semiotic discussions by architectural theorists, and empirical studies of meaning in architecture by environmental psychologists, have concentrated on building exteriors. Moreover, as Groat (1981) points out, architectural semiologists have tended to be interested in the physical elements conveying meaning rather than the meaning conveyed (in semiotic terms, the 'signifier' rather than 'signified' component of a 'sign'). In contrast, the early empirical studies of meaning have focused more on dimensions of meaning rather than the physical properties of design to which they are linked (the 'signified' rather than 'signifier').

### **3.2.6 A Psychology of Place**

Place is a very rich psychological concept, yet one which has been ignored in the psychological literature until recently. In his book entitled "The Psychology of Place" (1977), Canter describes place as a combination of actions, conceptions and the physical environment. This is represented by the point of intersection of three overlapping circles, representing actions, conceptions and physical environment.

Although identifying psychological factors is important in understanding the relationships of people to physical environments, there is limited attention paid to people's actions and almost none to the objective physical environment which architects have to manipulate. Canter (1983) criticises the lack of descriptions of actual physical settings in environmental psychology, yet this is not something that he himself addresses in research. For him, the physical environment is firmly locked in the head of the person experiencing it (Sime, 1995). Nonetheless, Canter's visualisation of 'placedness' as something that emerges when actions, conceptions and physical attributes are inter-related gave form to this concept and has proved helpful in establishing linkages with planning practice. Canter's model also married well with the literature addressing cross-cultural environmental research.



Culture systems may, on the one hand, be considered as products of action, or on the other, as conditioning elements for further action. Canters' discussion of the physical attribute component is given solely in terms of man-made elements. This assumption that meaning is imposed upon the natural landscape through the acts of human designers is such a fundamental part of the practice of planning, architecture and landscape architecture that is usually not noticed.

Canter's 'conceptions', which are similar to Relph's 'meaning' were expanded to include the mythical aspects of human experience to bring into the designer's consciousness the need to attune to the 'essential *core* of the culture'. This is the most problematic aspect of the rotation of theory in practice. It is recognised today that architects and planners often have cultural backgrounds different from that of their clients. If the designer is working with a client who speaks a different language, the need for translation is not questioned. A cultural 'translation' of conceptions and meanings is also necessary.

Relph (1978), in criticising Canter's book, has suggested that environment, buildings and even people could equally well be substituted for his notion of places. That 'place' is about this supposed fusion is not clarified and in fact the term may be used as little more than a synonym for 'environment' throughout his book. What is important about the concept of place espoused by Canter is that he always emphasises the necessity of understanding the perspective of the users. His emphasis is on scientifically measuring the relationship between people and the physical environment approach to 'place'. Unfortunately, any 'sense of place' which is so important to the humanistic geographers is lost in Canter's book. Interestingly, the emotional tie to places does not figure as an essential component. Canter (1983a) has adopted the terms "place rules" and "role-rules". In essence, the suggestion is that there are consistent patterns of action in spaces which are related firstly to particular forms of physical setting and secondly to the particular roles of people in settings.

### **3.2.7 Politics of Place**

In their paper, Proshansky et al. (1983) argue that the role of places and spaces in a person's development has been neglected in psychology. They introduce the concept of 'place-identity' as a physical environmental referent for a more well-known and widely used term: 'self-

identity'. As they suggest: "Humanistic geographers have argued that through personal attachment to geographically locatable places, a person acquires a sense of belonging and purpose which give meaning to his or her life". In this regard, a primary function of 'place', is to gather a sense of belonging and identity. Place attachment is strongest in relation to a person's own home. Individuals may strive to project their self-concept into the design of an environment. Interestingly, Cooper (1974), who adopted the Jungian / Heideggerian notion of the house as a symbol of the self, found a close correspondence between the 'ideal homes' architectural students create in sketches and their previous childhood homes. This shows that there are likely to be physical features of settings, which most people would feel are essential qualities of 'place' and some which are idiosyncratic, being related to an individual's past experience.

Whether or not somewhere is a 'place' for someone is not determined solely by the physical environment. In this respect, a place cannot, and perhaps should not, be created in absolute terms on behalf of other people. It is often important for people to be involved in the production, decoration, furnishing and maintenance of their environment. The 'placelessness' which Relph (1976) identifies probably stems from a sense of alienation in an environment over which they feel they no longer have control. One worrying contemporary example is the subordination of people to technological innovations in large-scale, mass-produced architectural schemes.

Relph (1985) recently suggested that the task of professionals such as architects, planners and social scientists is to develop a sensitivity to the attitudes of places, but the possibilities for place making on behalf of other people solely through the physical features of a design are limited. The professional role which he advocates is one of 'environmental midwife' rather than "the machine-driven arrogance of some landscape equivalent of a genetic engineer".

On a final note, architecture, in concentrating on the physical dimensions of space and form, is in danger of de-emphasising the patterns of behaviour and experience which imbue buildings with meaning. Psychology has historically divorced itself from the physical environment of buildings, which are so much a part of our everyday behaviour and experiences. It has been argued that it is not possible in absolute terms to create a place for users solely by manipulation of the physical environment on 'their' behalf. The building may

be imbued with particular qualities or physically modified by the eventual building users. An individual, in creating a place, is involved by definition in the appropriation and personalisation of a physical space through thought and action. This should not deter architects and environmental psychologists from considering firstly the degree to which the structure of a physical layout can be used flexibly by the eventual building user to create a sense of place, and secondly the features of a design which should help to nurture a feeling of a place rather than space.

### 3.2.8 Place and Placelessness

Regarding the socio-cultural values more than the land-value gradients and morphological factors in his study of place and placelessness, Relph (1976) expressed: "Places are fusions of human and natural orders and are significant centres for our immediate experiences of the world. They are defined less by unique locations, landscapes and communities than by the focusing of experiences and intentions onto particular settings." Similarly, Seamon (1979) argues: "For most aspects of daily living, individuals do not experience the world as an object but are rather fused to the world through a web of feelings." For humanism the key was the meanings of place rather than the geometry of space, 'man' was a central figure rather than an anonymous component of a model or law.

### 3.2.9 Place Today (The Loss of Place)

In general, the symptoms of social breakdown indicate a *loss of place* (Norberg-Schulz, 1984). "Lost is the settlement as a place in nature, lost are the urban foci as places for communal living; lost is the building as a meaningful sub-place where man may simultaneously experience individuality and belonging; lost is the relationship to earth and sky" (ibid, p.190). Contemporary developments - even many that use a 'historicist' architectural language - do not relate to a landscape or a coherent urban whole. The architects', planners' and developers' obligations focus on the other, arguably more artificial budgetse, urgencies of trends and highly mathematicised regulations. They inhabit a 'space' that finds its sense on the scaled model and the site plan but cannot distinguish between the qualities of up and down or the moods the seasons bring to the earth. This 'no where' is found inside the buildings. The windows exist only to allow at least if one window happens to

'frame' a view of appreciable beauty, this is more through hazard than an act of architectural desire the regulation minimum of day lighting into a room. In general, all *qualities* are lost, and we may indeed talk about an holistic 'environmental problem' (ibid.).

When we see architecture from this point of view, we gain an understanding and a direction for our work. This direction is not dictated by politics or science but is existentially rooted in our everyday lifeworld. Its aim is to free us from abstractions and alienation and this returns the author to the theme of environmental quality. Theory is not enough to gain this end. It also presupposes that our senses and our imagination are educated. This was also understood by Giedion who concluded his book *Architecture: you and me: the Diary of a Development*, (1958) with a chapter on "The Demand for Imagination". Today man is mainly educated in pseudo-analytic thinking, and his knowledge consists of so-called 'facts'<sup>6</sup>. His life, however, is becoming ever more meaningless, and ever more he understands that his 'merits' do not count if he is not able to 'dwell poetically'. 'Education through Art' is therefore more needed than ever before, and the work of art which above all ought to serve as the basis for our education, is the *place* which gives us our identity. Only when understanding our place, we may be able to participate creatively and contribute to its history.

### 3.3 City as a System

Not houses finely roofed or the stones of walls well-builed, nay nor canals and dockyards, make the city, but men able to use their opportunity.

(*Aristides Rhodion Oration.*)

What is the city, but the people?

(William Shakespeare, *The Tragedy of Coriolanus*, Act III Sc. 1, line 198.)

The city has different meanings to different people. For example, to the inner-city slum-dweller the city is perceived as a spatially restricted and oppressive force on his existence, its areal extent limited by his lack of information and by his social and geographical immobility. To the ex-urban automobile commuter the city is an expressway system leading to an office or factory, or is a built area that is sampled, often reluctantly, during brief periods

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<sup>6</sup> The same meaning has been adopted to make a model for the Structure of Argument and Research Process of this thesis in Figure 2.



away from the semi-rural retreat. To the geography teacher, on the other hand, the city may be conceived as a living textbook and an environmental classroom. To the public-works engineer it is a system of underground utilities. To the suburban housekeeper it may be an alluring sea of shopping alternatives. These define the city, its structure, and problems in a subjective or perceived manner. But the city may also be viewed in objective terms. **It has physical location, geographical extent, internal differentiation, and environmental character.** This section summarises various definitions or images of the city as a spatial and environmental unit for study purposes (Bourne, 1971).

To define the city and to understand its needs necessitates that we also view the city in social and political context. The introductory essay by Raymond Vernon is a perceptive review and critique of commonly held images of the nature and complexity of urban problems. To what extent do these views reflect the particular nature of our democratic system? What are the critical problems in the form and structure of our cities and in the living environment they provide? What is the origin and support of planning directed at these problems? Why have we been unable to deal with urban problems effectively? (Bourne, 1971).

Bourne (1982) argues that the city is the most spectacular outcome of social, political and economic processes; it is a microcosm we can study. He says that "urban structure is firstly a spatial mirror of society and its historical and organizational principles. That is, it reflects the previous and currently prevailing operating rules - of culture, technology, economy, and social behaviour - of the society within which the city has developed".

A city is a vast collection of memories and expressions of emotion, with its greatest concentration of human meanings at its centre, and a gradual thinning out of emotional value until one reaches the drabness of the fringes. But these are not separate and distinct emotions; rather they build upon and reinforce each other and thus we get that organisation which characterises a great city. This is not merely a biological form of organisation, an organismic model; it is also an organisation of meanings and values (Mason W. Gross, President, Rutgers, lie State University New Jersey at *the National Conference on Urban Life*, Washington D.C. March 28, 1962.) (Mayer, in Bourne, 1971, p. 28). The author believes that the real source of fascination of the city is that it represents the widest and fullest expression of all the types of meaning which man has achieved. The city is what we mean by



civilisation.

Whatever the variety of associations this word conjures up, it has one irreducible core: 'city' is, by any definition, a **social image**. Throughout history, and literary history, it has chiefly represented the idea of community, whatever values might be attached to it in any particular context. For religion, philosophy, and literature from the time of the Greeks and the Old Testament, the image of the city was the image of a community, whether positive or negative. This holds true for the Muslims and the *Qur'ān* where the image of the city is also associated with unity.

From the other perspective, the city is a construction in space of social values in all its complexity. Cities vary in size, form and content parallel to the variety of their social organisations, cultures and traditions, resources, building technology and many other factors. However growth, change, transformation and adaptation are natural processes which are equally applicable to cities as they are to living organisms. The author proposes that the built environment has to be seen in context with the social environments formed by the people and their activities. The objective characteristics of these two facets of environment - built and social - have to be seen through the filters of people's subjective awareness, understanding and appreciation of the space they occupy. Objective conditions such as overcrowding or unattractiveness have meaning only in terms of the cognition of the population involved.

Physical features of the environment achieve significance or imageability through association with a particular activity or function, or, more generally and in a more subtle manner, through the adherence of particular sentiments, memories, attitudes or beliefs. The city, for instance, is clearly more than bricks and mortar, more than a utility for living; it is the visible expression of man's value system - his beliefs, ideals, hopes and fears - the supreme expression of civilisation (Mumford, 1961). "Men may find God in nature, but when they look at cities they are viewing themselves", writes Ylvisaker (1971, p. 7), echoing the poet Cowper of two hundred years earlier. The city was neither built, nor is it experienced, as an exercise in pure form. Physical form mediates a higher form, suggesting or symbolising ideas and properties not necessarily obvious or inherent in the objects themselves. This may be illustrated with reference to both overall form and detailed structure (Pocock et al., 1978).

The city, in the widest sense, as it appears throughout all ages and in all lands - as the symbol and carrier of civilisation - has certain fundamental characteristics. The first and the most important of these is that it is an institutional centre, the seat of the institutions of the society which it represents. It is a seat of religion, of culture and social contact, and of political and administrative organisation. Secondly, it has been a seat of production, agricultural and industrial, the latter being normally the more important. Thirdly, it is a seat of commerce and transport. Fourthly, the city is a pleasurable seat of residence for the rulers, the wealthy and the retired, where they can enjoy all the amenities of civilised life that the institutions of their society have to offer. Fifthly, it is a living place for the people who work in it (Dickinson, 1951).

In the ancient city, commerce, defence and irrigation imperatives have been interpreted as "no more than external parametric conditions" (Wheatley, 1971, p. 477); the form is explicable in cosmo-religious terms, with man attempting to produce a territorial version of the cosmological ideal (Bogdanovic, 1975; Smith, 1974c). Perfection was symbolised in a regular geometrical outline, usually a circle or square. The function of the surrounding wall, antedating any defence role, was to enclose the sacred, habitable space from the profane, inferior, the sub-urban. Within the area delimited as sacred, the main intersecting axes were oriented to the cardinal points East-West (direction of sunrise and sunset, or of birth and death) and North-South (symbolising cold and warmth), thereby producing the 'four quarters', the name still given to city districts, however numerous these eventually become. Such axuality helped to achieve a centripetal tendency, focusing on one quintessentially sacred point, the location for a temple or palace. At this point were the tallest buildings, the vertical symbols of cosmological significance pointing up to heaven - the ziggurat, tower, dome or spire. Here contact with the supernatural was possible; from this point temporal power flowed outwards along the main axes to the four corners of the earth through city gates ostentatiously large to symbolise this authority (Pocock et al., 1978).

The cosmological or religious conception described above was lost in medieval market towns and in the industrial towns of the last century, although an over-all symbolic interpretation is valid for Renaissance cities, for the newly-planned capitals of the past two hundred years from L'Enfant's Washington to Costa's Brazilia, for Howard's idea of Garden Cities and some of the British new towns subsequently built. More often, however, one particular construction

or landmark is the supreme symbol of the present city. Within the city important individual buildings have always been public symbols proclaiming through the classic language of architecture messages of power, order, glory, freedom (Summerson, 1964). The phenomenal absolutism and cultural symbolism inherent in such classic language, however, were debased in the industrial town, where dome and pediment could now signify the gaol or museum or 'anything else', as Dickens (1854) observed of Coketown. Stained glass has now descended to suburban porches, where lawn and garden can also be interpreted as symbolising meadow and field, with pets the substitute for livestock (Tuan, 1974a, p. 237, in Pocock et al., 1978, p. 78).

There is some evidence that people took to the city slowly. The early cities of the Eastern culture were built by villagers as sacred centres for religious or ritual retreat. Eventually, the villager moved into the city with the concentration of agricultural surplus, the extended specialisation of consumption, the assembly of a labour pool and the growing economies of scale and social overhead as the urbanities developed technology. Thereafter, the momentum of urbanisation took over on its own, freed for action by facilitating noneconomic institutions. Today, when the old economies of the city are dwindling in importance in the wealthiest industrial countries, metropolitan growth rushes on. But the urbanites, some of whom remain in village-like pockets in the hearts of the cities, show signs of resuming the village roots in the new suburbia (Dyckman, 1962).

Although the concept of a city itself is five thousand years old, the metropolis is a new phenomenon, dating a mere hundred years. Its scale alone differentiates it from any older urban settlement. One could easily walk from one district to another or from the central to the rural area. In the metropolis this is hardly possible; even in a car it may take hours to move from centre to periphery. Thus, the city has swollen to a vast organism whose scale far transcends individual control (Lynch et al., 1962).

Throughout the metropolis the environment is man-made - even its plants and trees are there by man's agency. Yet the density of its population, in the outer parts at least, is much lower than in the traditional city, so that we observe single dwellings and factories dispersed among gardens, parks, small woods, and open spaces. In the suburb, city and country fuse, and their long rivalry may here find its resolution (Lynch et al., 1962).

Some commentators recognise that leisure in the big cities will increase along with automation and that mobility will be higher as facilities for transportation and communication proliferate. They claim that the metropolis has to grow at the expense of smaller cities. Yet they emphasise the high cost of capital outlay and of maintenance, or such technical constraints as the limitations on open space, the prospect of a water shortage, the difficult question of pollution, the increasing overload on communication and so on. But in general, Lynch et al. (1962) suggest that the metropolis should be regarded as creating fundamental opportunities for higher incomes, a greater variety and a wider choice of modes of living, a way of life that could be more stimulating, more enlightened and more conducive to innovation.

Research such as that discussed in this section does not produce conclusive proof that the built environment, through its content of quality and design features, affects human behaviour in predictable ways. There are far too many other sources of variation at work for such a finding to emerge. Neither, however, does it dismiss the built environment as irrelevant. The built environment has basic functions to perform such as shelter, safety, and access which are sources of satisfaction among its occupants. Built environments can be engineered in such ways as to improve the probabilities of social interaction, safety, or access, but design is no guarantee of such outcomes. Whereas local physical arrangements are relevant to ways in which individuals or groups behave, they are rarely the *main* determinants.

### 3.3.1 The Characteristics of Traditional City

What, then, are the characteristics of the traditional city - the kind of city that was normal yesterday but is obsolete now? If we are to answer this question, we must first define what we mean by the word 'city' itself. What are the common denominators between the cities in which our urban ancestors have lived since long ago and the present-day 'conurbations'?

In their material aspect, we can see that they are human settlements of a particular kind that are distinguished from other kinds by the nature of the man-made environment in which urban populations live. Cities are fixed settlements whose inhabitants are sedentary, but urban settlements are conglomerations of streets and buildings, and it is not possible to



produce, within a city's bounds, all the food - or, indeed, in most cases, any of the food - that its inhabitants require (Toynbee, 1970). This definition of the nature of cities in material terms is correct and is also illuminating, as far as it goes; but it is incomplete. Man is a social animal. Any kind of human settlement therefore has a social aspect as well as a physical one and an urban settlement is no exception to this universal rule.

Every city - or, it might be more accurate to say, every city before the present age of mechanisation - has been, among other things, a sacred place to some degree. The author views religion as an intrinsic and distinctive element in human nature, and it is unquestionable that, until not more than about two hundred years ago, every city had a religious aspect. No city at any time or place before the spread of the Industrial Revolution has ever exclusively been either a commercial, industrial, political, military or religious entity. Cities have differed from each other in being predominantly concerned with one or several of these activities but never exclusively to the exclusion of the other. The mechanised city, which made its first appearance in eighteenth-century Britain, has been peculiar in either lacking the traditional religious facet of a city altogether or retaining it, if at all, only in a vestigial form.

Festinger et al. (1950) pinpoint the significance of uniformity in social group and claim: "where the community is heterogeneous, one would expect the ecological factors to have considerably less weight than they do in communities where there is a high degree of homogeneity and common interests among the residents". The significance of this qualification, often ignored by critics of this type of study, is stressed by Mercer (1975) as an essential footnote to an earlier quotation which is often taken as a clear statement of architectural determinism: "The architect who builds a house or who designs a site plan, who decides where roads will and will not go, and who decides, which directions the houses will face and how close together they will be is also, to a large extent, deciding the pattern of social life among the people who live in these houses".

One way to look at urban society and culture is through the prism of the arts. Novels and short stories - as well as paintings, sculptures, musical compositions, and architectural designs - that are created out of specific urban contexts all reflect, to a greater or lesser degree, the social, political and economic conditions of the urban cultures that gave them



birth.

In his discussion of the emergence of the first urban areas, Lewis Mumford (1961, p.34) speaks of "little communal village cells, undifferentiated and uncomplicated, every part performing equally every function, turned into complex structures, organized on an axiate principle, with differentiated tissues and specialized organisms, and with one part, the central nervous system, thinking for and directing the whole." What is the justification for such a metaphor? We might begin with some specification of basic terms - 'city,' 'social,' and 'organism.' The term 'city,' of course, has many meanings but the most common concepts are legal or political; that is, the city is regarded as a kind of corporate entity possessing certain delegated powers. Thus, Eric E. Lampard quite properly observes that 'city is the name given to certain urban communities in English-speaking countries by virtue of some legal or conventional distinction.'<sup>7</sup> For our purposes, however, such a conception is unduly restrictive (Schnore, in Bourne, 1971, p.32).

The author would like to underscore two points about the city as an organism. First, the parts, the individual human beings making up the city, can be regarded as replaceable and interchangeable. They are very much like cells and, as in a healthy organism, cells may come and go and the organism itself may survive. One might ask if this is radically different from the fact that the city may live on, while people come and go. Secondly the city, once founded, or born, may grow and there are young, middle-aged, and old cities. There are periods of rapid growth, as in 'boom towns.' Cities live and die. There are 'ghost towns' or dead cities (Schnore, in Bourne, 1971).

Nelson (in Bourne, 1971, p.76) recognises five forces for a desire to leave one part of the city and the urge to go to another. One is the *spatial force*, when congestion in the central zone becomes and the empties spaces of the outer zones attract. The second is the *site force*, which involves the disadvantages of the intensively used central zone in contrast to the relatively little used natural landscape of the periphery. Another, the *situational force*, results from the unsatisfactory functional spacing and alignments in the central zone and the promise of more

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<sup>7</sup> Eric E. Lampard, 'The City,' an article prepared for a forthcoming edition of *Encyclopaedia Britannica*.

satisfactory alignments in the periphery. Then there is the *force of social evolution* in response to which high land values, high taxes and inhibitions growing out of the past create a desire to move to a developing periphery which provides opposing conditions. Finally, the *status and organisation of occupance* creates a force for change, in which such things as the obsolete functional forms, the crystallised patterns, the traffic congestion, and the unsatisfactory transportation facilities of the central zone contrast the modern forms, the dynamic patterns, the freedom from congestion and the highly satisfactory transportation facilities of the outer zone (ibid, p.77).

The themes which have been discussed in this section all relate to the 'social dynamic' in urban life and also, in various ways, to the influence of behaviouralism in human geography. One can find examples of both behavioural tendencies with, for example, the spatial learning processes of children, and of more subjective humanistic interpretations of space, place and urban territories. Some of these research strands, such as that concerned with urban neighbourhood, have practical relevance. However, the continuing need for urban structure to develop its applied qualities and relate to public policy can be exemplified by those recent studies which have become concerned with identifying and understanding the problems of the modern city.

Furthermore, the ideas of the city / organism, of Nelson's five forces and of socio - urban territories or quarters evoke the very qualities that the aforementioned writes (Norberg-Schulz, Giedion, Sime, Canter etc.) raised in seeking psychologised space. The influences they recognised as informing man's existential foothold (or similar philosophy of 'being in place') derived from a diachronic awareness of the conditions of landscape, climate, culture, season and so on. In looking at the city, one seems to find these factors replicated but from a more overwhelmingly social cause. Thus the up / down, the earth / sky distinctions required by human anthropological needs are still made available.

### 3.3.2 Urbanism

Urban changes over time and regional differences in the forms and processes of urbanisation are too clearly facts of the real world to be ignored and the whole field of urban system studies is the inheritor of the themes of town and region (Herbert, 1990). While the notion

of urban core or centre is tailor-made for a positivist geography intent on model-building and law-generating, consumer behaviour shows, in contrast a response to a stronger focus on decision-making and behaviour.

Needless to say, the urban environment is vastly different from the rural, for in it is always a concentration of services and varied goods. It is a meeting place and melting pot, both a refuge for people and ideas and also a reservoir of new ideas and venturesome populations. It feeds off the land, but nourishes the land with enlightenment and ingenious artifacts. In our world and time, it has begun virtually to absorb the countryside (Mayer, in Bourne, 1971). The meaning and reality of urban and urban places will vary considerably over both time and space; a town or city is a physical concentration of people and buildings, but it also has economic, social and political qualities which are specific to the cultural context within which it emerges (Herbert, 1990).

### 3.3.3 Modern Perspectives (Positivism, Humanism)

Modern perspectives can be conveniently summarised under the broad headings of *positivism* and *humanism*. Herbert (1990) explains that the positivist method seeks to explain events in the natural world by showing that an understanding of a single event can be deduced from certain general statements or theories which contain at least one universal law. Humanism was in many ways a reaction against positivism and its tendency to ignore human agency. Humanistic researchers looked to different philosophies such as phenomenology, which evokes the subjective description of the life-worlds of human experience. The absolutism of scientific thought is rejected and idealism and mental activity is accorded a primary explanatory role independent of the material order (Jackson et al., 1984). To the positivist, a belief in universal laws seeks what is identical among people and can thus be grouped, categorised, evaluated, repeated and expected. The humanist, like the romanticist, is more concerned with the qualities of individuality, qualities that make each person distinct such that group categorisation along any but the broadest lives, becomes futile. For the humanistic researcher, an essential question concerns an understanding of the processes by which shared meanings within groups developed, the inter-subjectivity which imbued places with special values: "People come together in time and space ... they recognise each other ... out of their daily taken-for-granted impersonal dynamics, these spaces of activities evolve a sense of

place that each person does his small part in creating and sustaining" (Seamon, 1979).

Humanism has many strands but is united by an interest in man's subjective experience. In Lowenthal's (1961) words: "Every image and idea about the world is compounded of personal experience, learning, imagination and memory".

The built environment comprises the morphological framework of streets, buildings, and open spaces which is the setting for urban behaviour. Values are attached to the elements of this framework, social as well as economic. These social values - the meanings attached to space and place - may have special significance. The *built environment* with its buildings, structures, design features and plan, spaces and alignments of streets and paths poses questions. The *urban* environment is more than the *built* environment. People occupying space give it meaning and the idea of a *social* environment within the city is relevant. Herbert (1990) suggested that the *social* environment could be usefully subdivided into *impersonal* and *personal*. Impersonal social environments can be measured by census indicators of demographic structure or social class; *personal* social environments are subjective and rest on values, attitudes and forms of behaviour. How individuals will react to it relates to their individual differences and the diversities of their past experience. Any attempt to postulate simple associations of behaviour with environment is confounded by this diversity among the population.

Oscar Newman (1972, p.9) argued that design principles could be introduced which would help make such environments more livable, and therefore reconstituted as 'defensible space':

- a) territories must be defined and delineated (barriers could identify open spaces as extensions of the living block; amenities for a project should be located within the defined territory);
- b) windows and doors in particular should be so designed that they enable surveillance by residents, who could overlook public spaces and detect strangers; and
- c) quality of built environment should be improved with avoidance of featureless walkways and tiled walls.

Paradoxically, the broad aim of 'defensible space' was to create a local sense of identity, to



increase safety and the quality of life. Mercer (1975) says that it sought to place "greater control within the hands of the community and coincidentally, but just as importantly, allowed the underlying cohesiveness of the community to be articulated."

### 3.4 The Image of the City

At every instant in the urban experience there is more than the eye can see, more than the ear can hear. There always remains at least one more setting or a view to be explored. Nothing is experienced by itself, but always in relation to its surroundings, the sequences of events leading up to it, the memory of past experiences. Every citizen has long associations with some part of the city, and these memories and meanings inform and flavour the city image (Lynch, 1960).

Structuring and identifying the environment is a vital ability among all mobile animals. They make consistent use and organisation of definite sensory cues from the external environment. This organisation, according to (Lynch, 1960), is fundamental to the efficiency and to the very survival of free-moving life.

The observer, as shown in chapter two, plays an active role in perceiving the world, has a creative part in developing his or her **city image** and should have the power to change that image to fit changing needs. An environment which is ordered in precise and final detail may inhibit new patterns of activity. A landscape whose every rock tells a predetermined and inflexible story may make difficult the creation of fresh stories. This is an environment not of symbols but one of signs, of instructions and themes that relate overwhelmingly to the objects and only slightly to the needs of the perceiver. Although this may not seem to be a critical issue in our present urban chaos, the author agrees with Lynch (1960) that it refers to the fact that what we seek is not a final but an **open-ended order**, capable of continuous further development.

Environmental images are the result of a two-way process between the observer and his or her environment. The environment suggests distinctions and relations, and the observer - with great adaptability and in the light of his or her own purposes - selects, organises, and endows



with meaning what he or she sees. The image so developed now limits and emphasises what is seen, while the image itself is being tested against the filtered perceptual input in a constant interacting process. Thus, the image of a given reality may vary significantly between different observers (see chapter two).

The coherence of the image may arise in several ways. Lynch, (1960) discussed that there may be little in the real object that is ordered or remarkable, and yet its mental picture has gained a specific identity and organisational role through familiarity. One person may find an object easily on what seems to anyone else to be a totally disordered work table. Alternatively, an object seen for the first time may be identified and related not because it is individually familiar but because it conforms to a stereotype already constructed by the observer. Again, a new object may seem to have strong structure or identity because of striking physical features which suggest or impose their own pattern. Thus, the sea or a great mountain can rivet the attention of one coming from the flat plains of the interior, even if he or she is so young or so parochial as to have no name for these great phenomena.

Therefore, this study will tend to pass over individual differences, interesting as they might be to a psychologist. The first order of business will be what might be called the 'public images', the common mental pictures carried by large numbers of a city's inhabitants: areas of agreement which might be expected to appear in the interaction of a single physical reality, a common culture, and a basic physiological nature, e.g. the places which have been addressed by the people of the city of Al-Madinah as the outcome of the thesis survey.

An environmental image may be analysed under three components: identity, structure, and meaning. It is useful to abstract these for analysis, if it is remembered that in reality they always appear together. A workable image requires first the identification of an object, which implies its distinction from other things, its recognition as a separable entity. This is called identity, not in the sense of equality with something else but implying individuality or oneness. Second, the image must include the spatial or pattern relation of the object to the observer and to other objects. Finally, this object must have some meaning for the observer, whether practical or emotional. Meaning is also a relation, but quite a different one from a spatial or pattern relation (Lynch, 1960).

If an image is to have value for orientation in the living space, it must have several qualities. It must be sufficient and true in a pragmatic sense to allow the individual to operate within an environment to the extent desired. The map, whether exact or not, must be good enough to get one home. It must be sufficiently clear and well integrated to economise mental effort: the map must be readable. It should be safe, with a surplus of clues so that alternative actions are possible and the risk of failure is not too high. If, for example, a blinking light is the only sign for a critical turn, a simple technical glitch may cause disaster. The image should preferably be open-ended, adaptable to change, allowing the individual to continue to investigate and organise reality: there should be blank spaces where the individual can extend the picture. Finally, it should in some measure be communicable to other individuals. The relative importance of these criteria for a 'good image' will vary with different persons in different situations; one will prize an economical and sufficient system, another an open-ended and communicable one (ibid.).

Since the emphasis of the thesis will be on the physical environment as the independent variable, this study will look for physical qualities which relate to the attributes of identity and structure in the mental image. This leads to the definition of what might be called *imageability*; that quality in a physical object which gives it a high probability of evoking a strong image in any given observer. It is that shape, colour or arrangement which facilitates the making of vividly identified, powerfully structured, highly useful mental images of the environment. "It might also be called *legibility*, or perhaps *visibility* in a heightened sense" (ibid.).

Although the city has been a constant and recurrent theme of literature since the very beginnings of urban civilization, Pike (1981) notes that the **image of the city** has been highly ambiguous and contradictory. 'The word-city,' he writes, " leads a double life, evoking deep-rooted [diachronous dimension] archetypal associations while its surface features [synchronous dimension] reflect changing attitudes and values".

Ever since there has been literature, there have been cities in literature (Pike, 1981). The same source indicates that this phenomenon is not modern and goes back to early epic and mythic thought. Therefore, we cannot imagine *Gilgamesh*, the Bible, the *Iliad*, the *Aeneid* or the *Qur'ān*, without their cities, which contain so much of their energy and radiate so much of

their meaning. Small settlements and villages had, then as now, some direct connection to the land around them, and provided clear and limited social functions. But cities were, from the beginning, something special; as centres of religious and military power, as well as of social life on a large scale, they were things apart.

The modern form of realism in literature began with the idea that the individual could discover the truth through his senses, and this concept led to the rise of fiction as a literary form. Whereas earlier literary forms had been characterized by making conformity to traditional practice the major test of truth, the primary criterion of the modern novel was 'truth to individual experience'. Thus, its plot "had to be acted out by particular people in particular circumstances, rather than, as had been common in the past, by general human types against a background primarily determined by the appropriate literary convention". In this regard, Pike (1981) argues that throughout the nineteenth century the isolation of the individual rather than the cohesion of urban society becomes increasingly the focus of the image of the city.

The city has always been man's single most impressive and visible achievement. It is a human artifact which has become an object in the world of nature. Cities are a plural phenomenon; there are many of them but, though each has its individual history, they all seem to exemplify similar patterns. The most basic of these is the interpenetration of past and present. On the one hand there is the visible city of streets and buildings, frozen forms of energy fixed at different times in the past and around which the busy kinetic energy of the present swirls. On the other hand, there are the subconscious currents arising in the minds of the city's living inhabitants from this combination of past and present. These currents include the city's ties with the realm of the dead through its temples, cemeteries<sup>8</sup> and ceremonies as well as its old buildings, along with its functions as the seat of secular power, embodied in kings, governments, and banks. Frye Northrop (1957), following Kierkegaard's concept of repetition as re-creation, writes that "the culture of the past is not only the memory of mankind, but our own buried life, and study of it leads to a recognition scene, a discovery in which we see, not our past lives, but the cultural form of our present life". The city is, as

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<sup>8</sup> The author would like to refer to the role of al-Baqī' as a unique cemetery in the city of Al-Madinah which still symbolises the divine power of Islam.

Joseph Rykwert (1976) characterises it, a curious artifact "compounded of willed and random elements, imperfectly controlled". It has even been called 'a state of mind'.

However, the image of the city seen historically only partly explains our fascination with it. At a deeper level, the widely historical cities are the same city, a powerful archetype-emblem representing deep-rooted social and psychological constants. For this reason, history and cultural psychology are intimately linked in any study of the literary city. The author also believes that there must be a correlation between the past of the city and the past of the mind. The question may be raised as to why he chose precisely the past of a city to compare with the past of the mind. It is a question which he does not really find the answer for.

There seems to have been echoing Freudian thinking, an association between *Kultur* (culture) as the highest product of the human mind, and the city as the densest - and at the same time the most rarefied - distillation of civilisation. This association is unstated but does not appear to have been entirely subconscious on Freud's part, since he himself wonders in print why he chose a city as a metaphor.

Baudelaire's (1961) use of the term religion is interesting, underlining as it does the integration of the individual into the sharing group in a ceremony of reconciliation. As a poet, the individual must be isolated from the group in order to create but, through his or her imagination and poetry, he or she can join it. This sovereign freedom understandably produces in the poet heightened sensitivity. However, this intemperance is indeed singular. The underlying tone of this passage is not that of the playful equation of opposites. Lefebvre (1971) has perhaps pinpointed this more exactly in a thought about an extreme ambivalence of modern society that expresses itself in two contradictory obsessions: integrating and disintegrating. Lefebvre sees one of these obsessions, the compulsive need to integrate and be integrated, as a response to the other, the disintegration of the idea of community.

This thesis is interested in the response of the human imagination to the phenomenon of 'city'. From the beginning the image of the city served as the nexus of many things, all characterised by strongly ambivalent feelings: presumption (Babel), corruption (Babylon), perversion (Sodom and Gomorrah), power (Rome), destruction (Troy, Carthage), death, the plague (the city of Dis), and revelation (the heavenly Jerusalem) (Pike, 1981). In Christian



thought, the city came to represent both Heaven and Hell. Significantly, the early cities of the epics and the Bible have retained their metaphorical force throughout Western history, as if they stood for certain constants of feeling.

If one of a writer's functions is to give voice to aspects of culture which are fragmentary perceptions, or preconscious or perhaps even subconscious feelings in the mind of the citizen, then the city is one of the most important metaphors at his command. These conflicting resonances of the image are reinforced by a writer's and reader's own experiences of city life, whether real or imagined. What exactly does happen when one experiences a city in real life? The question itself makes us realise the complexity of the problems facing anthropologist, sociologist, writer and critic. The basic problem is how to reduce a cacophony of impressions to some kind of harmony. Kevin Lynch (1960) categorise some aspects of this problem as far as empirical response is concerned. The inhabitants or visitors basically experience the city as a labyrinth, although one with which they may be familiar. They cannot see the whole of a labyrinth at once, except from above, when it becomes a map. Therefore, their impressions of it at street level at any given moment will be fragmentary and limited: rooms, buildings, streets. These impressions are primarily visual, but involve the other senses as well, together with a crowd of memories and associations. The impressions a real city makes on an observer are thus both complex and composite in a purely physical sense, even without taking into account his or her culture's pre-existing attitudes. 'Observer' is a slightly awkward term to use here since it indicates a person who is, with some awareness, looking at the city from a detached viewpoint. 'Observer' applies better to the writer and the narrator than to the citizen. In daily life most urbanites go about in the city concentrating on their immediate business; they swim in the urban ocean without being particularly aware of it.

There is a paradox in this entire situation. The city is, on the one hand, incomprehensible to its inhabitants; as a whole "it is inaccessible to the imagination unless it can be reduced and simplified" but, on the other hand, "any individual citizen, by virtue of his particular choices of alternatives for action and experience, will need a vocabulary to express what he imagines the entire city to be" (Pike, 1981).

Every culture has its own great spirit of place. Every people is polarised in some particular locality, which is home, the homeland. Different places on the face of the earth have different



vital influence, different vibration, different chemical exhalation, different polarity with different stars: call it what you like. But the spirit of place is a great reality (Lawrence, 1924).

Spirit or sense of place is concerned with the relations between place and person, an awareness of the distinctive character of specific localities (Briggs, 1970). The concept, however, is a broad one and incorporates aspects of imageability, toponophilia (see Tuan, 1974a), attachment and the symbolic meaning of places. Two dimensions are recognisable, a physical and a socio-psychological one (Pocock et al., 1978).

The strength of the physical image derives from the distinctive combination of local topography and built form. The ease of recognition and recollection of a pen - picture or symbolic image - is a ready measure of such distinctiveness. The absence of such a quick recall may well indicate a certain placelessness. As Gertrude Stein is said to have remarked of Oakland, California, 'When you get there, there's no there, there' (Chermayeff et al., 1966, p. 50). One of Lynch's (1960, p. 41) responses referred to Los Angeles in similar terms.

Although there are, apparently, times when it is 'better to travel than to arrive', it says little for the end-points, since place is initially distinguished from space by external bounding and internal structuring, such that there is a recognisable 'insiderness' and 'outsiderness'. A sense of place, however, comes from the further attribution of meaning to such physical form, the third stage in place-making which Rapoport (1972) calls 'personalisation'. There is, therefore, a social or psychological interaction, a reciprocal relationship between place and person.

Many writers for whom the image of the city is important have been urban journalists and dedicated *flâneurs*, saunterers through the streets of real cities who have paid careful attention to their impressions. Balzac, Dickens, Poe, Baudelaire, Whitman, Dostoyevsky, and Zola all fit this mould exactly. For there is a gulf between the living experience of a real city and the word-city of a poem or novel. How does one make printed statements, ink on paper, into 'London,' 'New York,' or 'Al-Madinah,' aside from the associations evoked by the names themselves? Even the sociologist and the urban historian, whose primary obligation is fidelity to empirical reality rather than to the imagination, must, as we say, 'reduce' the city to words; for them, as well as for creative writers, the process is one of metaphorisation. The sociologist and historian would ideally like to establish identity between the sign and its

meaning; the writer calls attention to the separation between them.

### 3.4.1 Sacred City

"Man constructs according to an archetype," writes Mircea Eliade. Man's city and temple, as well as the entire region he inhabits, are built on celestial models (Pike, 1981). The act of Creation was a divine act; when man creates, he repeats the divine act, and formalises the connection through ritual. The sacred city or temple is symbolically the centre of the universe, the meeting point of heaven, earth and hell<sup>9</sup>. The sacred rites of the founding of the city were repeated in regular recurrent festivals and in its monuments. The founding of cities was a matter of myth and ritual to which practical concerns were completely subordinated. "The city had to be founded by a **hero**," Rykwert (1976) says, and the "hero-founder had to be buried at the heart of the city; only the tomb of the hero-founder could guarantee that the city lived". The city of Al-Madinah is founded by the Prophet, Muhammad (pbuh), and is a good instance for the application of such definitions.

## Concluding Remarks

This chapter discussed various theoretical approaches that have been applied in order to understand the notion of meaning. One depends on the linguistic model, which is mainly based on semiotics, another relies on the study of symbols, while a third is based on non-verbal communication. These approaches should be considered in any design and planning for the future if one wants to consider cultural interpretation.

The meaning of the built environment is essential to understanding people's interaction with the place they are living in. The notion of meaning has been addressed in this chapter through reviewing a literature that will convey knowledge and understanding of issues related to man-environment interaction in general, and people's interpretation of their own city in particular.

There is, therefore, an interaction with, rather than response to, 'place', in effect a sense of

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<sup>9</sup> In Chapter Four: Islamic Legal System in relation to the Image of Muslim City, the author has mentioned some of these characteristics about the city of Al-Madinah and the city of Makkah.

relatedness. In this respect, people are no different from places. Hence, Tuan's phrase (1974b) of places being 'fields of care', Langer (1953, p. 95), in a discussion of virtual space, had earlier used similar terms when describing place in a non-geographical sense as being a 'created entity', an 'ethnic domain made visible', 'tangible', 'sensible'. Interaction with the associative power of place is of a symbolic nature; to be among the initiates one must be able to read such symbolic language. Time is therefore an important component of sense of place (Pocock et al., 1978).

Throughout the various sections of this chapter, the study attempted to demonstrate the way and the processes of transformation by which things change from one position or form to another. Beside the other theories, more emphasis was put on cognitive studies, essentially because the core of this study deals with the cognitive images, cultures and values, which are socio-cultural and psychological issues. At the same time, the argument did not omit basic human needs, which the built environment had attempted to fulfill in the first place. Those factors, combined in different ways, have led to the creation of the man-made environment and to the various solutions it has altered so as to arrive at a better adaptation.

The chapter also investigated the various theoretical approaches to 'place' developed by different writers, each one stressing one aspect of the built environment. An overview of these approaches will help us to understand the differing aspects in people's interpretation of the city of Al-Madinah. These range from seeing a place as a spirit, which has a characteristic 'genius loci', to seeing the city as a language, where its streets, buildings and features are patterns in this language. To understand the city one has to understand and analyse its spaces, streets and buildings. Others see the city depending on the way people experience and sense its places as a combination of physical elements, social activities and shared meanings. Still others, like Canter, see the city as actions, conceptions and physical attributes that are interrelated. Finally, Proshansky sees the city as a sense of belonging and identity.

The stability and continuity of an enduring environment is also effective therapy against the general rapidity and scale of modern social and environmental changes, the current rate of which has planning and policy implications for sense of place. In short: can one preserve or create a sense of place? Conservation is already designated, and individual buildings scheduled for preservation by architects; areas of natural beauty or interest are preserved on

the advice of ecologists; the obvious omission is a social - psychological input. What constitutes a community? What is the hierarchy of life's social spaces and what is the implication of their spatial correlates for a sense of relatedness?

As nodes of human societies, urban areas are agglomerations of people and material objects. An agglomeration of this kind, and the space it occupies and reshapes, can be seen from a variety of angles. We can see the city as a collection of artefacts: buildings and material possessions. The way this urban space is structured is therefore understood to be a matter of classifying these material objects into meaningful groups and exploring our relationships with them. For example, we can see urban space as a created, as distinct from natural space, and see how it relates to the natural processes within and without it. We can concentrate on it as the built environment, classifying building forms and street patterns according to their ages and styles; a temporal classification of urban space, which gives us a sense of how urban space is structured historically and how its current character is affected by this **historical evolution**. We can classify the urban space of material objects according to the way we use it now. Hence, we adopt a spatial classification, arriving at a land-use organisation of space. There are areas in cities where land uses tend to mix, as in the city centres, and areas where single uses prevail, as in the suburban housing estates. In addition to the patterns of use, we can look at the intensity of use in urban space (Madanipour, 1996). The general picture seems to be a more intense use of space in the city centres, where it overlaps with the mixture of uses, and a diminishing density towards the outskirts of urban core in the suburbs, where single use is the predominant feature. Attached to this familiar urban structure are new agglomerations in the suburbs and exurbs, where land uses which were characteristic of city centres, such as office and retailing, have created new but dispersed landscapes. In this sense we can see urban space as metropolitan space, at a regional scale, and the diversity and complexity which occurs throughout a large urban area (*ibid.*). The relationship between these various areas, as physically exemplified by transport networks, gives us another view to urban structure, where spines and nodes, in the movement patterns, are primary elements in the constitution of urban structure. We can also see how urban space was produced by urban development processes and by the construction industry. In this regard, Madanipour (1996), claims that our understanding of the way urban space is structured will correspond to the patterns of its production, rather than its consumption.



Our emerging metropolitan civilisation at times inspires similar sentiments in the hearts of its would-be planners. But if our cities have been produced by neither human nor divine plan, they are nonetheless a faithful mirror of our culture (Dyckman, 1962). In attempting to establish criteria of judgment for the 'natural' pattern of the contemporary metropolis, we have to resort to a series of pairs of contradictory desiderata:

1. *Provision of access to centre and to periphery.* As Ebenezer Howard put it, people are attracted by two magnets, 'city' and 'country.' They want easy access both to central facilities and to open land (1974, p. 50).
2. *Identification both with a part and with the whole.* People want to identify with and take part in the life of the community in which they live and which they can easily grasp and understand. But there is an equal, if not greater, need for understanding, interest and pride in relation to the metropolis as a whole.
3. *Encouragement for continuity and change.* Identification with any environment becomes impossible if it loses its identity. However, Blumenfeld (1971) notes that change is the very nature of the metropolis, and possibilities for change, and growth must be kept open.

Finally, whatever demands may be derived from these or other criteria, they should be satisfied at a reasonable cost. By ending this chapter, the study completes Section A of Part One, which builds the general theoretical base of the thesis. Section B will review the literature via constructing a discourse based on specific matters and will have an emphasis on Islamic legal system in order to explain the image of Muslim cities. The general discourse of section A becomes a vantage point from which to view the specifics of section B. In combination, these will provide a detailed, holistic lens through which to interpret the findings of the case study in Part Two. This, in turn, will guide the author to propose realistic applications of philosophical ideas and recommendations for further research.



# PART ONE

## LITERATURE REVIEW AND THEORETICAL FRAMEWORK

### SECTION B

#### ISLAMIC BELIEF AND THE BUILT ENVIRONMENT



*Al-Madinah Al-Munawarah*

# CHAPTER 4

## ISLAMIC LEGAL SYSTEM

Islamic Law is a comprehensive system of law that covers all aspects of life, from personal conduct to public administration. It is based on the teachings of the Quran and the Sunnah of the Prophet Muhammad (PBUH). Islamic Law is a dynamic system that evolves over time to meet the needs of the community. It is a system of law that is based on the principles of justice, equity, and fairness. It is a system of law that is based on the principles of the Quran and the Sunnah of the Prophet Muhammad (PBUH). It is a system of law that is based on the principles of the Quran and the Sunnah of the Prophet Muhammad (PBUH).

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## Introduction

In dealing with any built environment and trying to understand how it works, how its present shape has emerged and why, one has to experience it from within. In this respect, certain issues need to be addressed to be able to empathise with the kind of people who live there and their cultural background. Once one starts to know more about the society and the socio-cultural aspects of their built environment, one can begin to formulate answers to their most pressing questions.

All societies in the world have certain guidelines and rules organizing the people's way of life and retaining the continuity of their society. These rules and guidelines - which can be called constitutions and laws - may vary from one society to another, due to certain circumstances and variables, such as cultural and environmental aspects. The main reason for establishing these constitutions and laws is, ideally, for the benefit of the members of the society, whether these constitutions are Divine or Positive laws.

Islamic society, like any other, has its own laws and legal system. This is a Divine Law set by Allah, the creator of the world, in the religion of Islam. Islam for the Muslims is considered to be a **way of life** rather than a religion separated from daily life. In other words, Islam is "The Law" for both religious and secular life. Islam is involved in all aspects of a Muslim's life. This means that Islam is a secular religion as well as a divine one, where general guidelines and teachings were set to suit the Muslim way of life. Everything in life can be evaluated by Islam and its legal system. There is no differentiation between Islam and its legal system. To elaborate this point more, Islam set the general guidelines and the ordinances for society, and the Islamic legal system then clarifies and explains these guidelines.

This chapter will give a general understanding of the Islamic legal system and the way it works within Muslim society. It will also examine the concept of constants and variables within this system. This concept shows the flexibility of the Islamic legal system to accommodate any changes and emerging issues within Muslim society. The concept of

constants and variables had, until recently, a very strong influence on the built environment. It is a rather difficult task to explain these stages of development and it therefore is not the intention of this thesis to elaborate upon this particular topic. However, it will give a brief and general idea of the Islamic Legal System and how it is conceived by Muslims.

There are four reasons for studying the Islamic legal system. First, the integration between religion and secular life in Muslim society makes it essential to start from the basic components of the religious system of Islam in order to understand how Muslim society works. Secondly, from any society there is a strong effect in their belief and ideology on their built environment; it thus becomes important to study Muslim belief in order to evaluate the effect of this on the Muslim built environment. Thirdly, it establishes a foundation and a reference study of the Islamic principles regarding the Muslim society. This study will be used to refer to any comparison between the Muslim belief and other ideologies or beliefs which affect Muslim society in the present time. Fourthly, it sets guidelines and measurements for the case study which investigates the traditional and contemporary Muslim city.

This chapter on the Islamic legal system will be followed by a conceptual application of the Islamic legal system to Muslim society to examine how this system sets the guidelines and the main principles for that society. It is based on certain relationships that govern Muslim society and the Muslim city. This part represents the Islamic concept in relation to the built environment. It also represents the first step towards an understanding of the Muslim city from the Islamic point of view, in other words, the **Islamic perception** in relation to human settlement on this earth. The main purpose of this chapter, therefore, is to provide general perception of the Muslim's belief and the way this can affect the Muslim's built environment. It is also aimed at providing a conceptual background for better understanding the Islamic tradition in order to apply it into a qualitative research set for the city of Al-Madinah, the Case Study.

#### **4.1 The History of The Islamic Legal System**

The basic characteristics of the Islamic legal system are its dual bases in scriptural revelation

and the evolving needs and problems of the widespread and varied geographical and social environments. Allah, the Law-giver, made moral exhortations, delineated permanent values by which to distinguish good from evil and right from wrong; and gave concise legal ordinances in the *Ḳurān* (Husaini, 1980).

Islamic jurisprudence comprises two main parts, *Sharīah* (Revealed Law), and *Fiqh* (Derived Law). The *Ḳurān* (Muslim's Holy Book) and the legally binding *Sunnah* (Traditions of the Prophet Muḥammad, peace be upon him), together provide the subject matter for *Sharīah* the Islamic revealed law. *Fiqh*, the Derived Law, is the human understanding of *Sharīah* (Husaini, 1980).

The Islamic legal system was developed over a long period of time and by famous scholars in Islamic *Sharīah*. These scholars devoted themselves to preserving and developing the Islamic constitution. The Islamic legal system had been well established by Allah through His Prophet Muḥammad (pbuh). Later this legal system passed through different stages of development to accommodate changes and issues relating to Muslim society.

The *Ḳurān* was revealed over a period of about twenty-two years (13 BH-11 AH / 610-632 AD)<sup>1</sup>. During this period decisions were made primarily on the basis of the revealed *Ḳurān*, and partly through 'prophetic clarification of the *Ḳurān*' by the Prophet Muḥammad (pbuh). The latter is called *Sunnah* or Prophetic Traditions. The successors of the Prophet during the 'Rightly Guided Caliphate', or Islamic republican period (11-41 H / 632-661 AD), followed the *Ḳurān* as the primary source of law through their liberal and unscholastic interpretation. They also followed the precedents set in the Prophet's Traditions which they had helped to form, and to which they were a living witness. When the spirit of the *Ḳurān* or *Sunnah*, public interest and changes in time, places, intentions, environment, or social organisation required it, they resorted to new interpretations and innovative applications of the *Ḳurān*. They would also set aside some of the *Sunnah* of the Prophet in matters of details with regard

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<sup>1</sup> The Islamic era is based on the *Hijrah*, the migration of the Prophet of Islam Muḥammad (pbuh) from Makkah to Al-Madinah. This migration took place on 16 July 622 A.D. The Islamic year is lunar, and has 354 days; H stands for Anno Hegira (Hegira being the Latinized form of *Hijrah*), and B.H stands for the era before *Hijrah*.



to Positive Law, a principle which had been approved by the Prophet himself (Mahmassani, 1961). During this period other sources of law, such as *Idjmā'* (consensus), and various nuances of *Idjtihād* (interpretation) were also practised.

It was during the first half of the second century H/eighth century AD that the earliest systematic efforts were made to lay the foundations of a science of Islamic Law. The deliberations of a private 'legislative council' in Iraq, comprising Abu Ḥanifah (d. 150 H/767 AD) and his pupil, provided the material for the establishment of the first widespread school of Islamic law, the Ḥanafī school. During the second half of the second century H/eighth century AD, two students of Abu Ḥanifah, Muḥammad al-Shaibāni and Abu Yusuf Ya'qub al-Ansari, distinguished themselves in transmitting the Ḥanafī school.

Abu Yusuf established the Ḥanafī school of law in the Abbasid Period in his capacity as Chief Justice-cum-Law Minister. This initiated the first move since the Rightly Guided Caliphs to bridge the gap between Islamic legal theory and legal practice (Maudoodi, 1966).

There were two other great jurists contemporary with Abu Ḥanifah: Ja'far al-Ṣādiq (d. 148 H / 765 AD), also in Iraq, who became the eponymous founder of the Imamīah or Ja'fari school of law and whose lectures were attended by Abu Ḥanifah and Mālik ibn Anas (Ameer Ali, 1923); and Mālik ibn Anas (d. 176 H / 795 AD), who became the founder of the Māliki school of law in Al-Madinah, or the School of Tradition or *Ḥādīth* (Sunnah). The Ḥanafī school in Iraq, called the School of Opinion (*rāi*, *Idjtihād*), made greater use of individual expert opinion, and in the beginning tended towards building a logically perfect legal system based on pure reason and scholastic subtleties. The Traditionalist school of *Mālik*, flourishing in the milieu of the Prophet's living Sunnah in Al-Madinah, emphasized the real case and temporal against the above tendency towards abstract thinking in the law. However, in the beginning, the Māliki school tried to eternalise the decisions given in concrete cases in Al-Madinah (Mahmassani, 1961; and Faruki, 1962).

It was al-Shāfi (d. 204 H / 819 AD), who tried to integrate and reconcile the Ḥanafī and Māliki schools, and became the founder of the Shāfi school of law. He was the first to compile the sources of Islamic law. His systematic reasoning and disciplined methodology in explaining the origins of Islamic jurisprudence left their mark in the finished structure of

all the classical Islamic schools of law. Among his pupils were founders of new schools such as Aḥmad ibn Ḥanbal (d. 241 H / 855 AD), the founder of the Ḥanbali school (Khalil, 1994).

However, the greatest exponents of classical Islamic law, Ja'far al-Şādiq, Abu Ḥanifah, Mālik, al-Shāfi, and Ibn Ḥanbal, never intended to found legal schools, much less to make their opinions valid forever and inflexible. These schools took their names posthumously. Most of the important differences between the legal schools did not outlive them. The students of one jurist often migrated to other provinces of the Islamic world-state, studied under jurists of another school, and a cross-fertilisation of ideas took place. Thus al-Shāfi, a pupil of Mālik in Madinah, travelled in Iraq and studied with al-Shaibāni of the Ḥanafī school of opinion (Mahmassani, 1961; and Faruki, 1962).

The history of classical Islamic jurisprudence shows how early Muslim jurists worked to meet the changing needs in each generation, political regime and geographical area through fresh *Idjtihād*, within the constraints of *Sharī'ah* They accepted as legitimate variations on legal decisions based on sociological factors, while reconciling their ideologically diverging views within the purview of the norms and values of the *Sharī'ah* **They employed deductive as well as inductive methods in legal interpretations and decisions, thus ensuring that the emerging culture was ideologically Islamic, rational, idealistic and progressive.** They crystallised the assimilative and creative spirit of Islam in terms of principles of legal methodology (Husaini, 1980).

## 4.2 Sharī'ah (Revealed Law)

*Sharī'ah* can be defined in two ways in literal and religious terms. In the Arabic language, *Sharī'ah* means the source of water, suggesting purity in both content and appearance (Abdul Hamid, 1984) whereas, in religious terms, *Sharī'ah* is defined as all the revealed laws of Islam, legislated by Allah in the holy Book of the Qurān and by Prophet Muḥammad's (pbuh) traditions, the Sunnah. These Sharī'ah laws relate to beliefs, behaviours or actions required of persons, regarding worship and other behavioural matters or *mu'āmalāt* (ibid.).

*Sharī'ah* is unchangeable and is always in a constant state, since the Qurān was revealed to

Prophet Muḥammad (pbuh) more than fourteen centuries ago. It contains all the constant laws and guidelines for society to follow and apply. These are laws stated very clearly in both the Qurān and Sunnah and they have met the needs of all Islamic people throughout the centuries. This is because *Sharīah* is revealed by Allah, the Creator of the universe, who knows all the aspects of His creation. This does not mean that *Sharīah* is a rigid law and cannot cope with the changes and variables which happen in any society from time to time and from generation to generation. There is room in the Islamic legal system for these variables, under "*Fiqh*" or derived law (Khalil, 1994).

The *Sharīah* ordinances cover only general principles, or provide detailed legislation on issues which, being rooted in the basic elements of human nature, are independent of sociological and technological factors. The attribute of infallibility which applies only to Allah provides flexibility and multiplicity in the human understanding of *Sharīah* ordinances (Husaini, 1980).

### 4.3 Qurān (The Holy Book)

This is the scriptural revelation of the will or laws of Allah and is the primary source of Islamic jurisprudence. The authority of the Qurān is unconditionally binding and is irrevocable for all Muslims. However, according to the methodology for comprehending the Qurān and the nature of its subject matter, which deals with value judgments and broad principles, its commands are applicable to innumerable human and social conditions with precision and flexibility.

### 4.4 Sunnah (Prophetic Tradition)

Sunnah literally means a way, method or trodden path. It can be defined as comprising what the Prophet Muḥammad (peace be upon him) said, did and agreed to or tacitly tolerated from among the pre-Qurānic customs and practices of the people. Most of all, it is the "**model pattern of behaviour**". It demonstrates how the Prophet's thoughts and deeds were grounded in the eternal variety of the Qurān as well as the realities of social and natural environment in which He lived. The authority of Sunnah springs from explicit declarations in the Qurān

(Husaini, 1980).

## 4.5 Fiqh (Islamic Derived Law)

*Fiqh* can be defined as the understanding or the knowledge of something. Technically (religious definition), it is the comprehension of all legislation revealed by Allah to the people, whether related to beliefs, behaviour or religious practice (Abdul Hamid, 1984). It includes all the branches of law. Some jurists call it the science of Islamic law.

**The rulings of Islamic derived law, *Fiqh*, are the outcome of various deductive and inductive methods of reasoning.** *Fiqh* rulings are dependent on the **social, material, and intellectual** environments of each age; they also comprise the temporal legislation. Thus, *Shar'ah* is the plain, self-evident, unequivocal ordinances of Qur'ān and Sunnah, whereas, *Fiqh* is the human understanding of *Shar'ah* (Husaini, 1980). This human understanding is bounded by certain methodology and a unique process of extracting the specific meanings and issues from the *Shar'ah*. This process is not absolute or unrestricted in so far as anyone can interpret *Shar'ah* according to people's desires and own understanding of the Qur'ān and Sunnah. It is very precise and defined by scholars throughout the history of the Islamic legal system (Khalil, 1994). This process is also bounded by the main sources of Islamic *Fiqh* (jurisprudence).

### 4.5.1 Fiqh Sources

The basic method of understanding *Shar'ah* is *Idjtihād*. *Idjtihād* literally means striving hard. In a technical sense *Idjtihād* means to exert with a view to form an independent judgment on a legal question. It has been described variously as 'systematic original thinking'; 'individual reasoning'; 'private expert opinion'; 'interpretation'; 'disciplined striving' (to understand the meaning of the Qur'ān and Sunnah for a given situation); and more forcefully as '**the principle of movement in the structure of Islam**' (Husaini, 1980, p. 26). The various sources of jurisprudence are different technical forms or expressions of this basic idea of *Idjtihād*. These sources can be divided into two major groups, authentic and inferred. Both are discussed in detail in the following parts.

#### 4.5.1.1 Authentic

There are four authentic sources of *Fiqh*. The first two are *Qurān* and *Sunnah* which are non-changeable and divine; the other two, *Idjmā'* and *ḳiyās*, are considered to be the interpretation of the *Qurān* and *Sunnah*, and the majority of *Sharīah* scholars have approved these two sources. They can be classified into:

- a) *Qurān*;
- b) *Sunnah*;
- c) *Idjmā'* (consensus):

*Idjmā'* means agreement or general consent. It is the collective, organised *Idjtihād*, and a consensus of authorities on legal issues. Recourse to *Idjmā'* is based on the authority of *Sharīah* ordinances. *Idjmā'* is probably the most important Islamic legal principle. Without the sanction of *Idjmā'*, interpretations of *Sharīah* through *Idjtihād* in its various forms, would remain personal conjecture. *Idjmā'* cannot abrogate the *Qurān* or *Sunnah* which are the main sources of *Sharīah*; and

- d) *ḳiyās* (analogical reasoning):

Literally *ḳiyās* means measuring or correlating. According to a *ḳiyās* method, the cause (*'illah*, or motive) for the rules or legal maxims derived from the *Sharīah* sources is ascertained and the same rule is applicable to new problems on the basis of similarity of the cause of the original case and the new problem (Husaini, 1980.

#### 4.5.1.2 Inferred

There are technical forms of *Idjtihād* which are inferred. These inferences and technical expressions are the main sources for the majority of jurists, which they have agreed upon and used as devices in any legal judgment and legislative law. There are other sources which are not mentioned in the list below due to their limitations and because they are not approved by the majority of jurisprudents and *Sharīah* scholars. They can be classified into:

- a) *Istiḥsān* (preference for the better):

*Istiḥsān* means 'regarding as better', to preferring or considering a thing commendable.



Applications of *Istihsān* include giving juristic preference to the stronger bases of law over the weaker;

b) *al-Maṣāliḥ al-Mursalah* or *Istiṣlāḥ* (public welfare):

*Idjtihād* has the widest scope of action in matters dealing with social transactions in contradiction to the rules and rituals of worship. Some of these transactions or human affairs are outside the purview of explicit texts of the Sharī'ah. They are '*mursal*' or set apart from such texts. The intent of the values of the Sharī'ah is satisfied when everyday activities or transactions are conducted for the enjoyment and facilitation of life, and the benefit of the people so as to further public welfare or common interest, *al-maṣāliḥ*. This is the principle of *al-Maṣāliḥ al-mursalah* or *istiṣlāḥ*, that is striving for what is in the general interest (Husaini, 1980);

c) *al-'Urf* (customary law):

The Qurān always supports all good and the beneficial aspects of life, regardless of their sources, as being lawful for Muslims. Prophet Muḥammad (pbuh) had absorbed into Islamic culture many pre-Islamic customs, usage, conventions, and habits. Thus the customs and laws of pre-Islamic Arabia, and those countries conquered and inhabited by Muslims, have become another source of Islamic jurisprudence within the constrain of the Sharī'ah. In addition, conventions in contemporary local Muslim communities can be considered part of Islamic jurisprudence as long as they are within the constraints of Sharī'ah;

d) *Sharī'at Ma-Ḳablanā* (canons of earlier nations):

The traditions and canons of the earlier nations are considered valid and subject to abrogation or amendment by the Qurān or the Sunnah of Prophet Muḥammad;

e) *Sad al-Dharā'ī'* (preventative pretexts):

*Dharā'ī'* means pretexts, *sad* means to stop, or prevent something. Thus any techniques, methods and means that can lead to any forbidden act or sin in *Sharī'ah* will become forbidden and treated as a sin. By the same token, any technique, method or means that may lead to a permissible act is deemed allowable (Abdul Hamid, 1984);

f) *Madhhab al-Ṣaḥāb* (Prophet's companion's ideology):

The ideology of the Prophet's companion became a source of *Fiqh*, because these companions were taught and guided by the Prophet Himself;

g) *'Amal Ahl Al-Madinah* (Al-Madinah society methodology):

The way of life of *Al-Madinah* society at the time of Prophet Muḥammad (pbuh). This Law extends beyond the era of Prophet Muḥammad the Māliki school depends heavily on this source; and

h) *al-Istiṣḥāb* (the accompaniment of the existing rule):

This is an important source of law in many cases where it does not contradict the stronger origins of jurisprudence.

#### 4.6 The Concept of Constancy and Variability in the Islamic Legal System

*Fiqh*, is jurisprudence in Islam which is - as defined earlier - the knowledge of all the main laws and branches of the Islamic legal system. It includes all the laws which relate to secular and variable issues. There are certain orders and standards that all the jurists followed and used in extracting any law relating to certain matters that may appear over the course of time. These kinds of laws can vary according to the particular place and time. This does not mean that the Islamic legal system is constantly changeable or variable, but it shows the **flexibility** of this system, and its ability to cope with all the variables of **time, place and people**. This can be explained as the concept of constants and variables in the Islamic legal system. By and large, the Qurānic legal ordinances are broadly-based ethico-legal rules which establish general principles rather than specific details. The recorded Sunnah, on the other hand, varies in the degree of reliability and authenticity. These and similar considerations make most of the *Sharīah* ordinances flexible, conducive to varying valid interpretations, and adaptable to the changing social needs and exigencies in a time-space context (Khalil, 1994) (see Figure 4.1).

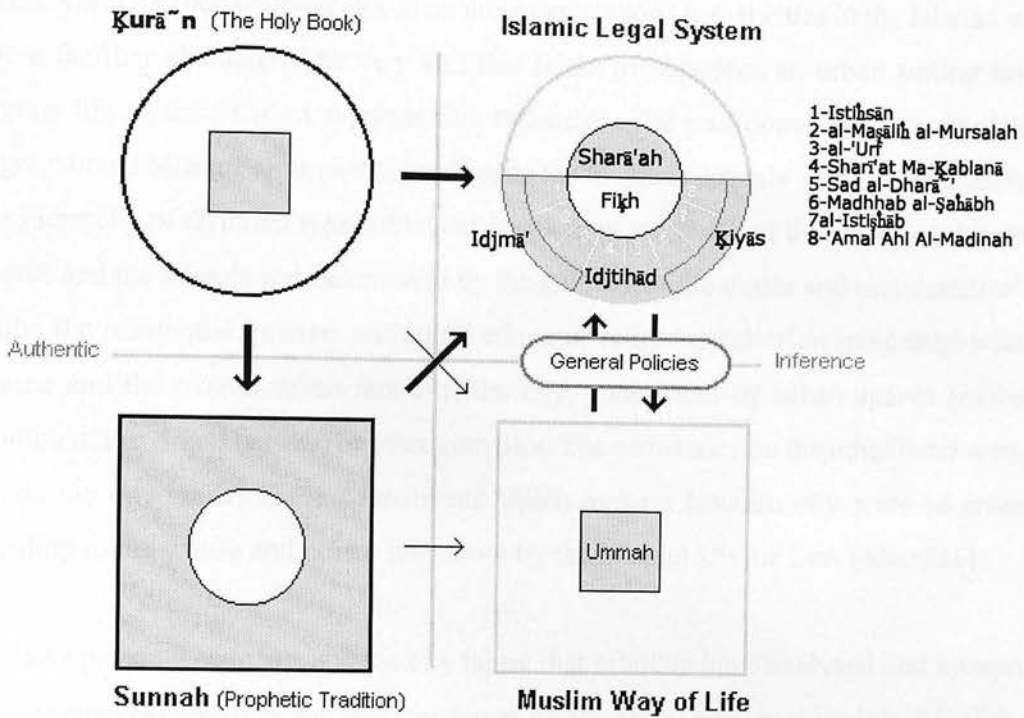


Figure 4.1: Islamic Legal System (Source: The author)

In this regard, *Sharī'ah* is considered the unchangeable and constant part of the Islamic legal system. It is the divine law which is based on the Qurān and the Sunnah, the unchangeable sources. These sources must not be added to or deducted from in any circumstance, and any change to or interference with these two sources is void and unacceptable, and considered to be an unlawful deed and is prohibited by Islam. On the other hand, *Fiqh* includes all the variables and changeable issues which can suit any situation. These are the variable issues in the Islamic legal system.

#### 4.7 Different Relationships Governing the Muslim City

After having a general concept about the Islamic legal system, the thesis will go further towards examining how this conceptual legal system governs the Muslim city. This is not a new subject, having been studied by many scholars. They have written extensively about the Muslim city, its growth, evolution and components. Some have described it from the point of view of its physical setting, while others have described it from its social and cultural

aspects. One common denominator in all these descriptions is that cities in the Islamic world have a familiar character. The very fact that Islam presupposes an urban setting for the virtuous life of the Muslim supports this statement. The traditional Muslim city had its congregational Mosque at its centre, attached to the religious schools<sup>2</sup> and - in later centuries - the hierarchy of different types of *aswāḳ* (market, pl. of *suḳ*) and their relationship to the Mosque and the schools was determined by the nobility of the trades and merchandise<sup>3</sup> and finally, the residential quarters with their ethnic or religious cohesion integrated with the Mosque and the overall urban fabric of the city, punctuated by urban spaces (*raḥba*) to accommodate markets (*aswāḳ*) or other activities. The cemeteries on the other hand were left outside the city walls. These constituents which make a Muslim city were so arranged according to the values and norms laid down by the Islamic Divine Law (*Sharīḥ*).

It is these physical elements and the city fabric that scholars have analysed and interpreted from different perspectives, but few (see Jamel Akbar, 1988) have analysed the Muslim city from the religious and Islamic perspective to show how the religion was reflected in the built environment. In other words: how does Islam and its teachings, centred on its Muslim way of life, affect the built environment? By answering this question we will be able to arrive at a true understanding of the vocabulary which constitutes the Muslim city.

According to Islam, the reason for the creation of man<sup>4</sup> on earth is for man to worship Allah, his Creator. "I have only created jinn and men, that they may serve Me. No sustenance do I require of them, nor do I require that they should feed Me. For Allah is He Who gives [all] Sustenance, Lord of Power, Steadfast [for ever]" (Ḳurā'n, surah 51/56-58).

In our analysis of the Muslim city and its vocabulary, certain relationships for man on this earth will be emphasised and studied in relation to the built environment. Such relationships are man and God (Allah), man/man, man/neighbour, and man/society. Islam set certain rules

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<sup>2</sup> Since the Prophet's time the religious and non-religious teaching had been conducted in the Mosque for many centuries (see chapter 5).

<sup>3</sup> The more mobile trade and crafts were in direct proximity to the mosque such as jewellery making, while the more coarse such as tanning and dyeing were far out of the city (Abdul Hamid, 1984).

<sup>4</sup> In this thesis the word "man" is used frequently to denote "mankind" and not "man" as opposed to "woman".

in the form of obligations, rights and incentives to organise and maintain these relationships. These relations played a crucial role within the Muslim society and were reflected in all aspects of life, which in turn reflected on the Muslim built environment. This is because these relationships constitute an important part of Muslim belief. The following sections will firstly summarise these relationships and the way Muslims understood them and lived by them through Islamic teachings; and secondly they will explain how these relationships were reflected on the built environment as part of the Islamic belief. It should be noted that the four relationships that are mentioned below are all inter-related - i.e., one cannot divorce one from the other as all are part of a complex matrix that reflects on its other different poles. It is only to simplify these relationships to the non-Muslim reader that they have been dissociated and for that reason will be re-synthesised in an example following these sections.

#### 4.7.1 Man and Allah Relationship

In the *Qurān*, the sole purpose for the creation of mankind is for man to worship his Lord and to follow His orders. Allah explicitly says he wants no money or charity or alms-giving because He is the only One who distributes wealth and food amongst His creations. It is from this perspective that one has to understand the relationship between Allah and man through worship and following of His Laws. Whenever this worship increases, the relationship increases and vice versa. The complete meaning of worship in Islam is thus the complete following of Allah and the complete submission to His Will and His Laws (Abdul Hamid, 1984).

The worship of Allah is divided into two parts: the spiritual and the practical. The spiritual is included in ritual prayer, prayers (*du'ā* and *tasbiḥ*) and by recitation of particular religious formulae (*dhikr* pl. *adhkār*) at night or before sunrise. Allah says in the *Qurān*: "...celebrate [constantly] the praises of the Lord, before the rising of the sun. And before the setting; Yea, celebrate them for part of the hours of the night, and at the sides of the day; that thou may be pleased" (surah 20/130).

The normative explanation of *dhikr* and *tasbiḥ* as practised by the early Muslims at the time of the Prophet (pbuh) and in the first century A.C. was manifested in all types of worship (e.g., ritual prayers, fasting, ...) or in acts between members of the Muslim society (e.g.,



protectors, one of another" (Qurān, surah 9/71).

This principle of **brotherhood** is what dissolves the differences of race, colour, and language in Islam and bonds the members of society together (also true of all other original religions). Therefore, a Muslim from the East is equally tied to a Muslim from the West. That is why Islam made the love of a Muslim to a fellow Muslim to be synonymous to belief in Allah; Prophet Muḥammad (pbuh) says: "None of you will have faith till he wishes for his (Muslim) brother what he likes for himself."<sup>5</sup>

The tangible or practical side, on the other hand, can be clearly understood from the teachings of Islam; for example, the right of the Muslim to another is to support him or her when in time of need by any means. This support is both moral and practical and within all the means and constraints laid down by the Divine Law. This same meaning can be seen from a *Ḥādīth* (Prophet's Traditions) which indicates the position and the rights of the Muslim towards his fellow Muslim brother:

"A Muslim is a brother of another Muslim, so he should not oppress him, nor should he hand him over to an oppressor. Whoever fulfilled the need of his brother, Allah will fulfill his needs; whoever brought his (Muslim) brother out of a discomfort, Allah will bring him out of the discomforts of the Day of Resurrection, and whoever screened a Muslim, Allah will screen him on the Day of Resurrection." (Ḥādīth 622, in *Ṣaḥīḥ al-Bukhārī*, 1976, p. 373)

As for the individual rights, they are many. Some are major and critical, while others are secondary. These rights were set by Islam in the form of duties and incentives that a Muslim should perform towards another fellow Muslim. Examples of major compulsory duties are for a Muslim to salute another Muslim whether they know one another or not (this renders a feeling of belonging and safety). Another example is never to refuse a fellow Muslim an invitation to any occasion (this brings about a feeling of communal activity during Muslim festivities). In times of sickness, it is the duty of the Muslim to visit his fellow Muslim to

<sup>5</sup> *The Translation of the Meanings of Ṣaḥīḥ al-Bukhārī*, Arabic-English, Vol. 1, Chapter seven, Ḥādīth 12, Translated by Muḥammad Muhsin Khan, Islamic University, Al-Madinah Al-Munawwara, Hilal Yayinlari, Ankara - Turkey, 1976 (p. 19).

raise his morale and to console him; likewise, in times of death, he should follow his *jinazah* (burial procession) to actually share in the bereavement of the deceased person's family. As for the secondary duties, there are, for example certain formulas that are repeated on certain occasions (such as "Allah bless you" when somebody sneezes). Although this seems a triviality, these small Islamic duties make up for the completeness of the Islamic mentality of the Muslim. It is for this reason that the Prophet (pbuh) said:

"The rights of a Muslim on the Muslims are five: To return the greeting, to visit the sick, to follow the funeral processions, to accept invitation and to reply the sneezer".  
 Ḥadith 332 in Ṣaḥīḥ al-Bukhārī, 1976, pp. 187-188)

From the point of view of incentives that encourage cohesion between Muslims, these are many and diverse in daily activities and include helping fellow Muslims, sharing and so on. The recompense of such good deeds are in the balance of the hereafter.

In this section, some of the many demands laid out for the Muslim towards his fellow Muslim brothers and sisters was briefly pointed out. Whenever this understanding is reached and practised, the stronger becomes the relationship between man and his fellows and the more it is reflected in all aspects of their lives and in the environment they live in. This is because there is a direct correlation between religious acts and daily life - as explained above regarding secular and sacred behaviour. **One can thus deduce that the life of a Muslim is highly influenced and disciplined by Islamic teachings applied to his daily life, and to his relations with others; this forms in fact the cornerstone in the principles between a Muslim and those who are around him, whether human beings, animals, plants, or any objects.**

#### 4.7.3 Man-Neighbour Relationship

The relationship between man and his fellow man - discussed in the above section - completely corresponds to that between man and his neighbour in the context of the Muslim community. The reason is that a neighbour is a member of the community - whether Muslim or non-Muslim - but at the same time, a neighbour has several extra privileges that the normal member of a community does not have. A reason for the specific attention given to

the neighbour in Islam is that man does not live in isolation but in a community and necessarily gets more exposed to those in his immediate surrounding - i.e., his neighbours - so that if such living conditions are not controlled by a code of ethics, some disrupting circumstances might occur, resulting in friction between members of the community and ending in a disunified situation. This code of ethics strongly emphasised in the *Sharīḥ* as ordained by Allah. Allah says in the Holy Qurān:

"Serve Allah, and join not any partners with Him; and do good - to parents, those in need, neighbours who are of kin, neighbours who are strangers, the Companion by your side" (surah 4/36).

This verse clarifies that the neighbour is entitled to certain rights in Islam and that "neighbour" is classified into two types; the next of kin and the stranger neighbours and they both have rights. The Prophet Muḥammad (pbuh) emphasized on the concept of neighbourhood and the neighbour's rights: "Gabriel continued to recommend me about treating the neighbours kindly and politely, so much so that I thought he would order (me) to make them as (my) heirs." (Ḥadith 43 in *The Meaning of Ṣaḥīḥ al-Bukhārī*, 1976, p. 27)

According to the concept of neighbourhood in Islam is that the neighbour is not only the one who lives next to you but it also includes those who lives further away. To ascertain the importance of neighbours, Islam links the concept of evil and *ih̄sān*<sup>6</sup> to one's neighbour with entering Hellfire or Paradise (Abdul Hamid, 1984). By examining the code of ethics as set down by the Divine Law, we find that it covers most matters regarding lifestyle and ranges from the fundamentally obvious to the infinitely small and detailed aspects in life. Some examples are fully elaborated in the following *Ḥādith* of the Prophet (pbuh):

"The Prophet (pbuh) said, "By Allah, he does not believe: By Allah, he does not believe! By Allah, he does not believe!" It was said, "Who is that, O Allah's Apostle?" He said, "That person whose neighbour does not feel safe from his evil." (Ḥadith 45 in *The Meaning of Ṣaḥīḥ al-Bukhārī*, 1976, p. 28)

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<sup>6</sup> Usually meaning "love of Allah", but here it is used by Abdul Hamid (1984) to mean "kindness and goodness to".

"Anyone who believes in Allah and the Last Day should not harm his neighbour, and anybody who believe in Allah and the Last day should entertain his guest generously...." (Ĥadith 47 in The Meaning of Ṣaĥīĥ al-Bukhārī, 1976, p. 29)

Such explicit instructions, and rights as decreed by Allah in Islam to govern the relationship between neighbours, can reveal some aspects that are characteristic of the built environment in the Muslim city and its physical appearance. For example, the compact urban fabric of the traditional Muslim city with its interlocking houses, and lack of spaces between each building resulted in the form and shape of the *harah* or alley (whether dead-end or street). Although all these features can be explained in terms of climatic, utilitarian and structural purposes they are obviously compatible to the religious teachings of Islam. They are a physical transformation of the relationship between man and his neighbour within the Muslim community.

#### 4.7.4 Man-Society Relationship

Islam set a general principle generating all human relationships, and that is the principle of equality between all people. This equality is one of rights, duties and opportunities where no person is better than another except by virtue (*taqwa*). Allah mentioned in the *Ḳurān* the origin of man to show how people are equal and to remind them of their creator: "O mankind! fear your Guardian Lord, Who created you from a single Person, created, out of it, His mate, and from the twain scattered (like seeds) countless men and women;- Fear Allah, through Whom ye demand your mutual (rights), and be heedful of the wombs (that bore you): for Allah even watches over you" (surah 4/1).

That is why, when any human relationship is analysed, one finds that the principle of equality is fundamental and is what created the characteristic cohesion in early Islam when society adhered to its normative teachings. As a corollary, brotherhood between the Muslims stems from that principle and relies on the **unity** of the Islamic belief - a tie that Islam makes stronger than that between race, clan, and blood; i.e., no difference between white or black, young or old, strong or weak.

"The Believers are but a single Brotherhood: so make peace and reconciliation

between your two (contending) brothers; and fear Allah that ye may receive Mercy" (Qurān, surah 49/10).

By this, Islam introduced the principle of brotherhood to the Muslims along with its implications for the relationship between the members of society and between them and their society. The role and duty of the Muslim is to help his brother at all times and especially in times of need. That is why Islam sees the members of society as a family or as a single body, all part of a whole. The Prophet (pbuh) says:

"You see the believers as regard their being merciful among themselves, showing love among themselves, resembling one body, so that, if one part of the body is not well, then the whole body shares the sleeplessness (insomnia) and fever with it" (Ĥadith 43 in *The Meaning of Ṣaḥīḥ al-Bukhārī*, 1976, p. 27).

"A believer to another believer is like a building whose different parts enforce each other." The Prophet (pbuh) then clasped his hands with the fingers interlaced (Ĥadith 55 in *The Meaning of Ṣaḥīḥ al-Bukhārī*, 1976, p. 34).

The meaning of these two traditions is that Muslim society and its members are like an organic whole (a body) governed by a unitary feeling. If a part of the unity is harmed the entire entity is harmed. The second tradition has similar implications and compares the Muslim community to a single building without a solid structure. It cannot provide a safe life for those inside it. Likewise, the relationship between the members of the community should be strong and Islam orders them to be like a strong building. This can be seen as the reason behind the compact inward-looking shape of traditional Muslim cities, reflecting the strength of the ties between Muslims as well as coinciding with the centralisation around the Mosque at the heart of the city. Explanations of this physical form by many urban theoreticians such as Lynch (1981) as an **"inward"** city or an introverted city, fail to understand the reason behind this compactness and introversion. In fact, Muslim cities grew both inwardly and outwardly, thus questioning the justification of the term **"introvert"**.

Neighbourhoods are nothing but an expression of the close ties between the traditional societies as dictated by the laws of Islam governing people, neighbours, Muslims and



non-Muslims, young and old, people in the street and others in public or private spaces so that a whole set of relationships is clearly delineated, governing the entire society. The deeper the understanding of the members of society to Islamic teachings, the more reflective these teachings become on the urban form of the city. Vice versa, the less the understanding, the great the deviation of the urban form from the teachings of Islam, resulting in a duality between the shape of the city and the religion. In other words, Islam orders Muslims to be cohesive and helpful amongst themselves. If people do not grasp this principle there will result a schism between the members of the Muslim community resulting in social distancing thus reflected in city planning.

#### 4.8 The Relationship between the Elements of the Muslim City

From the observations and findings arrived at in the previous sections, one can deduce some important notions relating to Muslim cities which explain the reason behind the physical form, as well as the meaning of each element and its relationship with other elements constituting the overall form. These findings can be summarised as follows:

- a) **There is no dividing line which severs the religious life of a Muslim and his daily life because both life and religion are one and the same and the relationship between both is that of attachment rather than closeness.** This explains the positioning of the dwelling elements and the markets in close proximity to the religious and administrative elements (such as the Mosque, the courts and the schools) in a relationship that is in modern terms referred to as "**mixed use**". It means that the relationship between these elements was not in the form of isolated buildings standing in proximity to one another but, on the contrary, it was one homogenous unity where Mosque, residential quarters, markets and the other elements were inter-related.
- b) **There are certain binding rules dictated by the religion governing communal relations between members of Muslim society in such a way that a homogenous and cohesive unity *Ummah* is created whether Muslim or non-Muslim.** This brotherhood instigated through the teachings of Islam works as a general framework

within which stronger bonds are encouraged, such as that between the Muslim and his or her family and neighbours; and this explains why Muslim cities have been realised with compact cohesive neighbourhoods where the street layouts serve the purpose of this cohesion and compactness. It is for this very reason that the unit and nucleus of the society, the dwelling, could not survive in isolation. The relationship between Mosque and dwellings is a relationship between unity and multiplicity (*tawḥīd*) where the Mosque (*al-masjid al-Jami'*) is the congregational place, the point of focus, the centre: while the dwellings, each a nucleus on its own, are the multiplicity of the society revolving around this one centre which embodies religion as a whole - because prayer is the pillar of the religion (*'imān al-din*).

- c) **The Divine order for cohesiveness between members of society is given both intangibly and tangibly.** From the intangible point of view, the biggest incentive in Islam, the promise for Paradise, is given to those who achieve this cohesiveness; while on the other hand, the tangible has to do with the daily ritual prayers to be carried out in congregation in a Mosque, the pilgrimage, and the unity of the word between the Muslims. Here, it is important to remember that the Mosque is the most important nucleus providing the bond between members of society, the more functions that the Mosque provides, the more the society becomes cohesive due to the relationship to the one multi-functional centre. In this way, the Mosque becomes the means by which Islamic principles are carried out.

## Concluding Remarks

It is clear from the discussion that within Muslim society there is a strong integration between religious and secular life. The Islamic legal system is not a set of guidelines and certain orders for the society to follow, but is rather a system which represents this integration between religious and secular life. It is also a complete system which can examine and evaluate any event or issue that emerges throughout the Muslim's life. The constants and unchangeables in this system are the *Sharī'ah* ordinances which should be retained as they are without any addition, deduction or alteration. On the other hand, the variables are those of the *Fiqh* which are the interpretation and the understanding of *Sharī'ah* in certain

methodology which is the *Idjtihād*.

The meaning of Islamic legal system is not limited to the legal aspects which relate to Islamic society, but is used here in this study from its broader meaning beyond the direct implementation of Islamic rules. In other words, this system can accommodate all aspects, physical and non-physical of Muslim life. Thus the Islamic legal system is the measurement by which any issue or event can be evaluated and examined.

Finally, the Islamic legal system can be considered the foundation of Muslim society, governing all the patterns of relationships within the Muslim social life. It has been shown in this chapter that this Islamic guidance and legal system can be translated and interpreted into an actual way of life for Muslim society. Thus, a Muslim's life can be truly reflected in the built environment if he or she applies the Islamic principles regarding the society.

This chapter clarified briefly the conceptual meaning of Islam in relation to Muslim society. It also relates these Islamic principles with the Muslim's living environment. This living environment is governed by different relationships set by Islam which have been discussed in the final part of this chapter. The analytical study is aimed to link the conceptual framework of Islamic society with the actual living environment. By establishing the general framework this will make it easier to interpret and relate it with certain physical aspects of Muslims' lives and their built environment. There remains one issue which needs to be investigated through further research, that is to understand the Islamic principles which are related to the elements within the built environment. An investigation of this issue is therefore included within the following chapter.



### Introduction

The main objective of this chapter is to deduce how Islamic cities should respond to a growing clamour for change without compromising their historical Muslim identities. The present discourse is certainly not qualified to answer a question which has for a long time caused much spilling of ink and much preoccupation of many good minds. One can only express the fervent hope that awaited and necessary reforms will be in the spirit of Islam, and trust that the picture we have given of the religious institutions - intangible 'pillars of Islam' on the one hand, and the image of the community on the other, firm in their principles but open to variations and adaptations in their actual application - may assist those who are striving to preserve the salvational role of the City to appreciate them:

"Only they that are endowed with perception shall ponder; who fulfil God's Pact and break not the Covenant; who join together that which God hath commanded to be joined; who fear their Lord and are in awe of the evil of the Reckoning; who are patient in seeking the face of their Lord, establish the Prayer, and give in charity of that wherewith We have provided them, secretly and openly, and return good for evil; it is to these that the last dwelling place is given, Gardens of Eden.." (Qur'ān, sura 13/19-23).

Much more needs to be said to elaborate on the all-too-brief outline of the religious institutions of the Islamic City in the previous chapter. In particular, the following sections will dwell upon the basic cell of the city, which is the family. Generally speaking, the typical city of the Islamic world contained Mosques in meaningful locations, particularly integrated into the ordinary life of the city. In addition, the Islamic city and its social system are based on the primary social units: the family and kinship.

### 5.1 The Traditional Muslim City

Michon (1980), discusses the question of the place of religious institutions in the Islamic city saying that the main outlines of Islamic faith and law are among the most unchanging aspects



of Islamic civilisation and its constant concern for bringing about a harmonious balance between its various components. In the broadest sense, the Islamic city, is none other than the great community of persons obeying its law. It therefore embraces all the *Muslimun* - all who profess Islam - and coincides with the *Ummah*, the 'nation' which every Muslim recognises and feels themselves to be a citizen.

The Islamic city can, however, be considered from a narrower focus which, nonetheless, must never be thought of as being detached from the universal framework into which it fits (Michon, 1980). This risks envisaging the city as being limited simply to those urban groups which are organised under the aegis of Islam and to the form of civilisation - *madaniyyah* or *ḥaḍārāh*, using the terminology evolved by the writers of the 'classical' periods - which is involved.

If we limit ourselves to considering urban civilisation, we still have a very broad field to cover. In fact, the characteristically monolithic nature of Islam, which is the religion of Divine Unity, strives to orientate the lives of individuals, as well as of societies, to the worship of the One God and to leave no domain, in the unfolding of human activities, exempt from the authority of Divine Law<sup>1</sup>.

This means that, in accordance with the strict intention of the Divine Legislator, no urban community can possibly have any institutions other than religious ones (Michon, 1980). This asserts that religious institutions suffuse political, social and even economic institutions of Muslim cities and their operations. The general definition of religion is to link into a single rope hung from Heaven those phenomena, from which earthly existence is woven. More particularly, since we are concerned with Islam, we should follow the trail marked out by a religion having a main cornerstone and enduring theme concerned with *tawhid*, the affirmation of **Divine Unity**, which seeks to assert, above and through all the relativities of the here-below, the rights that are the Creator's due.

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<sup>1</sup> See Chapter Four: Islamic Legal System.

### 5.1.1 The Islamic Community

There are more than one milliard followers of Islam, comprising populations in Asian, African, and Far Eastern states. Islam started in the Arab peninsula and spread from the Atlantic to the Pacific Ocean. Different types of people, cultures, environment (ranging from the heat of Arabia to the snows of central Asia and Afghanistan), social, political and economic systems in so many parts of the world led, inevitably, to different patterns of settlement and systems of cultural behaviour. Islam forged a belief in one single God, ruler of all time, space, and human destiny. Though there is an amazing ethnic diversity in the Muslim world, it is transcended by this common belief. Islamic coherence in the form of building complexes and settlements is the aspect we wish to emphasise in this section. The number and variety of building forms are not only a product of the Islamic world view; they developed as a result of a particular cultural and social interaction. In order to understand this interaction we have to study the various regional, social, political and cultural systems and their antecedents in pre-Islamic times. We start with the Arab peninsula where the Prophet Muḥammad (pbuh) was born, and then move to Syria whence the Caliphate expanded to the East and West (al-Bayati, 1984).

The success achieved by Islam in building up urban communities is connected with the insistence the *Ḳurʿān* places on human groups or the evocation of historical or allegorical events which are relevant to human groups - namely nations (*Ummah*, plural: *Umam*) and cities (*ḡaryah*, plural: *ḡura*) to which Divine messengers were sent such that no people have been denied Revelation (Michon, 1980).

However, the greater part of these nations and cities displayed ingratitude and sinfulness, for which they incurred the Divine wrath: 'And how many cities have We destroyed! ... when Our wrath was unleashed upon them, they could but cry: "In truth, we have been unjust" ' (sura 7/4-5). 'God coineth the parable of a city; it stood in safety and at peace; there flowed to it riches in abundance from every side; then it denied the blessings of God. God then made its people taste the terrors of hunger and fear in punishment for their deeds' (sura 16/112). "When We desire to destroy a city, We command to them that live in luxury and they abandon themselves to iniquity. Then is the word realised against it and We destroy it utterly" (sura 17/17).

In order to avoid the repetition of the evils of ingratitude and sinfulness, the Islamic Community are obliged to be virtuous and faithful to its commitments: "Ye are the best Community raised up for men; ye commend what is reasonable; ye forbid what is blameworthy; ye believe in God" (sura 3/110). It received the gift of the 'just mean' (sura 2/143). It forms an **organic whole** in which each element is at home: 'Believer is to believer as the mutually upholding sections of a building', declared the Prophet in a much-quoted *Ĥadith*. And he also said: 'Ye will see the Muslims in their goodness, affection and fellow-feeling form as it were a single body which, when one member is ailing, seeks to share out its sleeplessness and fever throughout that body.' Finally, he gave an assurance that 'my Community shall never be unanimous in error (*dalālah*)' - a declaration which was to have considerable repercussions in introducing the principle of *Idjma'*, the consensus of believers, as a source for the elaboration of law. This solidarity is translated in Muslim law into the existence of a collective statute of obligation called the 'duty of sufficiency' (*farḍ kifāyah*) which exempts an individual believer from a compulsory legal duty from the moment that a sufficient number of the faithful join together to carry it out. This applies, for example, to the prayer for the dead, the Holy War (*djihād*), and the fulfilment of tasks requiring a thorough acquaintance with Religious Knowledge (Michon, 1980).

For conduct which a man commits himself alone, it is he alone who will appear before the Supreme Judge to answer for his actions. However, the bond which links him to the social body is so tight that he depends for his salvation largely upon those around him and upon the more-or-less favourable circumstances that prevail there for the accomplishment of Revealed Law (Michon, 1980). "Verily, man is in loss, save only them that believe and perform good works, and exhort one another to Truth and exhort one another to patience" (sura 3/2-3) says the *Qur'ān*, stressing in the latter part of the verse the importance of mutual admonition in the fundamental virtues.

### 5.1.2 Islam and Urban Civilisation

Many indeed are the observers and historians of Islam who have remarked on an astonishing contrast within the geographical and human context where the Islamic Message first established itself: the Arabian Peninsula, inhabited mainly by nomadic Bedouins or semi-sedentaries, and the classical visage of the Muslim world as it was to emerge a few centuries

later; and a network of great cities from India to the West between which there would flow and interflow, by land and sea, every kind of product, as well as branches of knowledge, ideas and cultures (Michon, 1980).

It is a fact that the propagation of Islam by the Arab armies and, even more, by the sheer conviction of the message they carried with them, was accompanied by extraordinary urban development. This phenomenon took place in the three great areas to which the conquest first extended - namely: the Sasanid Empire in the northeast (Mesopotamia and Iran), the Byzantine Empire (Syria and Egypt) and the previously Romanised west, now partly barbarised (North Africa and Spain). New towns appeared, which were originally no more than fortified camps, such as Kufah and Baṣrah, founded in (15-17 H / 636-8 AD) during the Caliphate of 'Umar. Their first inhabitants, consisting of fighters in the Holy War, were supplemented by new converts (*Mawālī* or '*clients*') and 'protected persons' (Dhimmi Jews and Christians, all of them 'people of the book', subject to a head-tax but free as regards their persons, goods and worship) at such a rapid pace that Kufah boasted a population of over 100,000 souls within thirty years, and Baṣrah over 200,000. The breakneck pace at which Baghdad, founded in (145 H / 762 AD) by the Caliph al-Manṣūr, was built by 100,000 workers, who were also its first inhabitants, meant that the Abbasid capital was the home - forty years later - of some 2 million citizens and was the greatest metropolis of its age. Many more examples could be added - the creation of Fuṣṭāṭ (the future Cairo) by 'Amr in (19 H / 640 AD), of Ḳayrawān by 'Uḳbah in (48 H / 668 AD) and of Tunis several years later, followed by Almeria (756 AD) and Fez (807 AD). There were, moreover, ancient cities everywhere which, having fallen into decadence, found renewed vigour and prosperity with their entry into the *pax Islamica*, such as Damascus, Balkh, Bukharā and Samarḳand, or Cordova and Seville (Michon, 1980).

How are we to account for a town-planning vocation as precocious and strongly affirmed as this in the world of Islam? City organisation was doubtlessly not unknown to the Arab conquerors; Makkah, where Muḥammad (pbuh) was born and where his prophetic vocation was proclaimed, had long been an urban grouping of real importance as a nexus of the caravan trade in the Arabian peninsula and a centre of pilgrimage sheltering the statues of numerous divinities in the Temple of the **Ka'bah**. But above all, there is the testimony of **Al-Madinah**, the City of the Prophet, where Muḥammad (pbuh) had found asylum at the time



of the Hidjrah in 622 AD and where the basis of the Muslim Community and its organisation was laid.

### 5.1.3 The Function of the Islamic City

Between the Muslim, sanctified by his monotheist faith and the practice of its basic rites, and the community of believers, whose effective presence we can somehow grasp through a description of its rites, religious law weaves many bonds. One would be hard put to review every one of them in the context of this brief study, inasmuch as the very domain of their operation - the collective entity - is inevitably stamped with the mark of diversity and relativity. Even in its sources alone, which are the *Ḳurʿān* and the Traditions of the Prophet, the material on social relations (*mu'amālat*) is very copious. Moreover, the cleavage between Sunni and Shi'i Islam, the constitution of schools of belief and, even more, the geographical extension of the Muslim peoples and their historical evolution have all meant that variations and fluctuations do appear; if not in matters of principle, at least in the interpretation and modalities of application of religious institutions. At different places and times, the normative strength of certain rules is noted and reinforced or, on the contrary, relegated to the position of a simple, preferred option, or even a lapsed option.

The **Madinan Community**, which was ordered to "obey God and His Prophet" (sura 8/1) since "he who obeyeth the Prophet obeyeth God" (sura 4/80), is the prototype of the Muslim Nation whose supreme leader is the Caliph, or Imam, the Prophet's successor in whose person are united all the offices of spiritual authority and temporal power. His role is not to make laws, since *Ḳurʿānic* Law is final and already promulgated, but to create the requisite conditions for fulfilling this law and guarding its application; it is an executive mandate which, being based upon legislation bestowed as an instrument of Divine justice, has, in addition, judicial authority.

In order to guarantee the security of the lands under his sway, to lead the *djhād* on the frontiers and to meet the needs of administration, the Caliph organises his army and depends upon officials whom he posts to provinces and cities or appoints locally. The descriptions and titles of these officials have varied according to the period and the country; minister or vizier (*wazir*), governor (*wali*), deputy (*nāʾib*), commander (*amir*, *ḵāʾid*), tax-collector (*'amil*), pasha



etc. Their role is to maintain order in the city by creating a police force (*shurṭah*) to protect it from external enemies, gather taxes and distribute revenue, and to run such public services as are not undertaken by religious foundations; thus it is a temporal role which, however, in a context where politics and religion are not disassociated, is played out according to norms imprinted with religious mentality and which answers to a duty of solidarity towards the community.

It is true that the preoccupation of the Umayyad Caliphate with affirming its political power and the subsequent transformation of the Caliphate into an autocratic kingship under the Abbasids brought about an early cleavage between political/administrative functions on the one hand and juridical/religious ones on the other, further exacerbated by the fragmentation of the Muslim world into a multitude of autonomous entities. However, it was only with the introduction of national constitutions on the Western pattern and the abolition of the Ottoman Caliphate in 1924 AD that the final rupture came about between the executive and religion in the greater part of *Dār al-Islām*.

The notion of **justice** is fundamental to Islam. The realm of Islam (*Dār al-Islām*) is also called the 'realm of justice' (*Dār al-'Adl*) because the Law that prevails there is that of God 'the just' (*al-'Adl*).

All the obligations and prohibitions of the *shari'ah* as well as the virtues which are, for the believer, the corollary and result of his submission to the **Will** and **Wisdom** of the Divine Legislator, come back to the same thing which is summarised in the classical formula of jurisprudence: 'give to each his due' or, more explicitly, 'respect the rights of God and the rights of men'.

Thus, every function of the city is organised around a contractual relationship (*'ahd*), the original pact whereby God placed man on earth as His deputy and which man agreed to in accepting this mission. Man thus has the duty of the holders of authority to be protectors, matched to the duty of obedience to them on the part of subjects, and contracts governing social and other transactions of private law whereby men pledge themselves to one another. This is without ever losing sight of the sovereign prerogatives of Him who had established the status of all things before any human intervention had occurred.

The affinity between this concept and the Platonic vision of the just society is self-apparent. Similarly, when Fārābi in the fourth century H / (10 AD) described the **ideal of a virtuous city** (*madinah faḍīlah*), it was as a Muslim no less than as a disciple of Platonism that he defined its ends and means: "to have men in this life and on this earth enjoy as far as possible the happiness and delights of the life to come by means of communal institutions founded on justice and fellowship".

In order that God-decreed order may prevail, the city must depend upon men who possess, apart from a deep knowledge of the sources and branches of religion, proven moral qualities that will guarantee their having a 'feeling for what is fair' (*'adālah*). This quality was thus described in the Qur'ān (sura 4/135): "Ye who believe! hold staunchly to what is fair, as God's witnesses, be it against yourselves, your parents or near relations, whether it concern a rich man or a poor, for God is the true patron of the one as of the other. Follow not passion at the price of justice. And if ye evade or turn aside, know that God knoweth well what ye do".

At the city level, judicial authority is vested in the *ḳāḍī*, who is appointed by the Caliph or chief of the executive. Installed in the Mosque, he is frequently called upon to deliver the Friday *khuṭbah*. His domain is the *shari'ah* and extends to all the Qur'ānic prescriptions, whose application to specific cases must be ensured by him. He conducts both marriage and divorce ceremonies, sees that wills are honoured and looks to the interests of orphans and the incompetent; above all, he judges disputes that are put to him and applies the punishments provided for in the Qur'ān for public or private misdemeanours.

In order to base his verdicts on surer ground, the *ḳāḍī* frequently consults the *mufti*, a legal counsellor to whom he is bound to refer matters of jurisprudence, in accordance with the duty placed upon the leader of the community to consult others (*shurā*) (according to Qur'ān sura 3/159). Ever since, in Sunni Islam, the 'doors of *idjtihād* were closed', the *mufti* has based his decisions (*fatwa*) on precedents contained in works on *fiqh*; he does not pronounce judgement on an action, nor does he formulate either punishment or approbation, but expounds the theoretical or practical rules on which his decision is based and determines the modalities (Michon, 1980).

Finally, to help him in his tasks, the *kađī* designates certain persons as formal witnesses (*shuhūd* or *'udūd*), whose role is essential to administer oaths; like notaries, they record formal statements which they can reproduce accurately in a dispute or court case and they form a respected class within the Muslim bourgeoisie.<sup>2</sup>

However, it is above all the moral aspect of this Qur'anic exhortation 'to command goodness' (*al-~amr bil-ma'ruf*) by word of mouth and personal example which has, in city life, been retained as a duty of the individual, whereas the actual correction of misdemeanours has been treated as a collective responsibility. Perhaps this highlights the importance of close contact within everyday street-life in Muslim societies, a lost asset in modern cities. As such, it became the concern of the *kađī* and of another official appointed by him, the *muĥtasib*, a very typical personality of the classical Muslim city.

As an official for the supervision of moral standards (*ĥisbah*), social behaviour and public security, the *muĥtasib* keeps an eye on the performance of such religious duties as Friday prayers or the Fast, on correct behaviour between men and women on the streets, the safety of buildings and the cleanliness of roads; he intervenes at schools against teachers who beat their pupils, receives the complaints of slaves who have been underfed or ill-treated: and prevents animal-owners from overloading beasts of burden. At market places and street stalls he supervises the honesty of commercial transactions and the manufacture of goods by craftsmen, roots out fraud and imposture and denounces exorbitant prices. To help him check on the various professions, he appoints provosts (*amĥn*, *'arīf*) of guilds to watch over the quality and fairness of services rendered to the clientele of their respective sectors.

This institution, which was considered a religious one (*diniyyah*), survived into the dawn of the modern age. Then it gradually died out, as part of its functions were handed over to officials of the police or the municipal authorities, others to the *kađī*, and others simply became obsolete as the public became ever more intransigent to normal censure, this being, partly, under the influence of the Western concepts of an intrusion on 'the freedom of the individual.

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<sup>2</sup> cf. E. Tyan, *Histoire de l'Organisation Judiciaire en Pays d'Islam*, Paris, 1939, 1943.

Fellowship between believers did not result in the suppression of bonds between fellow-tribesmen or members of a particular social *milieu* nor impeded the formation of new groupings based on ethnic, social, professional or other affinities. On the contrary, it would seem that adherence to a common faith was actually favourable to the establishment of very varied types of association throughout the world of Islam. Although several of these have contributed to emphasising the particular nature of specific groups and others have even degenerated into factions and caused serious disturbances within cities<sup>3</sup>, others have succeeded in extracting ethical concepts of truly universal relevance from the teachings of Islam. Such were the knightly orders (the Eastern *futuwwat* and the *murabiḡūn* of the Maghrib) and the professional guilds (*sinf*, *hantah*) before they too suffered a like decline to that of the *ḡisbah*<sup>4</sup>. And such were, *par excellence*, the *Ṣufī* brotherhoods (*ṭariḡah*, *ṭuruḡ*) which grew up in the first cities of Islam - Baṣrah, Kūfah and Baghdad - and which played a considerable part in Islam's expansion and whose radiance has retained to this day an indisputable vitality. The sanctifying influence exerted by the 'friends of God' (*awliya*) and the 'poor in God' (*fuḡara*) or dervishes of Islam on the mentality and manners of the city would themselves deserve a special study and can only be briefly noted on this occasion<sup>5</sup>.

In Islam are found the underlying factors in the evolution of the Muslim city. Religion was always an instrument for the rise and development of urbanisation in Islamic Countries (al-Bayati, 1984). The Friday Mosque is established at the core of the Islamic city, and is intended to gather the whole male population of the city together at prayer<sup>6</sup>. In addition to the Friday Mosque, a *hammam* (bath-house), and *madrassa* (Ḳurānic school) are functional prerequisites for the Islamic city. The Mosque was the heart of the community and the

<sup>3</sup> The part played in this by certain groups, militia and *ahdath* in Syria, *ayyarun* and *fityān* in Iraq and Iran has been elucidated by: C. Cahen, *Mouvements Populaires et Autonomisme Urbain dans l'Asie Musulmane du Moyen Age*; *Arabica*, V., 3, 1958, *Arabica*, VI, 1 and 3, 1959. See also *Encyclopaedia of Islam*, 2nd ed., *Futuwwah*, edited by Cahen and Fr. Taeschner.

<sup>4</sup> In this context, we should note the opinion of L. Massignon who wrote in 1924: 'If these guilds fade away . . . the entire social life of towns is threatened with regression.' 'Enquête sur les Corporations Musulmanes au Maroc', *Rev. Monde Mus.*, LVIII, 82.

<sup>5</sup> Fine examples of this for the saints of the first centuries of the Hidjrah dwelling in Basrah, Kufah and Baghdad are given in E. Dermenghem, *Vies des Saints Musulmans*, new ed., Algiers n.d., and for a contemporary Muslim city in T. Burckhardt, *Fes: Stadt des Islam*, Olten and Lausanne, 1960.

<sup>6</sup> The Mosque of the Prophet in Al-Madinah has a particularly significant role in shaping the structural transformation of the City.



community could not exist without it.

The organisation of social life in Islamic cities reflects a tribal structure. Another form of social structure found in Islamic cities is the neighbourhood which gathers together a population of the same ethnic origin and occupation. Although pattern varies from city to city, the basic unit is always the family house (Dār). These cluster together in different combinations. In the southern part of Arabia, the tendency is to height, giving the urban landscape a vertical emphasis; in Iran, the houses extend along the ground level with rooms grouped round a central courtyard. The Mosque always has its courtyard surrounded by a densely packed mass of housing, each mass isolated from its neighbour by blind walls.

The pattern of the Islamic cities also varies in relation to geographical location and climate. In Egypt and Iraq cities grow along major rivers, but in Iran the urban water system is based on underground canal systems (*kanāts*).

Leadership in the Islamic city was embodied in the persons (usually not local) of the governor, and of the *kaḏī* (civil judge), who also supervised the *wakf*. In each quarter of the city there was usually a tax collector. The *'ulamā* is the religious leader responsible for spiritual and religious teaching; the *mām* is the prayer leader in the Mosque; and the *mūzin*, the person who calls the faithful to prayer.

The planning of the traditional Islamic city is based on a minimum street width with open spaces. The city was surrounded by a wall with several gates, the main roads leading from the gates to the central area where the Friday Mosque was located. The administration buildings were near the Mosque, and were often fortified. Sometimes these buildings were located in the citadel or near a gate of the city (al-Bayati, 1984).

Each residential area of the Islamic city is separated by gates for reasons of security. The streets are narrow and winding, and consist of three types: the main road the secondary road, and the cul-de-sac. This planning achieved separation between private and public zones. The markets (*aswāḳ*) take on a linear pattern extending from an entrance gate into the city centre.

Life in a traditional Muslim city is based upon the protection of family privacy and the



respect of religion as dictated by the Divine Law of the *Shari'ah*. The typical city of Islam is a symbol of the equality of all Muslims in the eyes of God. The desire for privacy is reflected in the physical forms of the urban structures. For instance, in the placement of doors and windows within street façades, doors are not allowed to open in front of each other. The building height was controlled by privacy allowing no house to overlook the roof terrace of another, where inhabitants slept during the summer.

Islamic cities accommodate political, commercial and craft activities but, because their wealth derives also from agriculture, there is an integration between urban spaces and cultivated land. The Islamic city is based on the idea of close interaction between the various aspects of urban life. There is also a separation between various ethnic groups and a definition of spaces in relation to their users; pedestrian spaces are shaped for social interaction; organic growth patterns produce a variety of interrelated forms.

The **urban grid system** is adopted to functional purposes such as laying out drainage, or controlling traffic. It is in contrast to a clustered plan which grows naturally over the years in the old Islamic cities and is defined by narrow streets and open spaces developed each of which is decided by immediate human requirements at the individual level.

In **modern Islamic cities** we have already lost the texture of the traditional Islamic city. There is very little continuity, and the Islamic city in its traditional form has often ceased to exist. The questions now are how to define the modern and the traditional Islamic city and how to search for new definitions which are better than the existing ones (al-Bayati, 1984).

The city in the West is dominated by a pattern of streets and squares into which buildings are fitted. In the Islamic city buildings are one or two storeys high, and are planned around courtyards with narrow roads in between. Buildings in the West are **look outward**, and the streets and squares contain both commercial and domestic activities. Buildings in the Islamic cities **look inward** with a few public buildings, like the Mosque, being within a public and formalised open space (courtyard).

In the traditional city, two patterns often co-exist; one being the **formal pattern** leading to the religious and institutional complexes at the centre surrounded by the commercial zones;

the other, the **informal pattern** which is created by the low rise, high density residential areas each with their own centres containing the local mosque and madrasa (al-Bayati, 1984).

#### 5.1.4 Legal Institutions which Governed Traditional Muslim Cities

It is necessary to consider some of the principal features of the social character of the cities in question and the juridical concepts on which these life styles and their administration have been based. For it is only in this context that the legal and administrative institutions of Islamic societies - whether urban or rural - can best be understood.

Considered as social entities, traditional Islamic cities were undoubtedly characterised, *inter alia*, by the existence amongst their inhabitants of a strong and highly developed sense of unity and social cohesion (Abdel-Rahim, 1980).

Since *shari'ah* laws were primarily based on Islam as a religion, all official posts - from that of supreme ruler to the humblest function in the market place or police force - have traditionally been regarded as religious institutions<sup>7</sup>. The point is that, in Islam, the material and spiritual aspects of life are viewed as a *continuum* rather than a set of dichotomous entities or modes of existence. Accordingly, the Islamic system of *shari'ah* laws has been developed as a comprehensive body of directives which is as much concerned with the regulation of all facets of private and social life in its earthly forms as with the offering of moral and spiritual guidance for human beings with a view to their enlightenment and subsequent salvation in the hereafter<sup>8</sup>.

The principal institutions concerned with the interpretation and implementation of laws in traditional Muslim cities (under the Caliph or Sultan) have been:

- a) *al-Wali* or *al-'Amil* (Provincial Governor), generally assisted by *al-Shurṭah* (or police);

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<sup>7</sup> The classic works of jurists - including those of al-Mawardi and Ibn Taymiyyah are agreed on this point. See also Ibn Khaldūn, *The Muqaddimah*, trans. by F. Rosenthal, I, 448-65, New York, 1967.

<sup>8</sup> A standard introduction to the subject in English is J. Schacht's *Introduction to Islamic Law*, Oxford, 1964.

- b) *al-Ḳaḍī* (judge), assisted by a panel of approved witnesses or notaries (*Shuhūd* or *'Udūd*);
- c) *al-Muḥtasib* or Ṣāhib al-Sūḳ (i.e. the supervisor of markets and public morality), assisted by the heads of the various professions (*'ārifs* or *amāns*) and by the *'ārifs* of city quarters (*ḥārāt*); and
- d) in addition there were the leaders of the Protected Communities (*al-Dhimmiyyun*) i.e. the Jews and Christians who, in accordance with the precepts of the *shari'ah*, enjoyed a kind of autonomous status in the cities of *Dār al-Islam* and thus constituted a special category in their administration<sup>9</sup>. (Abdel-Rahim, 1980).

## 5.2 Rise of Islam

The faith of Islam began in Arabia when the Prophet Muḥammad (Peace be upon Him), given to religious contemplation, had a vision in which the Angel Gabriel gave Him the Messages from God. Inspired by these Messages, Muḥammad (pbuh) began to preach to the people, ordering them to submit to the one indivisible God, Allah. Muḥammad (pbuh) and his followers provoked much hostility; and in 1H/622AD they went together to Al-Madinah (Yathrib), 497 kilometres north-east of Makkah. From this first period of Islamic history dates the Mosque of the Prophet Muḥammad, the most significant example of the Mosque (al-Bayati, 1984).

The local population was indigenous and remarkable for its homogeneity. The ancient civilisation of the area was based on a tribal-nomadic structure; the religion was animistic and nature-worshipping. The city dwellers depended on trade and agriculture like Makkah and the oases of Al-Madinah but retained the rigid nomadic values of their ancestors.

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<sup>9</sup> On this subject see, for example, Encyclopaedia of Islam, 2nd. ed., 1965, II, 227 et seq. In his study of Damascus under the Mamluks, Nicola Ziadeh quotes interesting passages from the charter in accordance with which the Batraq of the Melchite Christians was then appointed, "after the community's choice, according to the rules of Christianity, as the controller of their affairs.... He should rule according to the laws of his denomination... treat them with mercy... try their laws of inheritance and marriage.... All parishes, churches, monasteries, and convents are under his jurisdiction" (cf. p. 87 et seq). Jews and other Christian communities enjoyed similar treatment. The contrast with the position of Jewish and Muslim minorities in Europe, before as well as since the Inquisition, is instructive.

In Yemen, an ancient and highly developed culture had existed long before Islam, when the whole peninsula had trading contacts with Africa (Ethiopia, Egypt, and the Eastern Coast). The legends of King Solomon and the Queen of Sheba reflect these ancient cultural exchanges. Arabia became important politically in the years preceding Islam in the power struggle between the Byzantine and the Sasanian Empires; monotheistic and Christian influences began to be felt, but were largely ineffectual in the nomadic system, unwilling to submit to a foreign central authority (al-Bayati, 1984).

It was at Al-Madinah during the ten years' residence there of the Prophet until his death, together with his companions, who like himself were emigrants from Makkah or 'Helpers, advocates' (*Anṣār*) from Al-Madinah, that the Muslim Community was endowed with the basic institutions. Al-Madinah was - and to a large extent has never ceased to be - the model Islamic city, whose example inspired the founders of the first cities already referred to, just as it has never ceased to serve as a point of reference down the centuries for the reflections and modes of action of Muslim lawmakers and rulers. Without the firm imprint inherited from this first city of Islam under the threefold influence of the revealed Message, the personality of Muḥammad (pbuh) and the communal discipline acquired by the first believers, it is inconceivable that the fighters of the Holy War would have been able - even supposing them to have been capable of their lightning conquest - to implant their unmistakably Islamic ideals and life-style in lands so widespread and varied, some of which were themselves heirs to very ancient cultures (Michon, 1980). In addition the City of Al-Madinah is the first city in Islam which set the basic principles for the spatial organisation of the traditional Muslim city.

### 5.2.1 The Spatial Organisation of the Muslim City

The spatial organisation of Al-Madinah at the time of the Prophet was rather straightforward. The pattern is understood by studying the biography of Prophet Muḥammad (pbuh) and his companions. Early Al-Madinah Al-Munawarah was the best example of a relationship between the Mosque and the rest of the City. The City was small at the time and the neighbourhoods were mainly in the proximity of the Prophet's Mosque. This is based on the description of many old historians and writers who described the City in different periods of time. Although there are a number of references which talked about Al-Madinah in the early



Islamic time, they do not give a spatial picture of the whole City and its organisation in detail. Most of these descriptions concentrated on the central zone and some other different parts of the City. One can only draw a general image of the City based on these descriptions. The city of Al-Madinah consisted of the Prophet's Mosque in the centre with his residence attached to it. In the surrounding area the different *khiṭaṭ* (territories) - later developed into quarters or neighbourhoods - were located which were assigned to different tribes. The existence of nine local mosques other than the Prophet's Mosque gives an indication of the distance between the Prophet's Mosque and these quarters. The distance may be great but, according to the description of Bukhārī (d. 122 H / 740 AD), these mosques were in different quarters and they performed prayer after their communities heard Bilāl's call. This gives an indication that these quarters were in the proximity of the Prophet's Mosque as they heard Bilāl's call for prayer. It is also an indication of the importance of performing the five daily prayers in congregational form in the Mosque. This was the reason for building these mosques at the time of Prophet Muḥammad (pbuh): to make it easy for the residents to hold their prayers within a reasonable walking distance. Although these mosques were small and only for daily prayers, they were true centres for each quarter.

Many descriptions exist on the development of Al-Madinah at later times such as the Umayyad, the Abbasid and later periods. At the time of Mu'awiyah ibn Abi Sufyan (41-60 H / 661-680 AD) there were three major thoroughfares leading to the Prophet's Mosque from the edges of the City. Their width varied from six cubits (3m) from the Prophet's Mosque to ten cubits (5m) at the end.

This spatial organisation was followed later when al-Amṣār, the newly founded cities by Muslims, were built. These Amṣār were developed and changed later, but they preserved the basic principles of the Muslim City. The central *Djami'* Mosque and the core of the City; the *khiṭaṭ* (quarters); the major and the minor connectors; and the local mosques are all considered to be the basic principles of the traditional Muslim city, which were learned from the spatial organisation of Al-Madinah al-Munawarah.

### 5.2.2 The Spread of Islam and the Development of Islamic Architecture

After the Prophet's death in 11H/632AD, Muḥammad (pbuh) was succeeded by four elected



Caliphs: Abū Bakr, 'Umar, 'Uthmān, and 'Alī. Under these rulers the new faith of the Muslims expanded beyond Western Arabia; and by 13H/634AD the rest of Arabia was conquered, and Palestine reached. By the end of 'Umar's reign, Damascus and Jerusalem had fallen to the Muslims, and also the Tigris and Euphrates basin, Eastern Persia, and Egypt. The significant mosques in this period are at Baṣra, Kūfa and al-Fuṣṭāṭ (al-Bayati, 1984).

Islam spread further eastwards beyond India as far as China. During the 9th-10th centuries H/15th-16th centuries AD, Islam spread to South-East Asia, especially Indonesia and Malaysia. Early examples of architecture in these areas are closely related to vernacular types, but few mosques are preserved from earlier than the 12th-13th centuries H/18th-19th centuries AD. Important examples include the Kuala Kangsur Mosque, and the mosque of Minangkabaum in northern Sumatra.

The Chinese had already adopted Islam as early as in the 2nd century H/9th Century AD in the northwest, but no records of this period in Muslim architecture remain. From the 8th century H/14th century AD, a good example of Muslim architecture was preserved, at the Hasi-Al Mosque.

On the other side of the Islamic world, in Africa, the Muslim armies found themselves confronted with vast distances and the task of converting the nomads of the *Ṣaḥrā* desert. Thus, Islam began its slow expansion through tribal Africa. In several areas of equatorial Africa, the spread of Islam has been going on since the 6th-8th centuries H/12th-14th centuries AD. **Vernacular architecture** dominated Muslim religious building up to the present, examples being the Great Mosque at Djenne in West Africa, and the Mosque of Fakr ad-Din at Mogadishu in Somaliland.

After the fall of the Ottoman Empire, the British held mandates for 'Irāq, Jordan, and Palestine; by 1339H/1920AD the French had mandates for Lebanon and Syria. By 1344H/1925AD 'Abdul 'Aziz Ibn Saud conquered the Ḥidjāz, and in 1357H/1938AD Ibn Saud took over Saudi Arabia. The architecture of this period has a particular significance, and begins with the British occupation of 'Irāq during the 1914-1918 World War and continues

until Iraq established its national government<sup>10</sup> (al-Bayati, 1984). The same source indicates that throughout the Muslim world colonial architectural trends provided significant links between the classical and the modern periods.

In Iraq the revolution came in 1378H/1958AD ending the British influence. In Egypt there was the 1373H/1953AD revolution; and in 1376H/1956AD Nasser nationalised the Suez Canal. In North Africa, Libya won independence in 1371H/1951AD; Algeria in 1382H/1962AD; and Morocco in 1376H/1956AD. The Muslim state of Pakistan came into being in 1367H/1947AD; and India also gained independence at this time. In Iran the Shah continued to rule, while in South-East Asia in 1369H/1949AD Indonesia gained independence (al-Bayati, 1984).

In the post colonial modern era, many architects from nations of the Muslim world studied architecture in the West. There they became influenced by the various modern ideals, bringing these back to their own countries and a new development of Islamic architecture appears. Muslim architects became indifferent to their local environment because they were imbued with foreign ideas that made them unsympathetic to the climatic and social conditions of their own countries. Inevitably the architecture they adopted was foreign; and even if their individual buildings were well designed, they were not compatible with the life of a traditional Islamic city.

The Architects of this generation have tried to utilise forms copied directly from the West, or from hybrid traditions in other Islamic countries. Though they came from Islamic

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<sup>10</sup> During this period English architects had many posts in the colonial administrative departments. Most of these architects had served in India or were Indian: thus there is a noticeable Indian influence in British Colonial architecture. After the fall of the Mughal Empire, Delhi was taken by the British in 218H/1803AD; and the subsequent architecture of this period in India is really one aspect of British colonial culture. In the Nile Valley, Egypt and Sudan were under the direct control of the British. The same trends occurred in North Africa where Libya was forcefully occupied by the Italians, who took over from the Ottomans in 1331H/1912AD; Tunisia, Algiers and Morocco came under French control. In Iran, the discovery of oil in 1326H/1908AD established British interest in the area. In the other parts of the Muslim world Britain colonised Nigeria. In SouthEast Asia, as in Sumatra, Islamic influence was experienced despite Dutch and British colonial rule. In Central Asia in 1337H/1918AD the Turkestan autonomous Soviet Republic came into being, and by 1343H/1924AD this region was established under the name of the Uzbek Soviet Socialist Republic (al-Bayati, 1984).

countries, their concern was never for the original Islamic context of their buildings. Nevertheless, two new groups of architects emerged who believed in developing an architectural style which was modern in both concept and technology; and yet influenced by traditional elements. Examples from this period include the Bunniya Mosque in Baghdad, which is based on abstracting a modern form from a traditional one; the Khulafā' Mosque in Baghdad, where a traditional form is incorporated into a Western concrete architectural type; and the village Mosque at Gurna by Hassan Fathy in Egypt, built in using the traditional methods. Al-Bayati (1984) argues that the International Style in architecture has changed dramatically since the 1960's, and today there is the 'Post Modern' style. The difference between Late and Post-Modern is simple. Late Modern architecture takes to an extreme the form of the Modern Movement, while Post-Modern architecture combines the Modern Movement with other Historical Movements. These architectural developments affect the Islamic world in a different way, especially in the Middle East, and, in particular, the Arabian Peninsular. Rapid changes have transformed the economy of the area because of the discovery of oil; and the subsequent creation of modern Arab cities with programmes of rapid development and planning. Modern Islamic architecture is a result of these influences. The first phase is characterised by a leading Arab architect at the time, Sayid Karim, back in the 1950's when Kuwait started its programme of development. During this period, forms using modern materials were sometimes combined with local forms (*ibid.*).

### **5.3 Al-Madinah's Special Quality**

Al-Madinah was, as has already been noted, the political capital of the original Islamic state for barely longer than a third of a century, but it has also served as a Holy City for more than fourteen centuries already, and it will retain the exalted status of being one of the two *Ĥaramayn* (two Holy Mosques) for as long as Islam continues to be one of the World's principal living religions (Toynbee, 1970). Thus, the following text attempts to elaborate upon both the political and Holy qualities of Al-Madinah.

#### **5.3.1 Al-Madinah the First Capital**

The Muslims' rise to power in the sixth century BC, Muḥammad (pbuh) started his political

career as the ruler of a tiny statelet. The nucleus of Muḥammad's and his successors' dominions was the oasis of Yathrib, now known as Al-Madinah, meaning 'the City', i.e. the City of the Prophet. Muḥammad (pbuh) lived to bring the whole of the Arabian Peninsula under his rule and, after his death, his successors emulated Cyrus's feat of overthrowing two great empires and annexing their former dominions.

Toynbee (1970: p.128) argues that the government at Al-Madinah had put Al-Madinah out of business by acquiring an empire of this extent. Al-Madinah, on the caravan route between Yemen and Syria via Makkah, was too distant from the demographic and economic centres of gravity of the new Islamic territories. The capital of government would have to be located elsewhere if it was to administer the whole of its enormous domain. In the event, the capital of the Arab Empire was transferred from Yathrib to Kūfah, by the fourth successor, 'Alī b. Abī Ṭālib in 657 AD, then the capital was transferred to Damascus, in 661 AD. In 750 AD it was re-transferred from Syria to 'Irāq, and here, in 762 AD, a new city, Baghdad, was laid out to house the capital.

Nevertheless this author challenges the claim that the city of Al-Madinah lost its status as the capital of Islam because it could not cope with the huge Islamic expansions. The biography of 'Alī b. Abī Ṭālib, as the Prophet's cousin and a great companion, makes clear that from the city of Kūfah he constantly considered the major role of Al-Madinah both spiritually and politically as the heart of the Muslim world and the centre for its decision making. Kūfah was nothing but a battle station from which 'Alī b. Abī Ṭālib could control uprisings resulting from the third Caliph's murder that were about to become a genuine threat to the political order established since the Prophet (Shurāb, 1994).

The second event that Toynbee cites, having Damascus and not Al-Madinah as the capital of the Muslim world, should be examined carefully. It is not that Damascus was favoured above Al-Madinah in having advantages from a political and economical perspective. It is rather that the political milieu was not paved for Mu'āwīa (the founder of the Umayyad Dynasty) at Al-Madinah, which was full of his opponents; while he was already established in Damascus, having been its viceroy for 30 years. This is best understood when tracing the decline of the Umayyad Dynasty and the rise of the Abbasid. Damascus then lost its position as the seat of the Islamic Empire for Baghdad (ibid).



The above instances shed the light on the political conflicts that forced the legitimate Islamic leadership out of its natural locus, that of leading the Islamic World from Al-Madinah, following the Sunnah of the Prophet and his guided Caliphs. During their time Islam had witnessed its golden era: the spiritual quality of the Muslim community was vivid, the community was more devoted. Thus the early conquests of the Byzantine and Sassanian Empire were more powerful and effective.

Furthermore, it is not necessary for a capital to be in the centre of the premises of the state. This is not the case in many capitals in modern history, e.g., Washington in the U.S.A., Moscow in Russia and New Delhi in India. It is the feasibility of communication of the capital with its different territories that matters and the communication between Al-Madinah and remote battle sites and lands during the reigns of the guided caliphs was very efficient assisted by the annual conference for all Muslims and leaders, i.e., the pilgrimage season to the holy lands, in which the Caliph was able to review the status of the different Muslim communities in all the Islamic domain. Also, Al-Madinah's fertile lands should not be underestimated. It had a very fertile volcanic soil as well as oases located in the middle of a major trade route, which maintained the independence of its community over a long period of time.

It is accurate to maintain that Al-Madinah was always, and is the only capital of Islam. In their modesty, the guided caliphs believed that the priority of conquest should go to rise the name of God and his religion and they worried that the false civilisations of the captured lands could contaminate the souls of the Muslim warriors. It can be argued then that Al-Madinah could effectively be the capital as long as the resolution of faith was clear. It is this intangible spiritual dimension again that was always overlooked by the different writers who dealt with a purely empirical or administrative way with Al-Madinah's role as the first capital of Islam (ibid).

### **5.3.2 Al-Madinah as a Holy Place**

The particular cases of Assisi and Makkah raise the general question of how cities that have become Holy Cities have acquired this status. In some cases their holiness has been conferred on them by their association with some holy human being, or by some particular crucial event



or events in a holy human being's life (Toynbee, 1970).

Yathrib (Al-Madinah), like Assisi and like Bethlehem, would never have become a Holy City if a charismatic personality had not come to be associated with it. Yathrib, unlike Makkah was, like Ṭāʾif, a self-sufficing city-state which drew its food supply from the fields and palm-groves of an oasis. Yathrib did not have to live, as Makkah had to, by commerce conducted under the guarantee of religious sanctity. Yathrib would never have become a Holy City if it had not become 'the City of the Prophet' (*Madinat-al-Nabī*) by virtue of its having been the scene of the successful second stage of his career and the site of his tomb.

Being a charismatic personality's birth-place or being the scene of his subsequent mission are not the only forms of local association with such a personality that can make a city holy. A city can also become holy through having been the scene of a transcendent spiritual experience, whether authentic or legendary. For instance, Jerusalem is a holy city for Muslims because the Prophet Muḥammad (pbuh) believed that this was the place where, on 'the Night of Power', he had ascended into Heaven and re-descended to Earth. The most tragic of all possible events in a prophet's life is martyrdom, and the holiness of the scene of a martyrdom is enhanced if the martyr has been buried in the same place. Neither a martyrdom nor a tomb is indispensable for the making of a holy city; the belief that the place has been the scene of a miracle can be equally efficacious (Toynbee, 1970).

In the past, religion has normally been an element in urban life, and indeed the most prominent element, by virtue of the paramount importance of religion among the various kinds of human activities (Toynbee, 1970).

In a Sumerian city-state the corporation of priests who managed the tutelary god's or goddess's affairs also managed *ex officio* the city's economic life; and, in cities that have come to be Holy Cities first and foremost, religion and economics have usually retained their original association with each other. This is illustrated by the cases of Makkah and Assisi.

For anyone today, Muslim or non-Muslim, Makkah is primarily a Holy City by virtue of its having been the home town of the Prophet Muḥammad (pbuh) - the town in which he was born and brought up and which he conducted his prophetic mission before his migration to

Yathrib (Al-Madinah). Yet Makkah had been a Holy City long before Muḥammad (pbuh) set his seal on its holiness. Muḥammad (pbuh) enhanced Makkah's already established holiness by being a Makkahn citizen born; by eventually giving his blessing to the worship, in the Ka'bah, of one of the Ka'bah's gods; and by also giving his blessing to the annual pilgrimage to Makkah, which, in virtue of the Ka'bah's long-since established sanctity, had already become a place of pilgrimage.

The Ḥadj to Makkah is traced back by Arabic historians to very ancient times. It dates back to the rebuilding of the Ka'bah at Makkah by the Prophet Ibrāhīm (Abraham) after the global deluge at the time of the Prophet Nūah (Noah), which is said to have taken place in the latter years of the second millennium BC (Mecci, 1979). The Ḥadj seems to have continued since the time of Ibrāhīm, though through the centuries pagan and idolatrous practices were introduced to it.

Moreover, the prestige of Makkah's sanctuary, and the annual pilgrimage that was a tribute to this prestige, were indissolubly associated with Makkah's economic role as a commercial centre for a zone in Arabia that extended far beyond the frontiers of the Makkahn city-state. Makkah, like its forerunners Petra and Palmyra and unlike Ta'if and Yathrib, was not an agricultural oasis. It did possess a spring, the famous Zamzam without which the site would have been uninhabitable. But Makkah had to earn its living by trade; in the anarchic world that Arabia was in almost all ages before the creation of the present Sa'udi state, commercial travelling was practicable only if and when there was a temporary truce; the only sanction for a truce in traditional Arab society was a religious one; and the annual fair, attended by commercial travellers from distant parts, which was the mainstay of Makkah's economy, could be held only on condition that this fair was also a religious festival and that, in consequence, the commercial travellers who attended the fair at Makkah could count on enjoying a temporary immunity from attack by virtue of their being pilgrims as well as business men. Muḥammad (pbuh) himself was a typical Makkahn of his day in having earned his living as a conductor of caravans between Makkah and Damascus before he became first a prophet and then a politician as well (Toynbee, 1970).

## Concluding Remarks

One should not overlook consideration of the subtle web of convention drawn from the *Qur'ān* and the *Sunnah* whereby the Muslim character displays itself at both the individual and collective levels: the rules of politeness (*adab lil-nās*) comprising all the gestures, attitudes and words used by people on meeting, congratulations on happy occasions, consolations in life's trials, calling upon God as witness to their common dependence and hoping for His Infinite Mercy for one another. It also demands good behaviour towards God (*adab lil-lah*), which includes the wearing of traditional garments and headwear, no less than the utterance of certain *Qur'ānic* formulae such as *In shā' Allah* - 'If God will!'; the *basmalah* - in 'the Name of God'; and the *ḥamdalah* - 'praise God!' - whereby a believer, accepts that it is God alone who orders all things and dispenses all benefits (Michon, 1980).

These observations lead us to the affirmation that religious institutions are a kind of matrix within which the Muslim personality is positively enwrapped in the recollection of Divine Unity. This is why no enumeration, however detailed, of the precepts and regulations of religious law could possibly exhaust the contents of Muslim life. **Within the institutional framework which shapes it, there are transformations and syntheses at work** in a veritable spiritual alchemy which owes everything to Islam but transcends its strictly normative aspects (*ibid*).

**The Revealed Message has two dimensions or aspects: one that is outward and on the surface (synchronous dimension) and another that is inward and deep (diachronous dimension).** The first is the Law (*shari'ah*) which is binding for all responsible men, ties them to itself by reason and rules their faculties of feeling and action. Followed to the letter, it restores creatures to their original status, and shapes them to attain to the paradise promised in the Hereafter. The second is Truth (*ḥaḳīqah*), which concerns the essential realities hidden behind outward appearances and is perceptible only to the 'eye of the heart' open to contemplation. It is like the anticipation in this world of the vision God accords to His intimates<sup>11</sup>.

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<sup>11</sup> For an analysis of these ideas based on the teachings of the Shadhili school, cf. J.-L. Michon, *Le Soufi Marocain, Ahmad Ibn 'Ajiba et son Mi'raj, Glossaire de La Mystique Musulmane*, Paris, 1973, 57-63.

The Islamic Community has, from the beginning, acknowledged the existence of a hierarchy of spiritual qualifications in its members, a gradation based not on any social or external criteria but on the degree of a man's absorption in his religion. As in the terminology of the famous '*ḥadith* of Gabriel', one speaks of three categories of the faithful: the *Muslim* who conforms to the five pillars of religion, the *mū'min* (believer) who adheres to sincere faith in the revealed truths, and the *muḥsin* (virtuous) who adores Allah as if he saw Him, 'for if thou see Him not, He seeth thee!' (Michon, 1980).

Knowing that its purpose and destiny is to have men live consciously beneath the eye of God in order that each may receive his due portion of the Light and Mercy for which he is destined, the Islamic City has long striven to preserve its institutions as the providential means of this flowering. Hence the truth that the contemplative potentialities which Islam bears in itself have never been expressed with such vigour in art, philosophy and mysticism as during the periods when the *shari'ah* was the great Law of the city.

These periods appear to be a thing of the past. After taking over political institutions, secularisation has spread to the realms of public and private law, education, fiscal practice and the judiciary. Today, the unity of the Muslim Community is more than ever compromised by national rivalries and ideological dissensions which rarely have anything to do with the ultimate interests of believers.

In the light of the above it should be clear that the organisation and functions of any institutions in traditional Muslim cities, though they did naturally vary, sometimes considerably, with variations of time and place, reflected the consistent concern of Muslim communities everywhere to live in accordance with *the shari'ah*, conceived both as a system of laws and as a code of ethics. So long as these institutions, taken together, were able to facilitate the pursuit of the good life on earth as a prelude to salvation in the hereafter, Muslim societies and scholars, it would seem, were not particularly concerned to have the institutions in question or their functions organised along the principles of any abstract system, however attractive that might have appeared to be. As we have seen, therefore, there was a considerable amount of institutional and functional overlapping and dove-tailing which may, in certain respects, be likened to the overlapping and criss-crossing of buildings and streets in traditional towns and cities throughout the Muslim world (Abdel-Rahim, 1980).



And just as, on the physical plane, the impact of a modern American and European-style life on Muslim cities has been to shatter or, at least, by-pass, traditional styles of building and architecture, so have the social fabric and legal institutions of these cities been transformed or supplanted by European-style concepts and institutions - and with no less a degree of incongruity and destructiveness.

Thus, while *Muhtasibs* (official guardians of moral standards) have completely disappeared - except perhaps in Morocco where some still linger on, though in a much diminished form<sup>12</sup> - the role and functions of *Qaḍīs* (judges), as indeed of the very system of *shari'ah* laws on which all institutions and social values were traditionally based, have likewise, been largely transformed or by-passed. It is obvious, therefore, that the preservation and renovation of Islamic cities, if that objective is to be realised, must be an all-encompassing process of total reconstruction and rejuvenation (Abdel-Rahim, 1980).

In the colonial period the West brought its values to the Islamic City. Western planning was implemented next to older existing cities in Cairo, Tunis, Baghdad and so on. Designed as separate entities, the colonial incorporated wide, straight avenues in a grid pattern with Mosques on the main road isolated from other buildings. Now following the modernisation of the old Islamic cities, an integration between the old parts and the new, and a re-evaluation of the past, must be sought. It is possible that the old Islamic City can survive the social, economical and physical needs of today, but this will be difficult. If it is possible to achieve a co-existence, the future shape of the Islamic City will always keep intact its Islamic social and cultural core as long as it is inhabited by Muslims.

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<sup>12</sup> The distinguished Moroccan scholar Shaykh 'Abdullah Gannun said that although *Muhtasibs* are still to be found in such cities as Fez, Marrakech and Tangier, their functions have shrunk to such minor matters as the supervision of the smaller bakeries to be found in the backstreets of qasbahs, and the control of certain groups of folklore entertainers. Since the functions traditionally entrusted to *Muhtasibs* have been largely taken over by modern type municipalities; moreover, it is policy in Morocco that when any of the remaining *Muhtasibs* dies, a replacement is not appointed (Abdel-Rahim, 1980, p. 51).



# PART TWO

## CASE STUDY, DATA ANALYSIS AND DISCUSSION

### SECTION A

#### QUESTIONNAIRE DESIGN AND METHODS



*Al-Madinah Al-Munawwarah*

# CHAPTER 6

## Introduction

## THE SURVEY METHODOLOGY

In Chapter 1 we discussed the importance of research in the study of Islam and the need for a variety of methodological approaches. It also discussed the importance of the survey methodology in the study of all aspects of life because the primary objective of this methodology is to provide information about the social and cultural life of a community. This methodology is used to study the social and cultural life of a community by collecting data from a representative sample of the community. The survey methodology is used to study the social and cultural life of a community by collecting data from a representative sample of the community. This methodology is used to study the social and cultural life of a community by collecting data from a representative sample of the community.

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### **Introduction**

In Chapter Five the investigation showed how the Muslim city has passed through a process of transformation and change. It also showed briefly the ways by which this transformation covered all aspects of life despite the evident difficulty of drawing a comprehensive picture of the scale of this transformation. It is almost impossible to predict how much is left of the traditional Muslim city in terms of its physical and non-physical aspects. The concern of this chapter, therefore, is to test the nature of the people's image of the city of Al-Madinah, in the wake of a process of modernisation that has covered all aspects of Muslim lives and living environments.

Recognising that all Muslim cities share common features, issues, values and problems, in spite of their differences in many aspects of social and political life, norms and customs etc., such needs and requirements go beyond those which one expects from the cities of more secularised cultures, in that they include a spiritual dimension which is vital for inhabitants, visitors and the like. Based on these points, this chapter will examine the relationship between the people's perception and image of the city of Al-Madinah and its structure in transformation, by applying a combination of quantitative and qualitative techniques. The author has used a quantitative technique to collect measurable and personal information and also qualitative approaches based on an open-ended questionnaire, cognitive maps, and the First Image technique described later in this research.

To understand the role of environmental images in the urban life of the city of Al-Madinah, it was necessary for the author to look carefully at the City as a whole and some of its areas of particular significance and to talk with its inhabitants. This served to develop and test the idea of imageability then, by comparing this to an objectified model of the visual reality; to learn which forms generate strong images. A survey was done in the belief that the analysis of the existing city fabric and its effects on the citizen should be one of the foundation stones of its design, and in the hope that some useful techniques for field surveys and citizen interviews might be developed as a by-product. As in any small pilot study, the purpose was to develop ideas and methods, rather than to prove facts in a final and determinate way. The

concern of the case study was based upon the two analyses which were carried out by Lynch (1960) in his survey. They are:

1. A systematic field reconnaissance of the area which was made on foot by a trained observer, who mapped the presence of various elements, their visibility, their image strength or weakness, their connections, disconnections and other interrelations, and who noted any special successes or difficulties in the potential image structure. These are subjective judgments based on the immediate appearance of those elements in the field and their associations with the subjective matters which were asked via a new method developed by the author, i.e. The First Image.
2. A lengthy interview which was held with a small sample of city residents to elicit their own images of their physical environment. The interviews included requests for descriptions, locations, and sketches, and for the performance of imaginary trips (the interviewees were those who had been long-term resident or employed in the area, and whose residences or work places were distributed throughout the zone in question).

Thirty-seven people were interviewed. The small size of the samples and their lack of bias among either old and young residents do not prevent us from stating that a true "image" has been gained, for the variation of the respondents' ages and experiences as explained in Chapter Seven.

## **6.1 Aims and Scope of the Survey**

Based on our discourse in Part One, and also on certain issues raised by this analysis, the survey in this chapter sets certain objectives in order to clarify specific issues. These issues related to the image of the city of Al-Madinah. The broad issue is related to the investigation of the relationship between the physical setting of the City and the image perceived by the people. The research thus aims to investigate the type and the strength of this relationship and the possibility of its impact on the fabric of the City, which is the author's concern as well as that of many other professionals in the built environment.

Such queries come to mind when examining the contemporary Muslim city in relation to the image of their citizens. So, the main objective of this field study can be summarised in the following major points which are about knowing:

- a) the image of the City;
- b) factors underlying the structure of the City;
- c) importance of the spiritual dimension (believing that this is an Islamic City);
- d) relationship between the spiritual dimension and the physical setting of the City;
- e) subjective image of the City (which is related to the structure of the City and social and cultural issues in the old and new urban habitat);
- f) reasons of losses of traditional urban texture and its effects on urbanism; and
- g) ways of avoiding further damage and finding better solutions for maintaining the City's historical heritage using different methods derived from Islamic Legal System.

1. It was the author's intention to compile a city image of Al-Madinah that relates to the complex, multi-functional urban core that the Prophet Muḥammad had established 1420 years ago. As much of this original fabric has been demolished in the past 14 years and replaced with the single function of the Mosque, it was necessary to trace people who had an in-depth knowledge of the Al-Madinah of 14 years ago.

2. The intention is therefore not to compile a representative, statistically supported idea of how Al-Madinah is perceived over a large, average population sample, for this thesis is an exploration of Islamic cultural identity as much as a research into city images; it uses the city image theory as a tool to re-construct a mental picture of the one city whose character stretches back unbroken (until recently) to the founding of Islam.

3. The questionnaire aimed therefore to enrich the notion of city image.

In order to reach these objectives the questionnaire, cognitive map and first image techniques used were designed to cover these points in a limited number of questions. The following parts will explain how the questionnaire, the cognitive map and other related issues were developed.



## 6.2 Questionnaire Methodology

To gather information about people's feelings and attitudes which construct the image of the city of Al-Madinah, the author carried out a social survey, an open-ended questionnaire, and personal interviews. The questionnaire is semi-structured - using the method of qualitative research - and asks people about the reasons of their responses in order to reveal their opinion in depth. The questionnaire asks about people's likes and dislikes concerning their city and its landmarks. The main process involved in analysing people's attitudes towards the topic raised in the questionnaire is to categorise and order the gathered information. This allows the author to extract valuable 'nuggets' of information from an ocean of responses (more than 900 pages of data). The survey represents a further continuation of the theory referred to in the First Part, i.e. the literature review: it is a methodological approach to refer to the position of the relevant theories mentioned in the discourse. Figure 6.1 shows the research model of the case study outlining the course of action adopted in this research.

The main objective of the present research is to test people's responses, opinions, their awareness of the various events, and their interaction with the environment of Al-Madinah. Therefore, the subjects of the questionnaire were its citizens as they are capable of describing most of the historical and religious events, landmarks and sites and allocate them. While its visitors, even if they are aware of some few of these events and places through some readings, they will not be able to allocate them as they have not experienced them sufficiently for having not lived there enough. It is thus Al-Madinah's citizens who have experienced, acted and interacted with these places, which creates an effective cognition of Al-Madinah in their conscious. This makes it possible to examine its qualities and the effect of the modernisation of its built and natural environment on people's cognition. Consequently, it would be possible to suggest appropriate solutions that can enhance Al-Madinah's image to transcend its symbolic messages and affect positively both its visitors and people in the future.

Because of the indicative and descriptive nature of the study, there was no need for to approach large sample (see Bryman, 1995). With this in mind the author sought assistance from his father, who inherited encyclopedic knowledge of the history of Al-Madinah handed

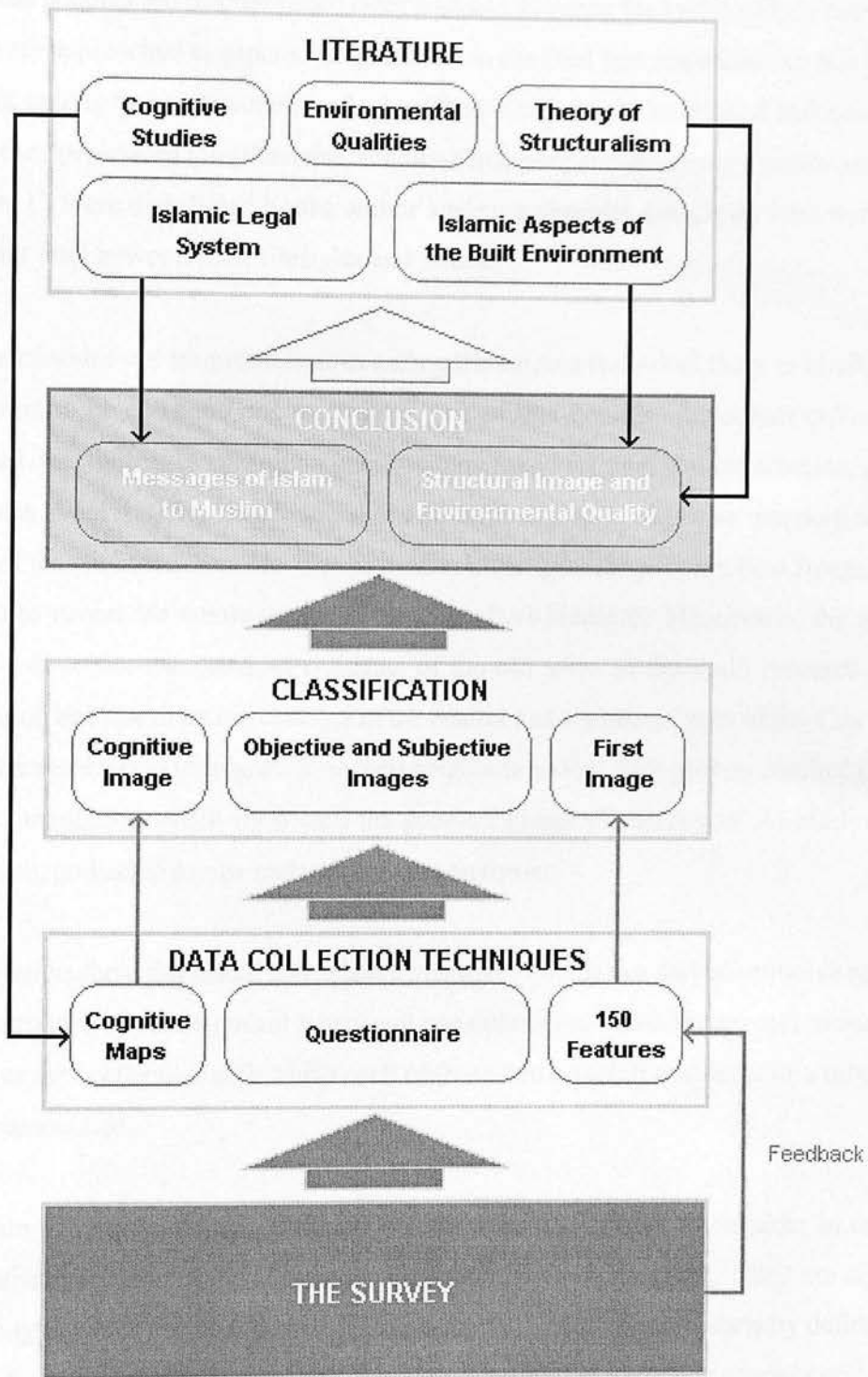


Figure 6.1: Research Model of the Case Study (Source: the author)

down from his father, who lived to be 110 years old. He shared the author's interest in exploring into the image of Al-Madinah and was able to indicate five people who had had direct experience of old Al-Madinah and could contribute a deep knowledge of living in the

City. These people each recommended other contacts, bringing the total to 43 citizens. These people were approached as experts, as specialists in the field that combines Islamic history, traditions, culture and architecture, and whose knowledge could be elicited and given form through the open-ended questionnaire, cognitive mapping and first image techniques used. A further 17 were distributed by the author among a younger age group who were more conversant with newer trends, lifestyles and issues.

The author handed out 60 questionnaires among the citizens and asked them to kindly fill in the answers to be collected one week later. Out of that number, the author collected 37 completed questionnaires. The main questionnaire asked for personal information, general preferences about the City and its social and cultural structure, cognitive mapping and 150 features of the City (which would later be used to investigate the people's First Images). The reason is to reveal the whole image of the city of Al-Madinah. Meanwhile, the author's concern was to use the previous residents of the old town as the main resource of this investigation because dramatic changes in the central and traditional part of the City forced some of the residents to immigrate from their neighbourhoods<sup>1</sup>. This process resulted in a 900 page documentation which illustrated the people's image of the city of Al-Madinah Al-Munawarah, and acted as raw material for data analysis.

The discussion about the nature and relative virtues of qualitative and quantitative research reveal a mixture of philosophical issues and considerations of the virtues and vices of the methods of data collection with which each of these two research traditions or a mixture of them are associated.

In designing any questionnaire there are certain steps which need to be taken in order to ensure satisfactory results and to meet the main objectives of the study. There are different methodologies which can be followed. The one applied in this research starts by defining the concept of the main theme of the thesis, the "City Image". Defining this concept will give a clearer, but general, perspective of the study. This represents the first and basic step for the rest of the process. In later steps certain issues will be extracted from this definition, each

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<sup>1</sup> These developmental projects started in 1406 H/1986 AD in order to solve many problems, among them the problems related to the maintenance and accessibility of the traditional quarter.

being more specific than the previous general concept. Gradually, the issue will become more precise and directed towards the actual situation of the image of the city of Al-Madinah within the built environment. The purpose of this gradual process is mainly because the city image is a non-measurable concept; it involves intangible and non-physical aspects.

After determining the major points and the specific issues believed to be the targets which need to be tackled, the concept of the city image develops a measurable dimensions. In other words, by breaking it down into smaller issues the questions can develop, one can reveal the images, feelings and attitudes of the people through their answers. This will give certain results which will be translated into indicators by which the nature of the city image within the contemporary city of Al-Madinah will be measured and understood.

### 6.2.1 Clarifying the Concept of "Image"

Beside the definitions cited in previous chapters and after our discussion about the scientific methodology used in this survey, the author would like to refer to some theoretical issues conducted by Hoover (1988) which help us to gain insight into the complexity of the whole process of the questionnaire and the City Image. Hoover says: "Just as science is not technology, neither is it some specific body of knowledge" (p.4). The popular phrase "*Science tells us* [for example] that smoking can kill you" misleads. 'Science' does not tell us anything; people tell us things; in this case, the people who have used scientific strategies to investigate the relationship of smoking to cancer. Science, as a way of thought and investigation, is best conceived of as existing not in books, in machinery nor in reports containing numbers, but rather in that invisible world of the mind. Science has to do with the way questions are formulated and answered; it is a set of rules and forms for inquiry created by people who want reliable answers (ibid.).

In becoming more self-conscious of our own habits of thought, one finds that there is some science in all of us. We **measure, compare, modify beliefs** and acquire a kind of 'common sense' about evidence in the daily business of understanding what to do and how to relate to others. The simplest of games involves the testing of tactics and strategies against the data of performance, and that is crudely scientific (ibid.).



The scientific way of thought is one of a number of strategies by which we try to cope with the uncertainty of life. We can not know the consequences of many of our actions and may only have limited ideas of the forces that affect us directly or otherwise. In even the simplest task, such as choosing what to eat, we form a reasoned conclusion as to what might taste good or what might be good for us (ibid.).

The same source concludes his discussion by emphasising on the fact that the intricate task of getting people to bridge the differences that arise from the singularity of their experience requires a more disciplined approach to knowledge. ***Knowledge is socially powerful only if it is knowledge that can be put to use.*** Then he claims that social knowledge, if it is to be useful, must be *communicable, valid, and compelling.*

The main point of this discourse is that no one can double-check everything that goes on as the mind deals with inner feelings, perceptions of experience and thought processes. Science brings the steps of inquiry out of the mind and into public view so that they can be shared as part of the process of accumulating knowledge. That is true whenever an author attempts to justify the result of the survey analysis in a scientific way or to contribute to the literature.

Many commentators, among them Hoover (1988), believe that custom is not all bad, for it may embody the lessons learned from a long, often unhappy, experience with reality, in a true way, scientific and frequently holds communities together. Yet the task of any social science must be to understand why things are the way they are, as well as how the elements of social life can be reformed to allow for more humane patterns of personal development and expression. The weapons in this struggle for understanding are not only science with its procedures for disciplining inquiry<sup>2</sup>, but also the **intuition** that life can be better than it is.

Our discussion in Part One indicates that the method of any effort at understanding involves a tension between thought and investigation. There are various ways of linking these two components. The mystic perceives an inner truth and interprets 'signs' that he or she finds in

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<sup>2</sup> The elements of a scientific strategy are, in themselves, simple to understand. They are: concepts, variables, hypotheses, measurements and theories. The way in which these are combined constitutes the scientific method. It is the function of theory to give meaning and motivation to this method by enabling us to interpret what is observed (Hoover, 1988, p. 25).



reality as symptoms of the validity of the insight. The historian looks for patterns in the past and, having conceptualised them, suggests their usefulness in interpreting the meanings of events. Thus, the 'image of the city of Al-Madinah' in the world of Islam becomes a major interpretive concept. Accordingly, the author attempts to be more concrete than the mystic and more precise than the historian with respect to the *images* by which the research is guided, the data regarded as significant in the investigation and the *measures* used in testing mental constructions against reality.

### 6.2.2 Questionnaire Structure

The main purpose of this study is to explore the connection between the City and its cultural heritage by defining the cognitive image of the city dwellers. This is achieved through studying the elements of Al-Madinah's structure namely: its built; and natural environments, and their impact on the formation of the city image.

The unique nature of the history of Al-Madinah is that it is not separable from the life of the Prophet, as a book is not separable from the life of its author. Not only did he found it from the farming settlements of Yathrib, lay out its planning elements and principles that have remained intact until 14 years ago, established at its core his Mosque that currently attracts 2 million pilgrims annually, but he gave it its name Al-Madinah (the City).

**a) Built Environment:** This concerns the urban fabric, features and the various religious and historical events which set up the structure, cultural traditions and identity of the city.

**b) Natural Environment:** This concerns the ecological attributes of the City. Many of the City's natural features became salient landmarks, attached historically and spritually with the Prophet's (pbuh) *Sirah* (biography). Consequently, the inhabitants attach symbolic significance and social and ethical meaning to these features. They remind the Muslims of the Islamic concepts and social teachings that have been associated with these attributes.

This is intended to be explored in the questionnaire through investigating the following (the preservation and continuity of values applies across all dimensions listed below):

- **Spiritual Dimensions;**
- **Historical Dimensions;**
- **Cultural Dimensions (religion and traditions);**
- **Social Dimensions (life style, habits and human relations within the society);**
- **Physical Dimensions (both natural and man-made).**

The author redesigned the questionnaire upon receiving the result of the first pilot study and before redistributing it in the second stage of the survey. To simplify the complexity of the issues related to the objectives of the study, the questionnaire was classified into three parts, preceded by the personal information of each respondent. The three parts applied three different techniques. Each differs in collecting information about Al-Madinah as follows:

#### **Introductory Questions:**

- **Personal Information** (responding to Section A in the questionnaire):  
In which seven questions specify the respondents' personal data and their relation with Al-Madinah.

#### **PART I (Open-Ended Questionnaire Technique):**

- **General Information about the City of Al-Madinah Al-Munawarah** (responding to Section B in the questionnaire):  
In which seven questions cover general information of the City's texture through emphasising its historical events and development.
- **Special Information about Mosques, Historical Places and Ecological Sites in Al-Madinah Al-Monawarah** (responding to Section C in the questionnaire):  
Four questions about the City's land marks and place preference emphasise the architectural features, e.g. Mosques and historical urban spaces.
- **Special Information about the Cultural and Social Life (Customs and Traditions) in Al-Madinah Al-Munawarah** (responding to Section D in the questionnaire):  
These Five questions relate to the people's social and cultural activities and their

customs in relation to the changes of its urban fabric and in to visitors to the holy City.

- **Extra Information** (responding to Section G in the questionnaire):

This question seeks to invite any extra information that the respondents believe might contribute to the subject.

The nature of the questions was left open-ended, allowing respondents to feel free to provide whatever information they considered to be the most relevant and because the nature of the research is to study their images, which includes their personal priorities and value judgments.

**PART II (Cognitive Map Technique)** (responding to Section E in the questionnaire):

Aims to define the 37 respondents' concepts of the image of the City through explaining its most important features, using the cognitive map technique.

The last page of the questionnaire invited respondents to draw a sketch map - their cognitive map of how they understood their city to be structured. This was to be used merely as a further explanation and enhancement of the questionnaire answers, and not intended as a source of new evidence.

**PART III (First Image Technique)** (responding to Section F in the questionnaire):

Introduces a new technique developed by the author. This was developed using the principles of the *Rorschach Ink Blot Test* technique used in psychology and applying them to architecture. After the first pilot - study people were asked to give their first impressions upon hearing or reading about 150 important features from around the City .

In order to achieve a wide range of responses, the questions did not concentrate only on the built structure of the City but also on its areas, qualities, characteristics and social and cultural issues. For a comprehensive assessment, it was important to observe all these different aspects that interrelate in the built environment. As a rule, the author asked for two or three responses to each question. Then it was possible to find out the reasons behind each

issue mentioned. Answers usually assign preferences and determine attitudes in the view of each individual. However, it is evident that these questions should evoke responses about needs, desires, preferences, as well as about cultural and social tendencies or other important characteristics in the respondent's lives.

The second step, the compilation of responses, starts by summing up all the information and attempting to categorise it. This is the main step which is considered as the basics for taking information out of the questionnaire which triggered many responses in the first place. The third step, analysis of responses, is the author's interpretation of the responses which provide qualitative data, therefore, the analysis is not about statistical tests. The fourth step, the correlation of the responses, examines in greater detail any parallels among the responses and establishing any interdependence or mutual relation among them. Step two and three, will be repeated in case of two other techniques, i.e. Cognitive Map and First Image, the latter case, step four will be apply. Finally, information gained from the above can be analysis by adapting a framework of categories and dimensions.

### **6.3 Questionnaire Analysis**

This part will concentrate on the analysis of the responses from the citizens of the City of Al-Madinah, which is the case study of this thesis. The analysis is preceded by certain steps and techniques which will be discussed in more detail in the first part, "Analysis Methodology". The following part will more fully analyse the raw data from the answers of the respondents. Before that, the author would like to reiterate some of the theoretical approaches to environmental images and their implementations referred to by Pocock et al. (1978).

As a prelude to a more general discussion of the role and utility of environmental images in relation to built environment discipline, and in order to develop certain themes raised in the previous chapter, attention is here focused on the importance of secondary sources in image formation, with an illustration of their influence at the regional level of resolution. The justification for this emphasis is that, despite modern mobility, man is still dependent, to a considerable extent, on secondary sources for information on 'far places' (Tuan, 1975). The cumulative influence of schooling and second - hand experiences through the arts and other

media enable a person to know, and hold opinions about, many places outside direct experience. The general type of mental representation so formed may be considered an imagination-image, being simpler, less rounded and containing a higher degree of distortion than is found in a memory-image (*ibid.*). The relative proportions of these qualities can be the basis for a more precise subdivision into stereotype, an oversimplification, myth, or prejudice unresponsive to corrective, first-hand evidence (Allport, 1954). Examples of these will be evident in the following descriptions, although the generic term 'image' is generally preferred (Pocock et al., 1978).

Secondary sources are important in influencing, by implanted expectations or conditioning, image formation of those areas subsequently known at first hand. Therefore, an obvious contrast exists between the image of a place held by the resident native and that held by the outsider. This is seen in the replies to two sample population studies in the city of Hull<sup>3</sup> (Burgess, 1974).

The implications of this discussion are profound: they indicate that man exists in what the psychologists know as 'invisible landscapes', which strongly shape his mental images and his behaviour which should be considered in the case of Al-Madinah. To what extent does human behaviour seem complex because of the complexity of the information of the environment in which men and women are embedded? Children in areas of high accessibility, literally in the swing of things, tend to have a small but significant advantage on certain tests, due to their locations in these intense nodes of human activity and communication. Perhaps information flows are quickening and gradually wiping out former and well-established disparities. Even so, location in an information - rich space appears to have some measurable effect upon human abilities and needs further research.

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<sup>3</sup> Both groups made a few common selections from an adjectival checklist of 48 items such as 'docks', 'ships' and 'fish', but only the city's inhabitants emphasised elements of general structure, such as 'shopping facilities' and 'redevelopment', or positive affection, for example 'friendly' and 'parks'. Outsiders emphasised the negative attributes - 'heavy industry', 'unemployment', 'slums', 'smoke', etc. (see table 8.1 of the same source). The non-native sample was in fact presenting the stereotype of a nineteenth-century industrial town in the north of England, illustrating the general property of stereotyped images, namely the subsuming of individual variety within a broad generic type. Thus through its oversimplification, the stereotype becomes applicable to many cases or to a wide area (Pocock et al., 1978).



### 6.3.1 Analysis Methodology

After collecting all questionnaires, the second step was to sort out all the information and answers gathered from the respondents. This was aided by the author's hypothesis<sup>4</sup> extracted from the literature and his experience of Al-Madinah as a citizen of that city. The results of the analysis then reflect back onto the hypothesis and by doing so contribute to the thesis.

The bare bones of the scientific method, the actual procedure of research does not always start directly with the formation of an hypothesis. As a preliminary to stating hypotheses, social scientists will often examine the data collected in a subject area to see if there are interesting connections between the variables. The relationships brought to light by various statistical processes frequently suggest that the hypotheses would be fruitful to explore. Occasionally, simply getting involved with a set of data triggers an interesting thought, a chance insight, or a new idea. The author agrees with Hoover (1988), who points to the fact that a great quantity of data has been generated over the past few decades, so researchers can usually avoid having to begin at the beginning with every inquiry. The analysis of existing data can be extremely helpful in isolating new data needed to test a crucial relationship. This is only an outline of the scientific method. Hoover (1988, p. 32) refers to second methodology and claims that in the hands of a skilled analyst, other elements are introduced, such as:

- a) the use of alternative forms of **measuring** results;
- b) detailed conceptual analysis of the **variable** description;
- c) **relationships** between one's own study and others;
- d) tests of the validity of the **measuring** instruments;
- e) the use of **experimental** and control groups; and

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<sup>4</sup> The purpose of a hypothesis is to organise a study. If the hypothesis is carefully formed, all the steps of the scientific method follow, as does an outline for the project, a bibliography, a list of resources needed, and a specification of the measures appropriate to the study. The hypothesis provides the structure. A hypothesis is a sentence of a particularly well-cultivated breed. It is crucial to realise that a hypothesis is a *supposition*, as the *Oxford English Dictionary* points out, "which serves as a starting point for further investigation by which it may be proved or disproved. . . ." A hypothesis stands near the beginning, not the end, of a study, although good studies may suggest new paths of fruitful inquiry and new hypotheses (Hoover, 1988, p. 27).

- f) equally important, careful **conjecture** that goes beyond what is established in the test itself.

These elaborations on the methodology, however, relate more to the tools used in carrying out the method than to the method itself (ibid.). Consider the differences between two kinds of studies: first, an **empirical scientific study** (in which the author states his values, forms hypotheses, lays out a testing procedure, carefully selects and discusses measurements, produces a specific result, and relates this to the hypotheses); and second, a **nonscientific study** in which the author expresses values, develops a general thesis, examines relevant examples, and states the conclusions<sup>5</sup>.

Just as language arises out of the experience of coming to grips with human needs, so also does theory arise from tasks that people face. The hardest task is to explain what is 'really' going on. Hoover (1988, p. 34) explains that "a theory is a set of related propositions that suggest why events occur in the manner that they do". The next question is: What does a theory do? Hoover's answer (p. 35) is: many things. We will list four particular uses of theory in social scientific thinking which have been classified by the same author as followings:

1. theory provides patterns for the **interpretation** of data;
2. theory **links** one study with another;
3. theories **supply** frameworks within which concepts and variables acquire special significance; and
4. theory allows us to **interpret the larger meaning** of our findings for ourselves and others.

In discussing theory, we have presented a general outline of its common uses in social scientific research. What we cannot capture is the subtlety and creativity with which people think about what they are observing. Hoover (1988, p. 41) claims: "without theory social

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<sup>5</sup> Hoover (1988) states that 'reality' is the firm foundation of science. We have occasionally described science as, simply, reality testing. Since everybody thinks he or she knows what reality is, science acquires a fundamental appeal. Yet, the necessary partner of realism in science is that wholly imaginary phenomenon: *theory*. Without the many roles that theory plays, there would be no science.

science would be an incoherent and meaningless pile of observations, data, and statistics". However, it is clear that complex social problems need all the well-informed study we can develop. The organisation and evaluation of that knowledge in theoretical form is almost as important as gathering it in the first place.

### 6.3.2 Data Analysis

Before discussing the analysis, there are certain points which need to be mentioned. Variables often have different dimensions. A psychologist measuring personality might come up with a classification of introverted and extroverted personalities. He or she might also come up with a characterisation of like or dislike on a scale from 1 to 10, for example. These represent different dimensions of one variable: *personality*. Public opinion is usually analysed, for example by Hoover (1988), in terms of a variety of dimensions:

- a) **Direction** (the *for*-ness or *against*-ness of the opinion);
- b) **Location** (where on the scale from *for* to *against* is the opinion found?);
- c) **Intensity** (how strongly or weakly held is the opinion?);
- d) **Stability** (how changeable is it?);
- e) **Latency** (how close to the surface of the opinion structure is it?); and
- f) **Salience** (how important is that opinion in relation to others the person holds?)<sup>6</sup>

All these dimensions contain different measurement possibilities, and there are a variety of techniques available to handle them. The *direction* of opinion requires only a specification that tells whether the opinion is on the "yes" side or the "no" side. *Salience*, on the other hand, allows an ordering of opinions from no salience to very great salience. *Intensity* of opinion suggests the possibility of scaling (*ibid.*).

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<sup>6</sup> Adapted to Karan, Bradlee, 1973, "Public Opinion and the New Ohio Criminal Code", The College of Wooster, Symposium on Public Opinion and the New Ohio Criminal Code, July 9-30, pp. 6-8; and Key, Vladimir Ortando, Jr., 1961, *Public Opinion and American Democracy*, Knopf, New York, pp. 11-18. Key discusses variables in terms of their *properties* rather than their *dimensions*. With respect to public opinion, he uses the term "dimension". In recent usage, the term "properties" has become a general name for all the characteristics of a variable: its measurements as well as its various substantive components, or dimensions, which have acquired the more specific meaning.

Before doing much work on a variable, we should think over which dimension we are looking at and what the other possible dimensions might be. Therefore, we can select those dimensions that are most promising in reaching the core of the variable. By looking at alternative dimensions, choices can be made as to which dimensions get to the crux of the variable and which dimensions can be measured by the means available to you. At the same time, understanding the different dimensions of a variable provides perspective in which aspects have or have not yet been explored to understand the variable (ibid.).

One of the most persistent myths about science is said by many commentators, for example Hoover (1988), to be the fact that it can be entirely equated with **measurement**. Hoover also pinpoints the real creativity in science and stresses that it goes into the operationalisation of variables and the design of hypotheses. These very often require genuine creativity. While measurement occasionally approaches an art form, it is more typically a matter of technique and the systematic application of mathematical concepts (ibid.). As we shall see at the end of Part Two: Case Study, Data Analysis and Discussion, measurement has its own logic and clever devices.

## Concluding Remarks

The perception that people have of places, and the mental images that are formed from filtered information flows, are two of the major themes of this work. It was one thing to discuss these important facets of contemporary human society in general and somewhat speculative terms; it was quite another to try to measure those mental maps<sup>7</sup>. Yet the author had to take on this difficult task of measurement beyond the speculative stage, even as he recognised that the act of attempted measurement might itself be a filter that screens out important aspects of the very thing he was trying to capture with his numbers. Though the discussion fell between the two tools of technicality and over-simplification, as Gould et al. (1974) describe it: "we must try to gain some insight into this difficult area before we examine some of the images of historical space later on".

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<sup>7</sup> "By weighing, we know what things are light, and what heavy. By measuring, we know what things are long, and what short. The relations of all things may thus be determined, and it is of the greatest importance to measure the motions of the mind. I beg your Majesty to measure it" Mencius (*circa* 335 BC).

As we approach the difficult task of measuring the images that people have of places, we must start from one basic assumption: the mental map of each person is unique. This is not a difficult assumption to accept; we are all unique as individual human beings, we possess a unique set of personal experiences, and we have been subject to a unique set of information flows. Our mental maps reflect all these particular aspects of our lives, so it is hardly surprising that the images we form of places may not be shared exactly by others. The assumption is easy to accept because of its obvious truth, and because it gives us comfort in this increasingly homogenised world.

Therefore every respondent was asked to supply a sketch map that shows their image of Al-Madinah as part of the questionnaire, on normal A4 paper and with their usual writing pen.

At the same time it is an assumption that does not lead us anywhere in terms of trying to order our experience of the world so that we can understand it better. That every person's image of the world is unique is a truism so ordinary that it can lead to no useful analysis. Gould et al., (1974) refer to an instance and say that it is as though a botanist declared every leaf of a tree to be unique, or a physicist noted that no atom was exactly like another. Both would be correct, but neither would gain very much understanding about leaves and atoms. Any so-called analysis would consist of making huge catalogues of the characteristics of each leaf and particle and, quite apart from being analytically useless, they would be intensely boring. This is difficult to forgive on any grounds.

The refinements we have discussed are themselves just the beginnings of what can be done to elaborate and improve research strategies. We have sought only to map the major pathways of understanding and technique in this chapter. Further development of research skills usually comes not so much from slavishly following through methodology texts as from the interest generated by an informative survey such as the one introduced in the next chapter. As this chapter develops, methodological matters become more significant and more rewarding to learn.



# PART TWO

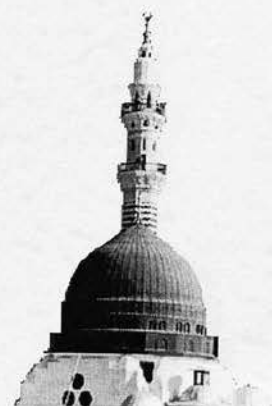
CASE STUDY, DATA ANALYSIS

AND DISCUSSION

## SECTION B

THE PUBLIC IMAGE

OF THE CITY



Al-Madinah Al-Munawwarah

# CHAPTER 7

## ATTITUDES OF

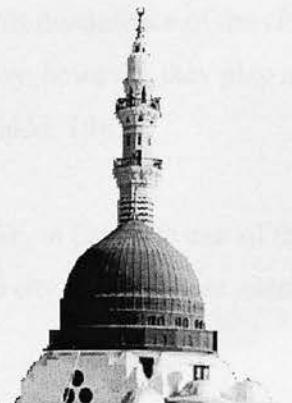
### AL-MADINAH'S CITIZENS: Historical Background of the City

7I: Open-Ended Questionnaire Technique

7II: Cognitive Image Technique

7III: The First Image Technique

7IV: Analysis of the Responses:  
Categories and Dimensions



Al-Madinah Al-Munawwarah

## Introduction

For the purposes of this study, this part has been divided into six sections. The first one concerns the geography of Al-Madinah while the following four sections concentrate on the historical background of the City, in which four distinct periods of development can be distinguished. These periods can be classified as: pre-Islamic times; the times of the Prophet and the Orthodox Caliph; the beginning of Omayyad Dynasty until the end of the Ottoman Rule; and the Saudi Era up to now. The last section is about the rules of Ḥadj and Ziyārah in Islam.

### 7.1 The Geography of Al-Madinah

Al-Madinah is situated in the Western Region of Saudi Arabia at latitude 24° 28' 6" North and longitude 39° 36' 16" East. It is about 150 kilometres east of the Red Sea and 497 kilometres north of the Holy City of Makkah. In early times, the city developed as an important transport centre in Arabia, being located on the ancient trans-Arabian caravan route that connected Syria with Southern Arabia. Today, it is on the cross-roads between Syria, Jordan and the northern part of Saudi Arabia; the fertile Ḳasiym area in the east; Yanbu' in the west; and Makkah, Jeddah and the Southern part of the Arabian peninsula (figure 7.1).

The city developed from an oasis on a plain bounded by mountains and lava flows sloping very gently downwards towards the north. Most of the plain lies at an altitude of between 600-605 metres, decreasing to 598 metres in the north and rising to about 620 metres in the south (figure 7.2). The mountains and lava flows contributed towards the defence of the city in early times, and they probably influenced its original siting. Today, however, they play an important role in controlling the direction of the city's growth (Makki, 1982).

The area is crossed by three main wadis (watercourses): Wadi Ḳanāh, in the north east of the city, Wadi Al-'Aḳiḳ, in the west and Wadi Baḥān cross through the city centre. These water-

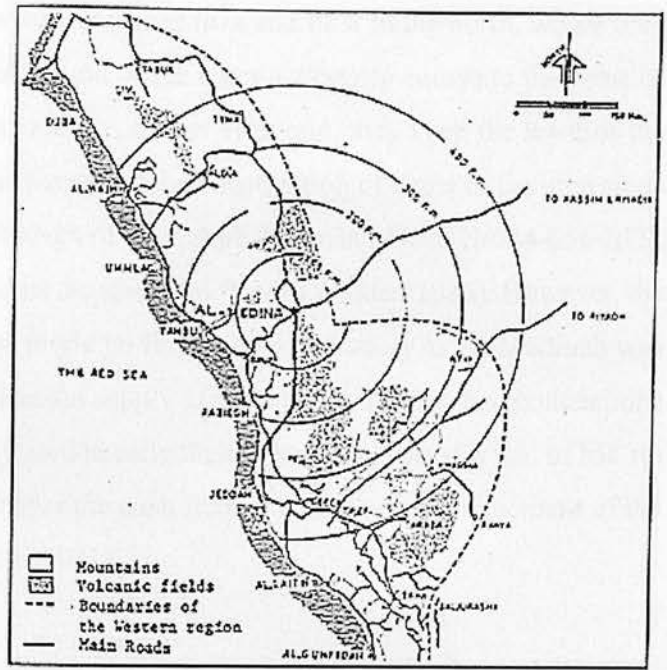


Figure 7.1: Location of Al-Madinah<sup>1</sup>

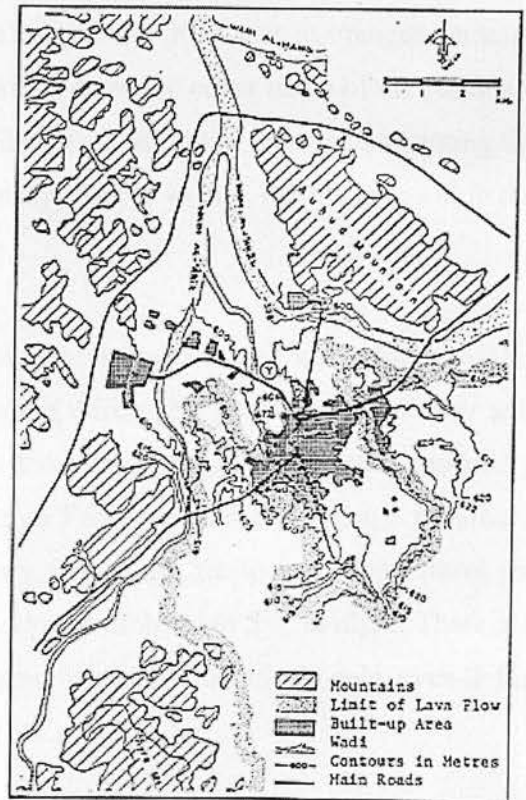


Figure 7.2: Physical Setting of Al-Madinah<sup>2</sup>

<sup>1</sup> Source: GACDAR (Group of Arab Consultants for Development and Reconstruction), 1978, **Project No. 202**, Ministry of Municipal and Rural Affairs, Riyadh, Report No. 4, p. 3.

<sup>2</sup> Source: Makki, M.S., 1982, *Medina, Saudi Arabia a geographic analysis of the city and region*, Avebury, England, p.5.

courses come from the eastern and western areas of lava and flow to the north, where they combine and then merge with Wadi Al-Ĥimḍ which takes a westerly course to the coast of the Red Sea (Fig. 7.2). Although they are dry, except after rain, they keep the level of the water table fairly high, particularly as a result of the construction of dams in the area since ancient times. It is reported that in the reign of the Caliph 'Uthmān (24-36 H/644-656 AD), a dam was built to protect the city against the threats of floods (Winder, 1986). However, the origin of dam construction in the area might go further back in history as Al-Madinah was well known for agriculture and its plentiful supply of water; also the area had connections with Yemen, where dams were widely used in early times. One such dam was that of Mā'rib which is said to have burst in 450 AD after the great flood that resulted in the increase of the emigration of the Arab tribes (Mostafa, 1981).

The soil is very fertile, particularly in the south. Generally, it consists of salty sand, lime and loamy clay. Date-palms flourish exceedingly well, also other fruits such as oranges, lemons, pomegranates, figs and grapes, and cereals. Farmland used to cover much of the plain and penetrated to the heart of the city. However rapid modernisation and urban sprawl during the last three decades have brought farming disastrously close to an end, particularly within the built-up area (Makki, 1982).

As to climate, Al-Madinah lies in a arid zone of high summer and much lower winter temperatures. The average maximum temperature during the period between May and September is about 30°C. The maximum daily temperature reaches 46° and occasionally higher. The cold period lasts from December to February with the average minimum temperature of about 15°C in the month of January. Sometimes, the lowest temperatures are recorded in February, as was the case in 1968 when it dropped to 5°C at night. There are wide variations between day and night temperatures. The night is relatively cold, even in the summer time, with a difference of as much as 13°C.

Relative humidity is very low, particularly in the summer, with an annual average of about 22%. Rainfall fluctuates from one year to another. For example the total rainfall in 1971 was 104 millimetres, whereas in 1973 it was only 0.7 of a millimetre. Rain sometimes comes suddenly, and short periods of intensive rainfall occasionally cause floods and damage in the area, such as in March 1960 when the rainfall in two days reached 45 millimetres. Such



rainfall, which is usually accompanied by thunderstorms, is caused by atmospheric depressions in the east of the Mediterranean.

The prevailing wind comes mainly from the west during March to July, and from the east during November to February. The wind speed is fairly uniform throughout the year with the monthly average varying between 5 and 8 knots (2.5 and 4.0 metres/second) (GACDAR, 1978).

The effect of climate on the development of the traditional city of Al-Madinah is expressed in a compact form minimising the surface area exposed directly to the sun (only top roofs and small parts of side walls of buildings). In addition, narrow streets guarantee shade for most of the day, enabling people to walk comfortably in the long summer season. The need for protection against the burning rays of the sun even has many of the streets completely covered, leaving only small openings for admitting light. The windows of houses were either kept very small or provided with *rwāshīn* (wooden screens) in order to control the penetration of the sun's rays. In order to provide insulation from the extremes of heat and cold, the walls of buildings were often made as thick as 50 cm and over.

In the new developments, however, much less attention has been given to the climate. Concrete buildings are exposed to the solar radiation from all sides. With their large glass windows, these structures act like greenhouses, building up internal heat which becomes unbearable at times when there is a fault in the electricity supply or in the air-conditioning units. In addition, expansion of the urban area into agricultural land and the construction of wide modern streets, have increased the surfaces available for absorbing heat. This not only makes walking at in the summer midday extremely uncomfortable, but also in the evening when the large asphalt and concrete surfaces re-radiate the heat back into the environment.

## **7.2 Yathrib (Al-Madinah) Pre-Islam (Before 622 AD)**

There is a consensus among the historical sources that Yathrib was the ancient Arabic name for the oasis which lies to the north-west of the present city (Mostafa, 1981) between the edge of Wadi *ḵanāh* to the edge of al-Djurf region (Ibn al-Nadjār, 1981). It was a prominent *Ḥidjāzī*

city since ancient times (al-Wakīl, 1986) famous for its fertile land and abundant water. Thus agriculture, especially the cultivation of palm trees, flourished where the inhabitants could draw on wells for irrigation (al-Ĥamawī, 1957).

Al-Madinah was called Yathrib after the name of the first inhabitant, Yathrib ibn Ḳaniyah ibn Mahlaṭīl ibn 'Ubail whose forefathers go back to Prophet Noah (peace be on him) (Ĥāfiẓ, 1987). After that, an Arab tribe from the 'Amaliḳ (Amelek) resided in al-'Uyūn area (Mostafa, 1981). They were the first inhabitants to construct houses and suburbs as well as cultivating palm trees (al-Ĥamawī, 1957).

The Jews arrived in Yathrib at the time of King Nebuchadnezzar (605-562 BC) after he destroyed Jerusalem in 586 BC, killed its king and expelling its inhabitants (Badr, 1993). The manuscripts of that ancient time indicate that whole Jewish tribes emigrated from Palestine to safe regions and Yathrib was one of them (Mostafa, 1981). The Jewish Rabbis used to find the description of Yathrib in the Tawrāh (old testament) that it was a land of palm trees lying between two ḥarahs (low hilly areas) and that the awaited Prophet (Muḥammad) would emigrate to it (al-'Abāsī, no date). The last Jewish emigrations to the Arabian Peninsula in general and to Yathrib in particular took place in the first and second century AD, i.e. after the Romans succeeded in extending their rule and authority over Syria and crushing the Jewish rebellions in 70 AD and 132-135 AD (al-Sāmūrā'i, 1984).

The most famous Jewish tribes which settled in the eastern ḥarah was Bani al-Nadīr, which resided at Wadi Muzaynib and Bani Ḳuraizah, which resided at Wadi Mahzūr in al-'Aliyah area. They were the first to dig wells, plant palm trees, build fortresses there such as Ka'b ibn al-Ṣhraf fortress and dwell in Ūṭum (means *walled without outside windows* in Hebrew and *high building* in Arabic; singular - aṭam) (Ibn al-Nadjār, 1981). These areas are the most fertile in the region. The Bani Ḳaynuḳā' tribe dwelled in the south-western part of the Yathrib oasis in al-Sāfilah region at the far end of the Wadi Baḥḥān bridge (al-Samhoudī, 1984). They were craftsmen who used a market place which took their name and was famous for gold works (Ibn al-Nadjār 1981). The other Jewish tribes were scattered in a number of different fertile areas in Yathrib (al-Sāmūrā'i, 1984). They lived in some Ūṭum such as the Ṣīrār aṭam. The total number of Ūṭum which the Jews built were 59 (Ibn al-Nadjār, 1981). Then some Arab tribes came to live with them and they also built Ūṭum and houses whose number

reached 13 (ibid.).

At around 207 AD, the first Arab tribal emigrations started, even before the incident of Sayl al'arim (al'arim flood) which swept away the Mañrib dam (Badr, 1993). Each tribe chose a residential area in the different parts of the Arabian Peninsula. The Aws and Khazradj tribes, descendants of two full brothers known as the sons of Ẓīlah after their mother, resided in Yathrib (al-Wakīl, 1986). The Aws and Khazradj made an alliance with the Jewish residents of Yathrib who had control of its natural resources. They signed a non-aggression treaty with the Jews and in the following long period of calm, they grew rich and owned farms and Ūṭum such as al-Dīhayān aṭam for the Aws tribe and other Ūṭum (Ibn al-Nadjār, 1981). The total number of Ūṭum they built was 127 (Ĥāfiẓ, 1987). The Aws resided between the eastern ĥarah and Ẓubāñ and the junction between Rānunāñ wadi and al-'Awālī. Some members of the Khazradj tribe resided in the western ĥarah and the middle of Yathrib while others resided at the front part of al-'Awālī (Badr, 1993).

The houses of the Aws tribe were the nearest to the Jews and their areas were consequently the most fertile. This led to a conflict between the two parties (al-Sāmurāñi, 1984). The Jews exploited this conflict and ignited the war between the two tribes, especially as the balance of power was tipped in the interest of the Aws and Khazradj. Furthermore, the Jews knew that this land (Yathrib) had been emigrating place of a Prophet from the sons of Ismā'il (peace be on him ). They used to threaten both the Aws and the Khazradj that the time of that Prophet was drawing near and that they would be on his side and have his protection (Shurāb, 1994). The grinding wars between the two tribes continued for 120 years (al-Samhoudī, 1984) and more than 12 battles took place, the last of which was the most ferocity was Bu'āth which took place about five years before the Hidjrah (Badr, 1993).

During that period, specifically three years before Hidjrah, far away from Yathrib and in Makkah at the time of the Ĥādj, the Prophet was presenting his message of Islam to the Arab tribes. In Minā at 'Aḩabah, the Prophet met six men from Yathrib who belonged to Khazradj Tribe. He talked to them, asked them to embrace Islam and recited Ẓurāñ before them. They found a striking similarity between what he told them and what the Jews had often said when talking of the Prophet who would be sent and how they will fight the Arabs along his side. Those six men were very quick in accepting his message and thus they embraced Islam

(Shurāb, 1994).

When they returned to Yathrib, they took the message of Islam to their people. The Prophet's name was fast spreading over the Arab households. During the Ĥadj season in the following year, twelve Arabs which from Yathrib, all of whom were from the Khazradj tribe except for two who belonged to the Aws tribe and they met the Prophet at the 'Aḳabah in Minā. They pledged allegiance to the Prophet in what is known as the first 'Aḳabah allegiance. The Prophet sent Muṣ'ab bin 'Umair with them to spread Islam and teach the Muslims Islamic laws and guidelines. The number of Muslims increased after this allegiance. In the following year (three years after the first six people had heard the Prophet in Makkah), more than seventy Muslims from Yathrib attended the Ĥadj. They assembled at the 'Aḳabah with the Prophet where they made the second 'Aḳabah allegiance. The Prophet was very content after this allegiance because Allah had given him a strong foothold and some people who were well prepared and who knew the art of war were ready to protect him and his message.

Also at this time, the persecution of Muslims in Makkah had reached a new high and thus they complained to the Prophet, asking him to give permission to migrate. The Prophet said to them 'Allah showed me the land where you would migrate to (I was shown Ṣabkhah with the palm trees between Labatayin, i.e., the East and West Ĥarah). I was told about it which is Yathrib in particular. So whoever wants to migrate, should migrate to it'. Therefore all the Muslims migrated to Al-Madinah except the Prophet, Abī Bakr, 'Ali and certain categories of people such as an imprisoned person because of his belief, the sick, or those who were unable to make the journey (Shurāb, 1994). The Prophet later made his Hidjrah accompanied by Abī Bakr and arrived at Yathrib (Al-Madinah) on Monday the eighth of Rabī' al-Awal.

### **7.3 Al-Madinah At the Time of the Prophet and the Orthodox Caliph (1-40H/622-661AD)**

After the thirteen years of resistance and hostility that Prophet Muḥammad and his early companions encountered in Makkah, he fled to Al-Madinah, accepting arrangements for him to live there. These had been made with the tribes of Aws and Khazradj (later called the Anṣār, "auxiliaries" of the Prophet). He arrived at the then flourishing town of Ḳubā, about



three kilometres south of the present centre of Al-Madinah (al-Samhūdī, 1981) on Monday Rabī' I 8th, 1 H/ September 20th, 622 AD (Mostafa, 1981). He stayed there for four days and laid the foundation of the Mosque of *Ḳubā'*<sup>3</sup>.

On Friday Rabī' I 12th, 1 H/ September 24th, 622 AD the Prophet, accompanied by some of his followers, rode toward the centre of Al-Madinah. Every clan of the Anṣār wanted the honour of being his host and as he entered the town the people pressed forward to offer him hospitality. However, he blessed the crowd, and asked them to stand out of his way, declaring that his camel would halt of her own accord at a divinely ordained spot. Eventually, the camel knelt down in a *mirbad*, (place where dates are dried) where it is reported that some people had been praying at that moment and in part of which a mosque had been built. This *mirbad* turned out to belong to two orphans from the Banū al-Nadjār tribe, Sahal and Suhayl, who presented it to the Prophet. The Prophet however, did not accept it as a present and insisted on paying them for it (al-Samhūdī, 1981).

Soon after the arrival of the Prophet, the construction of his Mosque as the centre of the new community started. It was built in the shape of a quadrangle; its length was 70 cubits (about 35 metres) from north to south, and 60 cubits (about 30 metres) in breadth (figure 7.3). The walls were the height of a man (about 3.5 cubits, 1.75 metres), built of mud bricks on a stone foundation (al-Samhūdī, 1981). In the beginning it was open to the sky but, at the request of the companions who complained about the burning rays of the sun when the summer season started, a portico for prayer was built towards the north. This consisted of three rows of palm tree trunks supporting a roof, 7 cubits high of palm leaves, which were later covered over with mud (*ibid.*). Another smaller portico, *ṣuffah*, was built in the south side for the *Muhadjirūn* (Makkahn immigrants), who did not have anywhere to stay (*ibid.*). Public access to the building was given through three doorways in the south, east, and west walls (*ibid.*).

The private residence for the Prophet was attached to the Mosque. Initially it consisted of two

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<sup>3</sup> It should be mentioned here that the mosque of *Ḳubā'* was not the first mosque built in Al-Madinah. The early *Muhadjirūn* (immigrants, those Makkahns who embraced Islam and emigrated to Al-Madinah) and the *Anṣār* built mosques in the city before the arrival of the Prophet. Djābir said "We stayed in Al-Madinah for two years before the arrival of God's Messenger, may peace be upon him, in which we built mosques and observed prayers"(al-Samhūdī, 1981, vol.I, p.250).



ĥudjurāt (chambers; singular ĥudjrah), one for Sudah and the other for 'Ā'isha, the two wives of the Prophet at that time. They were built against the outer wall of the Mosque, at the east side. During their construction the Prophet was the guest of Abū Ayyūb al-Anṣarī whose two-story house happened to be the nearest to the spot where the Prophet's camel knelt on his arrival (al-Samhūdī, 1981).

It is reported later that every time the prophet married a new wife, al-Ĥārithah b. al-Nu'mān, who was the owner of the land located to the east of the Mosque, would give him a piece of land to construct a ĥudjrah, for her (al-Samhūdī, 1981). Eventually, the number of ĥudjurāt rose to nine, each attached to the outer wall of the eastern side of the Mosque. The first four ĥudjurāt were built of mud bricks and roofed with palm branches and mud, whilst the rest were built of reeds and mud, roofed with palm branches and mud. All of them were open into the Mosque and before each doorway hung curtains made of black hair (ibid.).

In the Ḳiblatyn Mosque, on Sha'bān 15th, 2 H/January 11th, 624 AD, the Ḳiblah (direction of prayer) was changed from Jerusalem to Makkah. After this even, the Prophet's Mosque was subjected to some alterations. The entrance in the south wall was blocked up and a new one was made in the north wall, whilst the other two doors in the east and west walls were left as they were. The main portico, used for prayer, was transferred from the north to the south side and the ṣuffah was moved from the south to the north (figure 7.4) (al-Samhūdī, 1981).

After the expedition to Khaybar in Muḥarram, 7 H/June, 628 AD, the Prophet enlarged his Mosque, as it was no longer big enough to accommodate the increasing numbers of his followers. The measurements increased to 100 cubits from north to south and 90 cubits from east to west (figure 7.5), the extension being towards the north and the west (al-Samhūdī, 1981). The *minbar* (pulpit) was introduced to the mosque in 8 H/630 AD or 9 H/631 AD. It was merely a functional element for delivering the Khuṭbah (sermon); to enable the Prophet to see the congregation and to be seen (ibid.). The maḳṣūrah (chamber for the *imām*, the one who leads the prayer; in the early centuries of Islam the Caliph himself or the governor) and the miḥrāb (niche) were added to the Prophet's Mosque at later times, after his death.

Minarets in the modern sense were added to the Mosque during the enlargement in 88-91

H/707-710 AD in the reign of al-Walīd b. 'Abdulmalik (al-Samhūdī, 1981). However, the custom of pronouncing the adhān, (the call to prayer) from an elevated place was already in practice during the Prophet's time. Ibn Zubālah (d. 214 H/829-30 AD) reported that Bilāl used to call the adhān from a square pillar [aṣṭwānh], called the Miṭmār (meaning high or tall object) which he used to mount by means of a stair [Ḳṭāb]. It was still to be seen, during the time of Ibn Zubālah, in the house of 'Ubīdullah b. 'Abdullah b. 'Umar, to the south of the Mosque (ibid.).

Once the site of the Mosque was determined it became the centre of the city. The area around it, which seems to have been at that time open or very rarely used, was distributed by the Prophet to the Muhadjirūn. Yaḳut (d. 626 H/1229 AD) reported:

"When the prophet arrived at Al-Madinah he granted lands for dūr [houses] and ribā' [quarters] to the people. He marked land for Banī Zahrah in part of the area behind the mosque... He granted 'Abdullah and 'Utbah the sons of Mas'ūd al-Hudhlī their well-known Khiṭāt [land] near to the Mosque; al-Zubayr b. al-'Awām a large piece of baḳy' [land]; Ṭalḥah b. 'Ubaydullah the site of his dār [house]; and Abū Bakr al-Sidīq the site of his dār near to the Mosque. He also granted to 'Uthmān b. 'Afān; Khalid b. al-Walīd; al-Maḳdād and others the site of their dūr [houses]. When the Prophet was distributing these fiefs to his companions, he granted, directly, those located in the non-arable vacant land. Those fiefs located in areas which had already been developed were given to the Prophet by the Anṣār, and he then granted some of them as he wished..." (al-Samhūdī, 1981, vol.II, p.718).

It should be mentioned here that the relationship between the Mosque of the Prophet, his own residence and the rest of the city became a prototype model for later Islamic towns. The main mosque was placed in the centre of the city, and the dār al-imārah (the dwelling of the commander-in-chief, or the governor) was built immediately adjacent to it as for example in al-Baṣrah, al-Kufah, Damascus and al-Fuṣṭāṭ (al-Hathloul, 1981).

The companions of the Prophet not only built their houses adjacent to the Mosque but, like the Prophet himself, had gates opening directly into it. This can be inferred from the ḥādīth (sayings and doings of the Prophet; singular ḥādīth) regarding closing off some of the doors of the companions' houses which were open into the Mosque. It is reported that a few days

before the death of the Prophet, he ordered all of the *ḥwāb* (gate; singular *bāb*) and, some *ḥādīth* say, *khawkhāt* (singular *khawkhah*, a window-like opening through a wall not high from the ground through which people can go as an access or a short cut ) (al-Samhūdī, 1981) to be closed except that of Abū Bakr (al-Bukhrī, 1976). Some sources mention the gate of 'Alī b. Abī Ṭālib as the one which was supposed to have been left open as it is related that the only access to his house was through the Mosque (al-Samhūdī, 1981). Thus al-Samhūdī suggested that both gates of Abū Bakr and 'Alī were left open, but the one which was actually exempted by the Prophet was that of Abū Bakr, as he had another access to his house from outside the Mosque (*ibid.*).

The fact that gates of private houses, other than that of the Prophet, were allowed to be opened to the Mosque whilst he was alive, and one or two were exempt from closure after his death, is a clear sign that from the very beginning the building was of a public nature. and non-religious activities took place in the building. Caetani, in attempting to emphasise this aspect of the building gave a number of instances based on the *ḥādīth* and *sīrah* (the biography of the Prophet). For example: people sat as they pleased beside the Prophet in the Mosque, or lay down and relaxed; non-Muslim tribal envoys were received by the Prophet in the Mosque and tents for the sick and wounded were erected there after the battle of Uḥud (Creswell, 1979). However such activities, together with divine services which were held in the building, emphasise the manifold nature of the Mosque as a physical embodiment of a new religion which embraces all aspects of life: social, political and religious. These points of view cannot be separated in Islam. In the Mosque the believers observed the congregational prayer with the Prophet, where he delivered the Friday sermon, as well as other addresses which dealt not only with religious teaching but also with all aspects concerning the life of the community.

In the Prophet's time the city continued to preserve its tribal character within its spatial organisation. Although the pre-Islamic settlements seem to have taken the form of quarters within the city, they preserved their names as *manāzil* of each tribe (al-Samhūdī, 1981). Related groups of the *Muhadjirūn* too, clustered together and built their houses forming their own quarters (*ibid.*). Sites for these new quarters were granted by the Prophet and subdivided according to the needs of the individual members of the tribes or clans (al-Hathloul, 1981). There may have been nine quarters in Al-Madinah during the time of the Prophet,

corresponding to the number of tribal mosques which were said to have been, like the quarters themselves, named after the different tribes or clans (ibid.).

As indicated earlier there were four *aswāk* (markets) in Al-Madinah in pre-Islamic times. However, following his arrival in Al-Madinah, the Prophet is reported to have made a new *sūḵ* for the city (Ibn Shabah, 1979). He initially chose the site of the *baḳy'* (land) of al-Zubyar, which was at less than 150 meters distance from the Mosque (al-Hathloul, 1981), as the location but, after he had been prevented from doing so by the owner, Ka'b b. al-Ashraf, he moved it to the area situated between the *Muṣalla* (the place where the 'Eīd (feast) prayer is performed) of the Prophet and *Thanyat al-Wadā'* (hill to north of the city). The *Muṣalla*, which is the southern edge of the *sūḵ* was 1,000 cubits (about 500 meters) from the Mosque of the Prophet (al-Samhūdī, 1981). Now that area is known as *al-Manākhah* and a few commercial activities still operate in some parts of it. The *sūḵ* was open to the air, had no buildings during the Prophet's time, and seems to have remained thus until the reign of Mu'āwiyah b. Abī Sufyān (41-60 H/661-680 AD) who is said to have built two houses in it (ibid.). The fact that the *baḳy'* of al-Zubyar was first chosen may suggest that the Prophet preferred the *sūḵ* to be near to the Mosque.

The forms of defence on which the city depended for centuries, were its *āṭām* (fortresses) and topography, both being difficult for invaders to penetrate. The northern side of the city was the least protected as here the valleys of Al-Madinah joined. Following the advice of Salmān al-Fārsī to the Prophet, a *khandaḳ* (ditch) was dug around the northern side in order to defend the city against the attack of the Makkahn, Ḳuraysh and their allies in the battle of the *Khandaḳ* in 5 H/627 AD. During this battle, it was reported that the Prophet also sheltered the women and children in some of the pre-Islamic *āṭām* (al-Samhūdī, 1981). The city, however, only received its walls in 263 H/876-7 AD (al-Anṣārī, 1985).

The Prophet died on Rabi' I 13th, 11 H/June 8th, 632 AD (Mostafa, 1981) having spent the last ten years of his life at Al-Madinah. He was buried in the place where he died, in 'Ā'isha's *ḥudjrah*. Abū Bakr was elected as his caliph and he and his two successors continued to reside in Al-Madinah which thus continued as the capital of the rapidly growing Islamic state. During the first year of his brief reign, which lasted for about two years, he was firstly engaged in subduing revolts among some tribes, the wars of the *Ridah*, while in the second



year he started the foreign campaigns in the north. Thus, as far as the Mosque is concerned, he contented himself with merely restoring some of the palm pillars, which had deteriorated (al-Samhūdī, 1981). Abū Bakr died in 13 H/634 AD and was buried next to the Prophet in the ħudjrah of 'Ā'isha (Mostafa, 1981).

'Umar b. al-Khaṭāb was appointed by Abū Bakr to be his successor after he had consulted some of the Prophet's companions (Ibn Shabah, 1979). During his reign the area of the Islamic State expanded and the population of Al-Madinah increased. In 17 H/638 AD, at the request of the people of Al-Madinah, he enlarged the Mosque (al-Samhūdī, 1981). He is reported to have said on this occasion, "Had I not heard the Prophet say we should increase the size of our Mosque, I would not have enlarged it" (ibid., vol.II, p.482). He also gave the instruction "Protect the people from rain. Beware of red and yellow decoration for they put the people to trial" (ibid., vol.II, p.496) ("put the people to trial" here means "distract them from prayer") (Sābiḳ, 1985). Thus the new structure conformed to the example set by the Prophet in its simplicity, as opposed to later constructions.

After this enlargement, the measurements of the Mosque increased to 140 cubits from north to south and 109 cubits from east to west (figure 7.6). The extension was in all directions but the east where the houses of the Prophet's wives stood. Two new colonnades were added to the west side and one to the south, whilst the extension to the north was 31 cubits (Mostafa, 1981). The enclosure walls were built of sun-dried bricks set on stone foundations dug to the depth of a man's height. Palm trunks continued to be used as columns (al-Samhūdī, 1981), but other accounts say that 'Umar made the columns of mud brick and took away the wooden ones (Ibn Rustah, 1979). The roof, which was of thatched palm-leaves and mud, as in the earlier Mosque, was raised to a height of 11 cubits. Over this roof and surrounding it on all sides, stood a *sutrah* (parapet), 2-3 cubits high. Six doors were made to the Mosque instead of three: two in the north wall; two in the east and two in the west (al-Samhūdī, 1981). Finally 'Umar is reported to have said, after the enlargement of the Mosque had been completed, "if we had extended it as far as the Djbanah, it would still be the Prophet's Mosque" (ibid., vol.II, p.496). In this respect Abū Hurayrah also reported that the Prophet said, "If this Mosque was extended as far as San'ā' it verily would still be my Mosque" (ibid., vol.II, p.497).



Outside the Mosque, to the north end of the east side 'Umar built a raised platform, raḥabah, called al-Buṭayḥā, upon which the people might recite poetry or sit and talk (al-Samhūdī, 1981). He was murdered on 23 H/644 AD and was buried in the room of 'Ā'isha, at the side of the Prophet and Abū Bakr. Four days later 'Uthmān b. 'Afān was elected as the third Caliph of the Prophet (Mostafa, 1981).

The population of Al-Madinah continued to grow during the rule of 'Uthmān and the people complained that the Mosque was too small to accommodate them to the extent that some observed the Friday Prayer outside (in the raḥabah). In this regard 'Uthmān consulted the notables of the city who unanimously agreed that the Mosque should be demolished and a larger one built (al-Samhūdī, 1981). So in Rabī' I, 29 H/ December, 649 AD the demolition of the old Mosque and rebuilding of the new one with more durable building material was started. The construction work lasted for about ten months and was completed in Muharm 1st, 30 H/ September 4th, 650 AD (ibid.).

In this enlargement the Mosque extended a further nine cubits in each direction except the eastern side again on account of the houses of the Prophet's wives. Thus, the building measured 160 cubits from north to south and 120 cubits from east to west (figure 7.7) (al-Samhūdī, 1981). The walls, unlike the old ones, were built of hewn and carved stones and joined with lime mortar (Djiṣa). The columns were also of cut stone, joined by iron cramps bedded in lead and the roof was of teak (ibid.). The same six entrances were left as those in the reign of 'Umar (ibid.).

According to Ibn Shabah (d. 262 H/876 AD), the maḥsurah (chamber for the imām) was introduced to the Mosque by 'Uthmān for his personal safety, after the murder of 'Umar, while he was leading the prayer in the Mosque (al-Samhūdī, 1981). Ibn Khaldūn (d. 1406 AD) however, indicated that it was first constructed by Mu'āwiyah b. Abī Sufyān (at Damascus), either in the years 40 H/660 AD or 44 H/664 AD after an assassination attempt by a Khawāridj fanatic. He added, that it had been said that this innovation was attributed to Marwān b. al-Ḥakam, governor of Al-Madinah, after he was stabbed by a Yamanite in the year 44 H/664 AD (Ibn Khaldūn, 1984).

As far as layout was concerned, the new Mosque, as is clear from the plans (figures 7.5, 7.6

and 7.7), preserved the basic characteristics of its previous state, in the time of the Prophet and his first two successors. In addition, we are told that, during the construction, Zayd b. Thābit, who was apparently in charge of the project, put the new stone columns in the same places as those occupied by the old palm-trunks (al-Samhūdī, 1981). These facts demonstrate that a conscious effort was made to preserve the original layout of the building. The major change, however, was in the building materials and construction techniques, as indicated earlier. Thus it is important to examine the reaction of the people, who included some of the great companions of the Prophet, to the transformation that 'Uthmān's enlargement had brought about. In this respect Maḥmūd b. Labid reported:

"When 'Uthmān b. 'Affān intended to build the Mosque ... the people did not approve it. They wanted it to be kept in the same state. Thereupon he said: I heard the Messenger of Allah (may peace be upon him) say: He who built a Mosque for Allah, Allah would build a house for him like it in Paradise" (Muslim, 1976, vol.I, p.269).

'Uthmān is also said to have quoted this saying of the Prophet on different occasions during and after the reconstruction of the mosque in order to allay criticism of his initiative (al-Samhūdī, 1981). al-Samhūdī remarked that:

"They wanted it to be kept in the same state ... by rebuilding the Mosque of mud-bricks and palm trunks as 'Umar did, because it was in accordance with the work of the Prophet. Thus al-Baghawī said in *Sharḥ al-Sunah*: Probably what the companions of the Prophet disliked in 'Uthmān's reconstruction of the Mosque was its building of carved stones, but not merely the enlargement ... " (ibid., vol.II, p.502).

In fact this attitude towards change, together with what 'Umar said regarding the enlargement of the Mosque (cited earlier) are express of the desire of the early Muslims to preserve whatever related to the Prophet. Nevertheless, the new development by 'Uthmān might be justified if it is considered in the context of the development which took place in the city in general at that time. In this connection, Bisheh writes:

"... by 'Uthmān's caliphate ... the Arabs had been exposed to the cultural influences of the conquered territories for a long enough period to transform their outlook and taste. This new

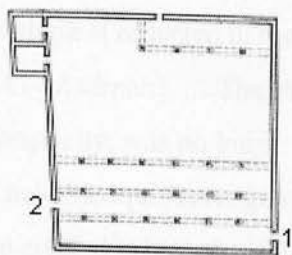


Figure 7.3: The Prophet's Mosque before changing the direction of prayer from Jerusalem to Makkah (North to South), 1H/623AD

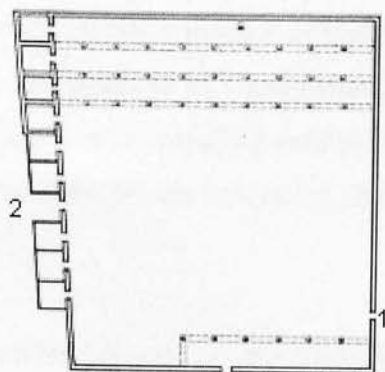


Figure 7.5: The Prophet's Mosque after the enlargement by the Prophet, 7H/628AD

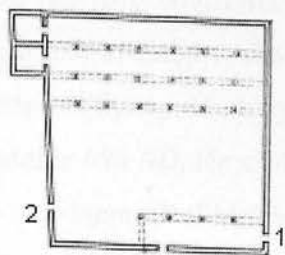


Figure 7.4: The Prophet's Mosque after changing the direction of prayer to Makkah 2H/624AD



1. Bāb al-Rahmah
2. Bāb Djibryal
3. Bāb al-Salām
4. Bāb al-Nisā'

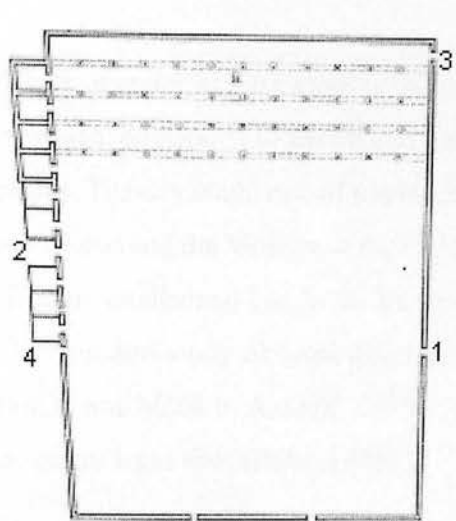


Figure 7.6: The Prophet's Mosque after the enlargement of 'Umar, 17H/637AD

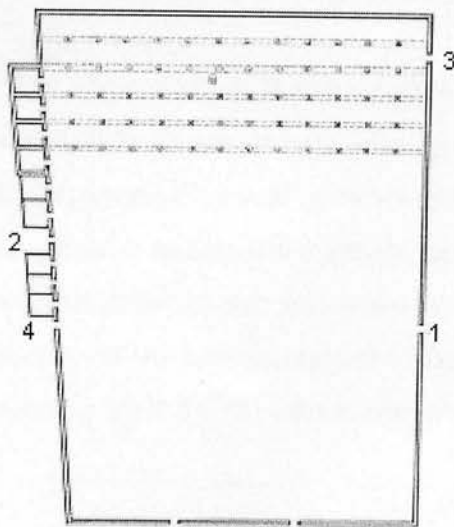


Figure 7.7: The Prophet's Mosque after the enlargement of 'Uthmān, 29-30H/649-650AD<sup>4</sup>

0 10 20 30 40 50 M.

<sup>4</sup> Source: Based on plans reconstructed by Mostafa, S.L., *Al Madina Al Munawwara, Urban Development and Architectural Heritage*, Beirut, 1981, p. 56,57,59,63 and 64.

outlook is reflected in the upsurge of building activity and remarkable expansion of Madinah [Al-Madinah]. ... The Prophet's Mosque, which had so far preserved its unprepossessing simplicity, was no longer compatible with the new conditions. it was virtually inevitable that a new Mosque, corresponding in luxury and sumptuousness to the private residences, should be erected" (Bisheh, 1979, p161).

'Uthmān is said to have had the pre-Islamic forts of Al-Madinah taken down, but remains of them could be seen as late as the 4th H/10th AD century (Buhl, 1936). He was killed in 35 H/656 AD (Mostafa, 1981) and 'Alī b. Abī Ṭālib became his caliph. 'Alī was opposed by Ṭalḥah and al-Zubayr, first from Makkah and then from Baṣrah as well as by the then governor of Syriay, Mu'āwiyah. In order to counter these moves, 'Alī left Al-Madinah for Iraq in October 656 AD. He made Kufah his capital and after his death in 40 H/661 AD and the acknowledgement of Mu'āwiyah as caliph, Damascus became the capital (Buhl, 1936).

#### **7.4 Al-Madinah From the Beginning of the Omayyad Dynasty Until the End of the Ottoman Rule (40-1336H/661-1918AD)**

With the transfer of the capital of the Islamic state from Al-Madinah to Damascus, the city descended, politically, to the rank of a provincial town ruled by governors appointed by the Caliphs. The city could not, of course, become totally unimportant because of its venerable associations and the Mosque of the Prophet. At the same time, it became a momentous centre of Islamic intellectual life. In the Mosque of the Prophet scholars devoted themselves to the collection and study of legal and ritual enactments. One of the most prominent of these scholars was Mālik b. Anas (d. 179 H/795 AD), the founder of the Mālikī school, one of the four Sunni legal rites (Buhi, 1936).

Despite the political changes Al-Madinah continued to grow during the Umayyad rule (41-132 H/661-750) AD. In the reign of Mu'āwiyah (41-60 H/661-680 AD) (Mostafa, 1981), who gave special attention to the city, it was supplied with water from the 'Ayn al-zarḳā~ spring in the Ḳubā~ area, via a subterranean aqueduct (al-Anṣārī, 1985). Some developments were observed on the 'Aḳiḳ valley banks to the west of the city, where there were many palaces and orchards the ruins of which could still be seen in 1353 H/1934 AD (ibid.). The area

around the Mosque was paved with flagstones and became known as the *balāṭ* (open space). This *balāṭ* was, later on, continued by the Caliph 'Abdulmalik b. Marwān (65-86 H/685-705 AD). According to the description of Ibn Shabah the *balāṭ* covered much of the city's three major thoroughfares (Ibn Shabah, 1979) and its width at some points was about 5 metres (*ibid.*). Ibn Shabah also indicated that the width of other streets, during his lifetime, was 3 metres and 2.50 metres (al-Samhūdī, 1981). In the *sūḳ*, Mu'āwiyah, as mentioned earlier, built two private houses, which were followed by a major construction project by the Caliph Hishām b. 'Abdulmalik (105-125 H/724-743 AD) that took over the whole area of the *sūḳ*. Shops were built on the ground floor, while the upper floor was used for accommodation. He is reported, in addition, to have carried out a similar development in the vacant area at the Baḳy' of al-Zubayr (*ibid.*).

The only enlargement of the Mosque during the Umayyad rule was carried out by the Caliph al-Walīd b. 'Abdulmalik (86-96 H/705-715 AD). He wrote to his governor at Al-Madinah, 'Umar b. 'Abdul'aziz, ordering him to demolish the old Mosque and the neighbouring houses, including those of the Prophet's wives, and to incorporate their sites into the building of the new edifice (al-Samhūdī, 1981). It is reported that the people of Al-Madinah were distressed by the news regarding the demolition of the houses of the Prophet's wives. 'Aṭā' al-Khurasānī, who was there when the letter from al-Walīd was being read, said "I have never seen a day with more sore weeping than there was among the people that day" (*ibid.*). Sa'iyd b. al-Musayab, a well-known scholar of Al-Madinah, is also reported to have said on this occasion, "I wished these rooms had not been demolished so that later generations would follow the simple life of the Prophet and realize his monasticism in the material pleasures of life" (Hafīz, 1987, p.48).

The demolition began in Ṣafar, 88 H/January, 707 AD (Mostafa, 1981) and was carried out by local workmen. However, the actual construction had to wait until the arrival of the workmen sent by al-Walīd. It is said that he sent many mosaics and marbles, and Greek and Coptic artisans to Al-Madinah. Some sources say that these items and people were sent by the Byzantine Emperor to al-Walīd at the latter's request, who in turn sent them on to Al-Madinah (al-Samhūdī, 1981). The work took three years and the supervision was entrusted to Ṣālīḥ b. Kaisan (*ibid.*).



In this enlargement the Mosque was extended towards the North, East and West. Its length measured 200 cubits, from North to South, and the southern wall measured 167.5 cubits (Mostafa, 1981). The southeastern and the southwestern angles were  $85^\circ$  and  $88^\circ$  respectively (ibid.). The enlargement towards the East resulted in the incorporation of the sites of the houses of the Prophet's wives within the enclosure of the Mosque. The mud-brick walls of the chamber of 'Ā'ishah in which the Prophet and his two first Caliphs were buried were replaced by stone ones. In order to keep the chamber away from the direction of prayer, an outer enclosure wall was built and its northern side was altered by means of a triangular projection towards the North (figure 7.8) (ibid.).

The walls enclosing the Mosque were built of cut stone, in regular courses laid in lime mortar. The columns were also made of stone drums which were hollowed out and fitted together by dowels of iron and lead caulking. On these rested wooden beams which in turn supported the flat timber ceiling which was 23 cubits above the floor. Two cubits above this gilded ceiling was another roof sheathed with plates of lead and capped by crenellations (al-Samhūdī, 1981). The earlier maḥṣurah (platform) of stone was replaced, and built of teak (ibid.).

Thus the Mosque began to change and new features that influenced later developments emerged. The courtyard was bordered for the first time with porticos (riwāḳs), on the East, West, and North sides. Four square-shaped minarets were built at each corner of the Mosque, though the one to the southwest was demolished soon afterwards by the Caliph Sulymān b. 'Abdulmalik (96-99 H/715-717 AD), as it is said that it overlooked the house of Marwān b. al-Hakam where he lodged during his visit to Al-Madinah. The minarets measured 60 cubits in height, and 8 cubits square in plan (Bisheh, 1979).

Other new features included the mihrab in the form of a concave niche and the nave and the dome over the bay in front of the mihrab (ibid.). The walls of the prayer hall were decorated for the first time too, and special attention was given to the Ḳiblah wall. Marble, gold, mosaic and fusayfisā~ (gold cubes) were used, and from which inscriptions containing verses from the Ḳur'ān and other artistic work in the form of trees, fruits and architectural compositions were produced (ibid.).

With the end of the Umayyad reign, the centre of the Islamic state moved from Damascus eastward to Baghdād, which became the capital of the Abbasid Caliphate (132-656 H/750-1258 AD). At the beginning of the Abbasid rule, Al-Madinah was the centre of two short-lived and unsuccessful revolts by some descendants of 'Alī b. Abi Ṭālib. The first one was led by Muḥammad b. 'Abdullah in 145 H/762 AD, who restored the ditch that was dug by the Prophet around the town, while the second was led by Ḥusayn b. 'Alī in 169 H/786 AD.

The town, in addition, suffered severely from the attacks of the nomadic tribes of Sulaym and Hilal during the reign of al-Wathīq, whose troops defeated them in 230 H/845 AD (Ḥāfiẓ, 1984), followed by other raids in the succeeding years. As a result of these hostilities a wall was built around the city for the first time in 263 H/876-7 AD. This wall of mud bricks was replaced, between 367-372 H/978-983 AD, by a stone one when the holy city was threatened by the conquest of the Fatimid of Egypt. It was restored in 540 H/1145-6 AD by Djamāl al-Dīn b. al-Manṣūr. A few years later, in 558 H/1162-3 AD, Nur al-Dīn b. Zinkī built a second and grander wall with towers and gateways, to enclose both the new development that took place outside the old wall, and the town itself (Mostafa, 1981). This wall is also said to have been built in preparation for a threatened attack by the Crusaders who arrived at the port of Yanbu', about 275 kilometres to the west of Al-Madinah, in 578 H/1182-3 AD in the first stage of their unsuccessful advance on the city (ibid.).

The development and prosperity which characterised the early days of the Abbasid reign seemed to have less effect on the more southern parts of their state. During their rule, which lasted for more than five centuries, the Mosque of the Prophet was rarely restored and only once enlarged<sup>5</sup>. This enlargement was carried out during the Caliphate of al-Mahdī (158-169 H/775-785 AD). The work, which was mainly restricted to the northern side of the building, was started in 162 H/778 AD and completed in 165 H/781-2 AD. The five colonnades to the north of the courtyard were pulled down and replaced with new ones after the extension of the building 55 cubits to the north (figure 7.9) (Mostafa, 1981).

The maḡsurah of al-Walīd was demolished and replaced with a new one that occupied the

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<sup>5</sup> From a short account of the restorations of the Mosque that were carried out during the 'Abbāsīd rule see, Mostafa, 1981, pp.77-79.

entire first southern colonnade (al-Samhūdī, 1981). Access to the Mosque was given through 24 doorways, most of which were walled up later on (ibid.) and by the time Ibn Djubīr visited Al-Madinah, in Muharam, 580 H/ April, 1184 AD, there were only four still in use, two on the east and the other two on the west side (Broadhurst, 1952). In this visit, he also reported that the Mosque had three minarets, one in the south-east, and the other two in the north-east and west corners (ibid.).

As far as the city was concerned, Ibn Djubīr indicated that it was double-walled with four gates, each one facing another in the opposite wall. The whole city was surrounded by palms which were most plentiful on the south and east side though less so on the west; whilst the road to Ẓubā̄ he added, which was once a large city comparable to Al-Madinah, passed through continuous palm-groves. Around the Ĥaram, he wrote, ran a road paved with cut stone and the first thing that struck the eye, when approaching the city at Dhu al-Ĥulayfah, now known as Abyār 'A1ī, 10 kilometres to the south of the city, was the tall white minaret of the Mosque (Broadhurst, 1952).

In 654 H/1256 AD, Al-Madinah was threatened by a volcanic eruption, known as the fire of Ĥidjāz. After a series of earthquakes, a stream of lava appeared, and fortunately flowed to the east of the town and continued its way northwards (Ĥāfīz, 1984). About three months later a fire broke out in the Mosque and almost all the building was destroyed (al-Samhūdī, 1981). Restoration was then started by the Caliph al-Mu'taṣim Bi Allah but, with the fall of Baghdād, the capital city of the diminishing Abbasid state, at the hands of the Tatars in 656 H/1258 AD and the collapse of the caliphate, the work stopped (ibid.).

The restoration work was resumed by the Mamluk sultans of Egypt who showed some interest in the sanctuary. In 678 H/1279 AD in the reign of the Sultan al-Manṣur Ẓalawūn, a dome was first introduced to the Mosque. It was built above the chamber in which the Prophet and the two first Orthodox Caliphs were buried (Mostafa, 1981). In 701 H/1301 AD the Sultan Anāṣir Muḥammad b. Ẓalawūn carried out some repairs to the Mosque. A few years later, he constructed the south-western minaret and in 729 H/1328-9 AD he enlarged the Ẓiblah prayer hall by adding two new colonnades in the courtyard (ibid.). After this however, the most important restoration work was carried out during the reign of the Sultan Ẓa'it Bāy (872-901 H/1468-1496 AD). He is reported to have started large scale renovation

work in 879 H/1474-5 AD (al-Samhūdī, 1981) but, in 886 H/1481 AD, after the work had been completed, the south-eastern minaret was struck by lightning. According to al-Samhūdī, who lost his own library in this incident, almost the entire building burned down again. When the Sultan learned of this, he gave the order for the building to be restored for the second time. During this restoration, the dome over the Ĥudjrah was replaced with a larger one which required the extension of the southern part of the building towards the east and the alteration of the eastern wall (figure 7.10). Other smaller domes were also added to the building and, against the western wall, between Bāb al-Salām and Bāb al-Rahmah, a small minaret, ribāṭ (a charity residence) and madrasah (school) were constructed (ibid.).

At the time of al-Samhūdī (d. 911 H/1506 AD) the city was still surrounded by the wall that was built by Nur al-Dīn b. Zankī in 558 H/1162 AD, and had four gates. The Bāb (gate) of al-Sūḵ in the western wall next to the Muṣalah, stood at a distance of 645 cubits from the Bāb of al-Salām of the Ĥaram. Also, in the western wall there was another gate known as al-Darb al-Ṣaghīr (the small access). Towards the north was Bāb al-Shamī and eastwards Bāb al-Baḡy' at a distance of 433 cubits from the gate of Djibrīl in the Mosque (al-Samhūdī, 1981). In addition it seems that the spatial organisation of the city had not dramatically altered for about six centuries. Al-Samhūdī, in his account of the houses of the companions of the Prophet that surrounded the Mosque and description of the balāṭ (mentioned earlier), confirmed the measurements of width of some streets and descriptions of locations reported by Ibn Shabah (ibid.).

During the Ottoman occupation of Egypt, from 923 H/1517 AD, Al-Madinah, as well as Makkah, came under their control (Ĥāfiẓ, 1984). From that time on, the Ottoman Sultans added to their titles that of "Custodians of the Two Holy Mosques". In the beginning and towards the end of their rule, the holy cities and their mosques were given special attention. During the reign of the Sultan Sulymān b. Salīm the Magnificent (926-974 H/1520-1566 AD), the walls of Al-Madinah and the fort to the north of the town were torn down and rebuilt in basalt and granite. According to al-Rūmī (d. 959 H/1552 AD), the construction of the wall started in 939 H/1532 AD and the fort in 944 H/1537 AD, and both were completed in 946 H/1539 AD. The total length of the wall was 4000 cubits, (al-Rūmī, 1972) and its height was 35 - 40 feet (Burckhardt, 1968). In 947 H/1540 AD, the Sultan ordered some repairs to be carried out to the Ĥaram (the Prophet's Mosque). Among these were the



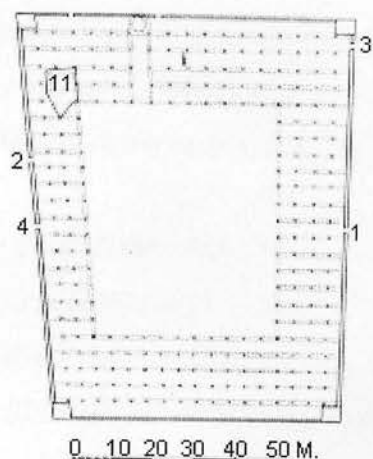


Figure 7.8: The Prophet's Mosque after the enlargement of al-Walid b. 'Abdulmalik, 83-91H/707-710AD

- |                                |                        |
|--------------------------------|------------------------|
| 1. Bāb al-Rahmah               | 9. School              |
| 2. Bāb Djibryal                | 10. Orchard of Fāṭimah |
| 3. Bāb al-Salām                | 11. The Prophet's tomb |
| 4. Bāb al-Nisā'                |                        |
| 5. Bāb al-Mad̄jīdī             |                        |
| 6. Entrance to the store rooms |                        |
| 7. Women's praying place       |                        |
| 8. Store                       |                        |

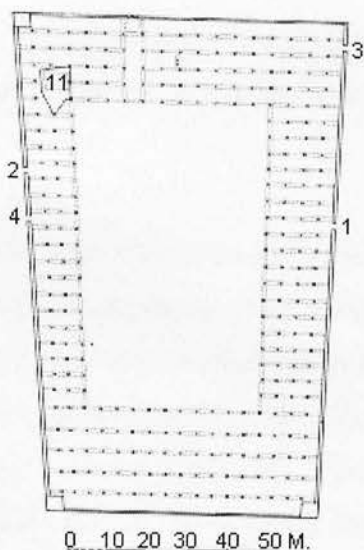


Figure 7.9: The Prophet's Mosque after the enlargement of al-Mahdi 162-165H/778-782AD

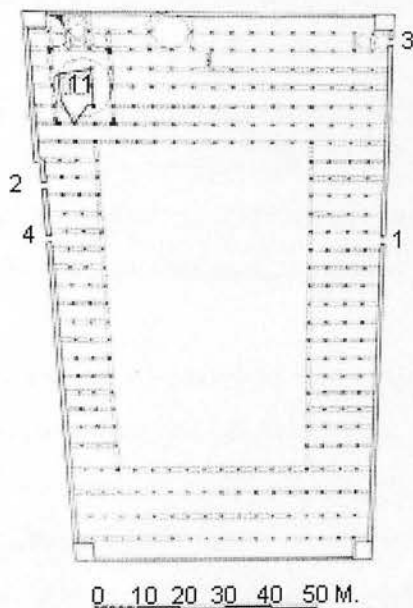


Figure 7.10: The Prophet's Mosque after its restoration by Ka't Bay after the thunderstorm in 886H/1481AD<sup>6</sup>

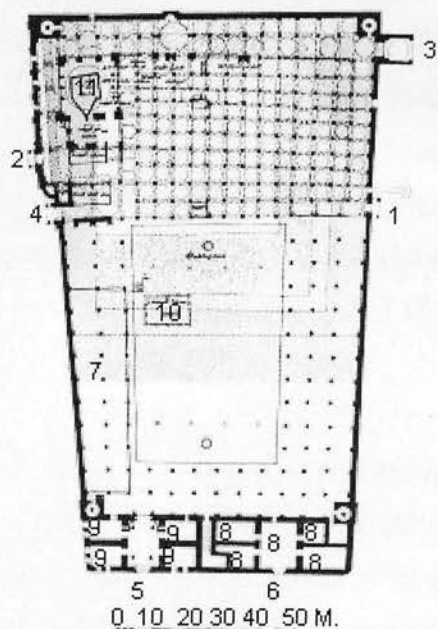


Figure 7.11: The Prophet's Mosque after its reconstruction by the Sultan 'Andulmadjīd, 1265-1277H/1848-1861AD<sup>7</sup>

<sup>6</sup> Source: Mostafa, op. cit., p. 67,76 and 87.

<sup>7</sup> Source: Rif'at, Ibrāhīm, (without date), Mirāt al-Ĥaramyn, Beirut, V.I., Fig. 82.



demolition and reconstruction of the north-eastern minaret, and restoration of some parts of the walls (al-Rūmī, 1972). After that it seems no significant development took place in the Mosque or the town during the following three centuries.

In 1230 H/1815 AD we have a description by Burckhardt, who visited the town and drew its first available map (figure 7.12) (Burckhardt, 1968). He indicated that the city was divided into the interior town, and the suburbs. The interior town formed an oval, surrounded by the wall built by the Sultan Sulymān the Magnificent and which had three fine gates: the Bāb al-Maṣrī, on the south side, which he described thus: "next to Bāb el Futouh, at Cairo, [it] was the finest town-gate I have seen in the East" (ibid., p.323); the Bāb al-Shamī, on the north side; and the Bāb al-Djum'ah, on the east side. He also added that in the south wall there was a much smaller gate, the Bāb al-Ṣaghīr, but this had been closed up (ibid.).

According to his description, the interior part of the town consisted of 28 small quarters, called *hārāt* or *aziḳah* (plural of *hārah* and *zuḳāḳ* -alley- respectively). Although the houses had been left to decay, he noted that they were well built and entirely of stone. They were generally two storeys high with flat roofs, and some of these private houses had small gardens with wells. The streets, for the most part, were narrow, often only two or three paces (1.5 to 2.25 metres) across and a few of the principal ones were paved with large blocks of stone. Shops were concentrated along the broadest street of the town that led from the Bāb al-Maṣrī to the Ḥaram (Burckhardt, 1968).

The Ḥaram was situated towards the eastern extremity of the town proper and surrounded by private houses. These were built against the Ḥaram's southern wall and the southern half of the western wall which concealed them, while only an open street separated the houses from the Ḥaram on the remaining sides (Burckhardt, 1968). As the houses were not high, generally two storeys, the dome over the ḥudjrah and the minarets of the Mosque were the most dominant features of the city's skyline. Burckhardt noticed that the dome was visible at a great distance from the city and the visitors coming to the town, as soon as they caught sight of the dome, repeated certain prayers (ibid.).

The suburbs covered more ground than the inner town and extended to the West and South, separated from it by an open space, narrow on the south and widening on the west where it

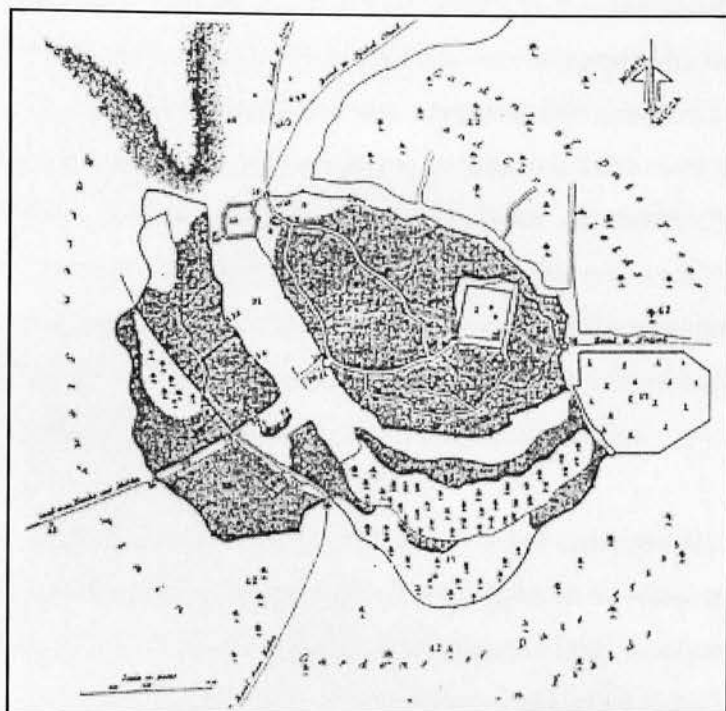


Figure 7.12: Plan of Al-Madinah, 1230H/1815AD<sup>8</sup>

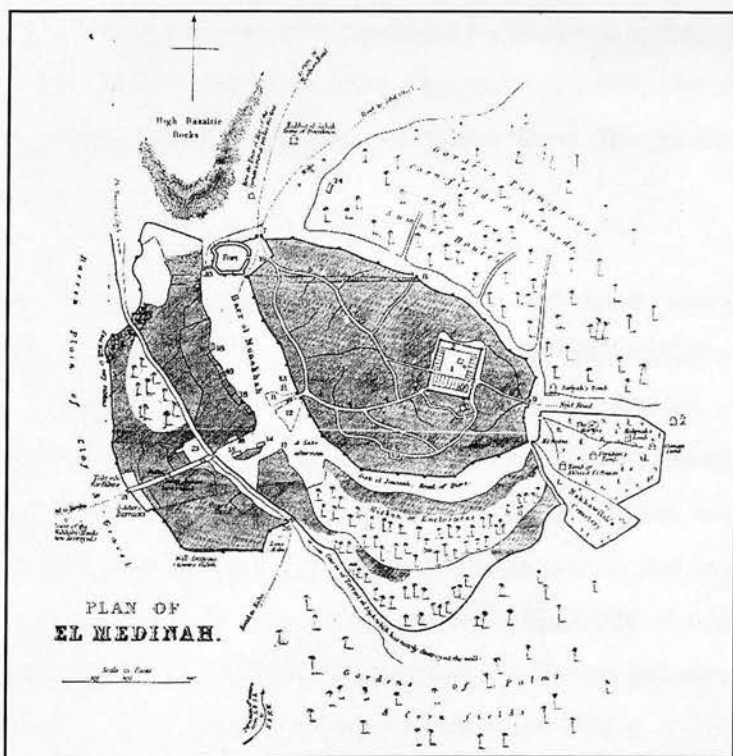


Figure 7.13: Plan of Al-Madinah, 1269H/1853AD<sup>9</sup>

<sup>8</sup> Source: Burckhardt, J.L., 1968, *Travel in Arabia*, London, (between p. 319 and 320).

<sup>9</sup> Source: Burton, R.F., 1964, *Personal Narrative of a Pilgrimage to Al-Medina and Meccah*, New York, V.I, (between p.392 and 393).

formed a large public place. This place was called and is still known as the Manākhah, meaning a place where caravans alight. As indicated earlier, this area was designated by the Prophet as the sūḵ of the town. Burckhardt noticed that it was occupied with commercial activities. He indicated it was always crowded with camels and people and there rows of small huts and sheds in which provisions were sold, principally corn, dates, vegetables and butter. There was also a number of coffee-huts which were beset the whole day with visitors. The northern side of the suburbs, fronting the Manākhah, was open, while on the west and south they were enclosed by a wall of inferior size and strength to the interior town's wall. Four wooden doors led from the suburbs into the open country (Burckhardt, 1968).

The suburbs consisted of eleven principal quarters. The quarters on the south and north-west side within the precincts of the outer wall, were composed of what is known in Al-Madinah as aḥwāsh (plural of ḥwash). The ḥwash a residential complex consisting of a large courtyard surrounded by thirty to forty single-storey houses with a gate which was locked at night (figure 7.31). The aḥwāsh were separated from each other by gardens and plantations. On the west side, directly opposite the Bāb al-Maṣrī, the quarters consisted of regular and well-built streets with houses resembling those of the interior of the town. This part was crossed by al-'Anbaryah Street, in which the Turkish governor and the rich people lived (Burckhardt, 1968).

To the North between the interior town and the suburbs was a castle surrounded by strong walls with several high and solid towers. According to Burckhardt, it contained sufficient space for six to eight hundred people (Burckhardt, 1968). To the East was the cemetery of al-Baḳy', also enclosed by a wall. Gardens and plantations surrounded both the town and the suburbs on three sides leaving only the western rocky ground where cultivation was impossible. Burckhardt added that to the east and south these plantations extended to a distance of six to eight miles (about 10-13 kilometres). They consisted principally of date-groves and wheat and barley fields, and also contained some residences for farmers and some of the towns people who made it a custom to pass the summer season there (ibid.).

Burckhardt stated that very few public buildings and services could be found in the town. Apart from the Ḥaram there were: fifteen mosques; two public schools, one in the street of al-Blāṭ and the other near to the Mosque; a corn-magazine in the southern quarter of the

interior town and a public bath in the same quarter. He indicated that there were no public khāns (Inn or Road House) in the town. Instead, the inhabitants of the city let out apartments to visitors, who come to the town at all times of the year (Burckhardt, 1968).

Finally Burckhardt claimed that, at the time of his visit, the population of Al-Madinah was, at most, between 16,000 to 20,000. Of this number about 10,000 or 12,000 lived in the interior town, and the rest in the suburbs (Burckhardt, 1968). With respect to the physical condition of the town in general he indicated that "It is, on the whole, one of the best-built towns I have seen in the East, ranking, in this respect, next to Aleppo" (ibid., p.323).

The only enlargement of the Mosque during the Ottoman era was carried out three and a half centuries into their rule. It is reported that because of the deterioration of the building the Sultan 'Abdulmajīd I (1255-1277 H/1839-1861 AD) ordered it to be renewed and enlarged. The work, carried out in stages as the building was in use during the construction, was started in 1265 H/1848 AD and completed in 1277 H/1861 AD. Most of the building was demolished and reconstructed. The only parts which were left undisturbed were the ĥudjrah, the miĥrāb, the minbars, the south-eastern minaret and parts of the northern and western walls. The southern hall, which was roofed in the form of a succession of little domes, was extended 2.6 metres to the east in order to enlarge the space between the ĥudjrah and the eastern wall. It was also expanded to the north by adding two new porticos in the courtyard. A large dome, painted green in colour, was built above the ĥudjrah (figure 7.23). The number of colonnades to the north and east of the courtyard was reduced to two each instead of three, while those to the east of the courtyard became three instead of four. An area to the east of the courtyard was enclosed by a wooden screen and formed the praying-place for women (figure 7.11).

Against the northern wall of the Mosque offices and Qur'ānic school, a new public gate the Bāb al-Madjīdī, store-rooms and facilities for ablution were built on the ground floor, and offices and additional ablution facilities on the upper floor. The original four gates, together with a new one, continued to give access to the building, and the number of minarets remained at five. After the completion of the construction, the interior of the building was decorated with calligraphic work containing verses from the holy Qur'ān and other religious texts, as well as artistic work in the form of trees, fruits and gardens (Rif'at, without date).



After these developments the length of the Mosque from north to south measured 126.25 metres. As the two long walls in this direction converged upon one another as they extended northward, the southern wall measured 86.25 metres and the northern one was 66 metres (Mostafa, 1981). The area of the building was 10,301 square metres (Makki, 1982).

In the long-term this enlargement apparently influenced the growth of the city in general. The huge amount of money, 750,000 Madjīdī pounds (Rif'at, without date), spent on the project proved to be of great benefit to the area. It resulted in the attraction of skill from outside and the improvement of local facilities.

Four years after the beginning of the reconstruction of the Ĥaram, in 1269 H/1853 AD, Burton visited the town, drew a map and described it (figures 7.13 - 7.16) (Burton, 1964). Although the main outlines of the picture he drew were much the same as the older one given by Burckhardt, there were some signs of new development. The new map shows an additional gate to the north, Bāb al-Ķyāfah, and a new street leading to it. Burton also indicated that at the time of his visit there were four wakālas (caravanserais) used principally as stores, and in addition to the great bazaar, the street leading from the Bāb al-Maṣrī in the interior town's wall to Bāb al-Salām of the Mosque, he mentioned two specialized aswāḳ. The sūḳ al-Khuḏaryah, greengrocers' market, and the sūḳ of al-Ĥabābah, the grain bazaar, were both located in the Manākhah next to the Bāb al-Maṣrī.

Burton also indicated that the city contained between fifty and sixty streets, including alleys and cul-de-sacs, and the main ones radiated from the Mosque. Latticed balconies, rawāshīn, were very common to the streets of the town. The number of houses, according to his estimation, was 1,500 within the interior town and 1,000 in the suburbs, whilst the population of the city was estimated at 16,000, of which 9,000 occupied the interior town, and 7,000 the suburbs and the fort (Burton, 1964).

Three decades after Burton, Ibn Mūsā, a resident of Al-Madinah, gave us another description of the town in his manuscript, dated in 1303 H/1886 AD (Ibn Mūsā, 1972). His description shows that there was a considerable improvement in local services. He indicated, for example, that there were 31 schools, 8 public libraries, 2 ḥamāms (public baths), 2 hospitals and 24 public and private gardens within the city. It also seems that this period was



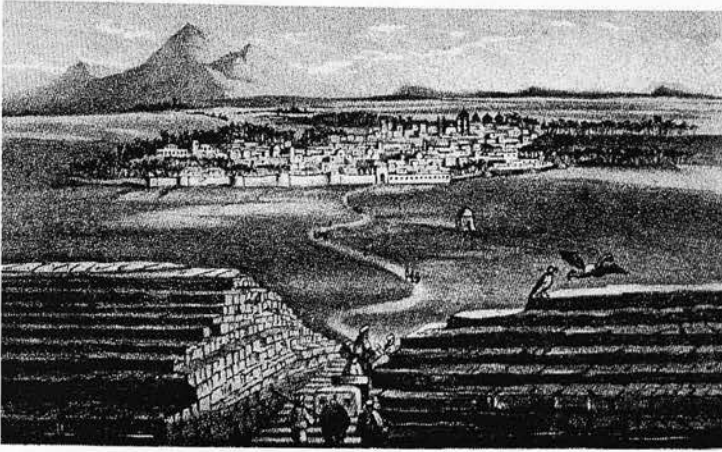


Figure 7.14: View of Al-Madinah taken from the Harrah (or ridge) west of the Town

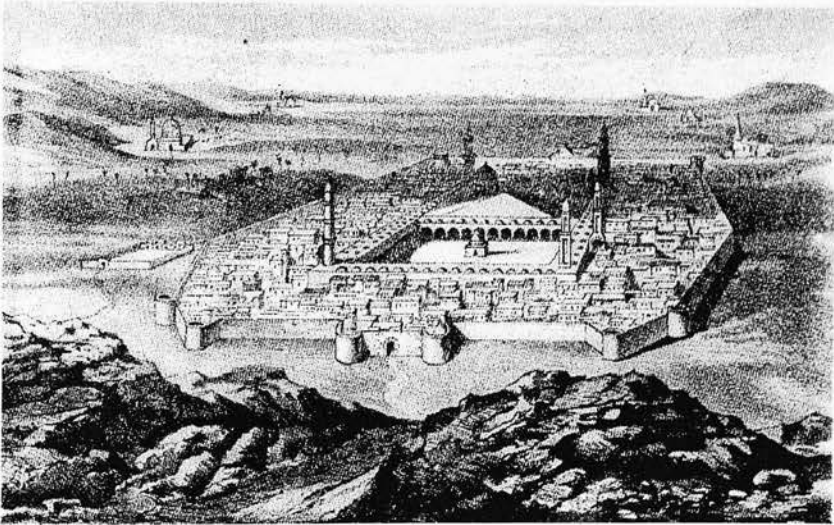


Figure 7.15: Sketch of Al-Madinah, by a Native Artist

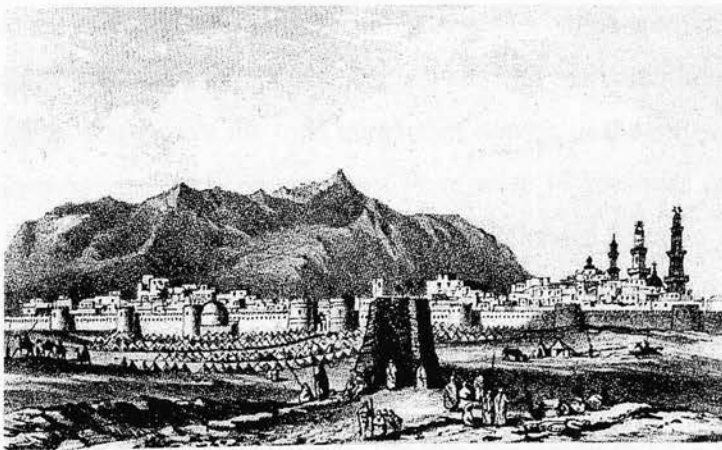


Figure 7.16: Al-Madinah view of the burial place of the Prophet (1269H/1853AD)<sup>10</sup>

<sup>10</sup> Source: Burton, op. cit., (opposite to pages 285, 391 and 377).

characterised by the development of commercial facilities. It is reported that there were eleven specialised *aswāk* in the *Manākhah*, in front of the *Bāb al-Maṣrī*. In addition to the *sūḵ* of the greengrocers and the grain bazaar which were mentioned by Burton, there were also in the *Manākhah*, the *aswāk* of the sellers of dates, oil, meat, spices, textiles, livestock, grass, coal and fire-wood and blacksmiths. Within the interior town, moreover, was the *sūḵ* of the *al-Shurūḵ*, specialising in 'abby (the traditional Arabian outer robe or cloak), and the *sūḵ* of the tailors. These branched out from the great bazaar, leading from *Bāb al Maṣrī* to the *Ĥaram* that was mentioned by *al-Samhūdī*, *Burckhardt* and *Burton* as the main commercial street of *Al-Madinah*. Also at that time some upward growth was observed in the suburbs. While *Burckhardt* and *Burton* had indicated that the *aḥwāsh*, in the suburbs, consisted of single-storey houses, *Ibn Mūsā* reported that they comprised single and two-storey houses (figure 7.31).

From the beginning of the twentieth century AD comes another account by *Rif'at*, who visited the town four times between 1318 H/1901 AD and 1325 H/1908 AD (*Rif'at*, without date). He described the outer and the inner walls of the city and indicated that each one had five gates (figures 7.17 - 7.21 and 7.23 - 7.25). He added that the inner wall was restored and raised to 25 metres and fortified with 40 towers by the Ottoman Sultan 'Abdul'azīz in 1285 H/1868 AD. The streets of the city were narrow; the main ones were not more than four metres across, while the alleys were less than 2 metres in width. The best of these buildings were built of stone. Most of them were two, three or more storeys high without inner courtyards. The ground floors were usually occupied by shops which were often raised one metre from the ground. The houses of notable people were well built and their façades were covered with *rawāshīn*. *Rif'at* gave the total number of houses in the city as 4,000. With respect to community services, it is reported that there were 17 mosques (apart from the *Ĥaram*), 18 public libraries, 19 schools, a hospital and two *ḥamāms*, while the number of shops was 932 and there were also 4 *wakālas* in the city.

One of the most important factors that influenced the city's growth at this time was the construction of the *Hidjāz* railway (*Ĥāfīz*, 1984). The line was begun in 1318 H/1900 AD at *Damascus*, and was brought to *Al-Madinah* in 1326 H/1908 AD. The railway station was built outside the city, to the south-west, next to *Bāb al-'Anbaryah* (figure 7.22). Because of this development, the inland travelling time from *Damascus* to *Al-Madinah* was reduced

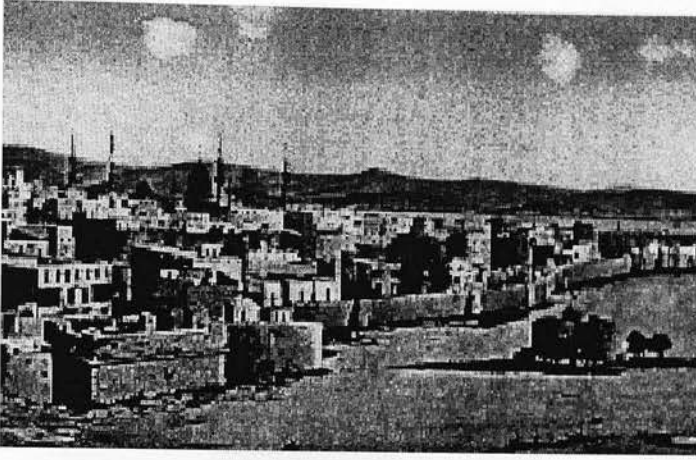


Figure 7.17: Al-Madinah, the general view showing the southern side of the town and city-wall (1330H/1912AD)

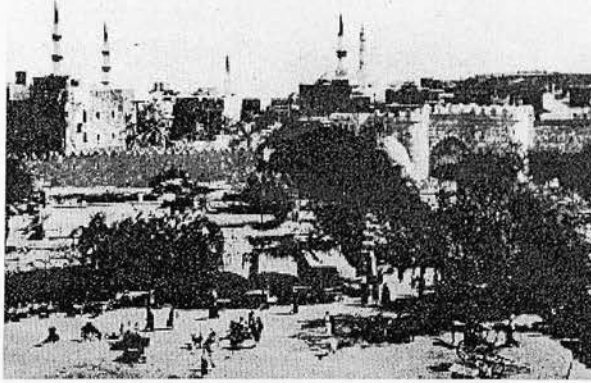


Figure 7.18: Al-Madinah, the general view with Bāb al-Maṣrī, an early-twentieth-century photograph

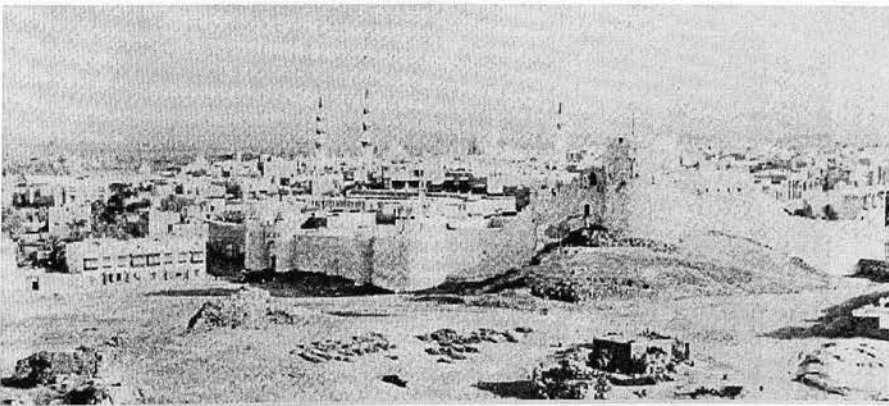


Figure 7.19: Al-Madinah, a general view, as seen from the north-west side (1326H/1908AD)<sup>11</sup>

<sup>11</sup> Rifat, *op.cit.*, V.I., plate 161.



Figure 7.20: Al-Madinah, Bāb al-Maṣrī in the interior wall, as seen from al-Manākhah market (1326H/1908AD)

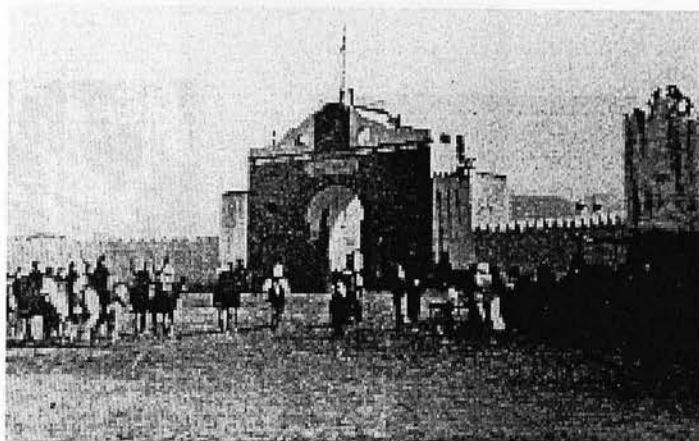


Figure 7.21: Al-Madinah, Bāb al-'Anbariyah in the exterior wall, as seen from outside the town (1326H/1908AD)<sup>12</sup>

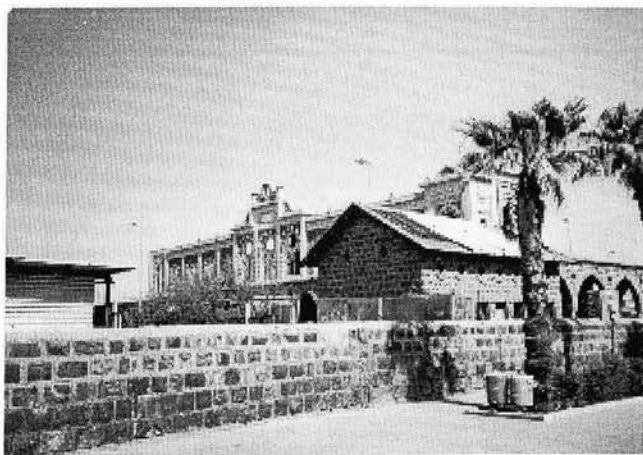


Figure 7.22: Al-Madinah, the Railway Station in al-'Anbariyah, built in (1325H/1907AD)

<sup>12</sup> Rif'at, *op.cit.*, V.I., plates 136 and 204.



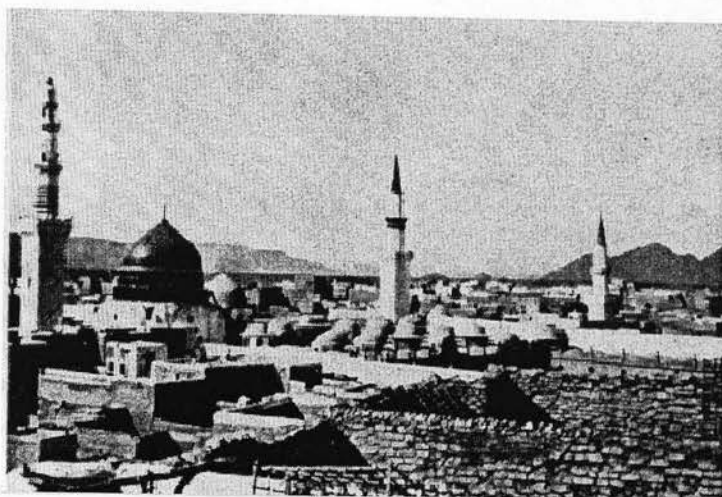


Figure 7.23: Al-Madinah, the Prophet's Mosque (al-Ĥaram) after its restoration by the Sultan 'Abdulmadjīd<sup>13</sup> (completed in 1277H/1861AD)



Figure 7.24: Al-Madinah, Bāb al-Salām, in the western side of al-Ĥaram (1326H/1908AD) as seen the Mosque surrounded by buildings

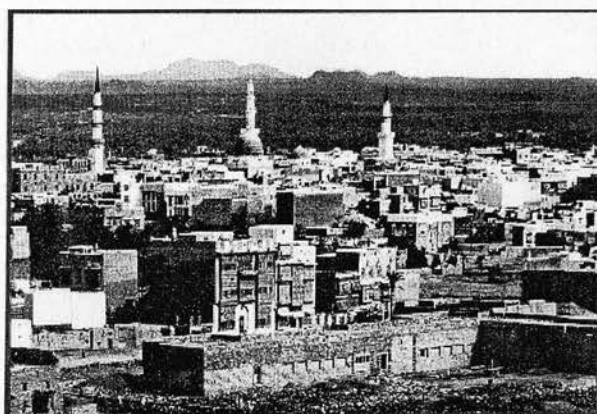


Figure 7.25: Al-Madinah, the general view of al-Ĥaram and the interior town (1326H/1908AD)

<sup>13</sup> Rifat, op.cit., V.I., plate 183.



from about 40 days by caravan, to only three days by rail (Makki, 1982). Thus, North African pilgrims changed their traditional route to the holy areas from the sea via Jeddah or Yanbu' to going by land via Syria.

This development in communications together with the instability in the North also resulted in the emigration of some of the Turks and the Syrians to Al-Madinah (Mostafa, 1981). This led to an almost threefold increase in the population of the city in six years: from 30,000 in 1326 H/1908 AD (Wavell, 1912) to 80,000 in 1332 H/1914 AD (Philby, 1946). It also contributed to the growth of the economy of the area as well as the urban expansion of the town which took place in the north.

This prosperity however, did not continue for long. The railway line, originally intended to service the pilgrims and the holy cities, also had some military and political importance in giving the Turkish ruler a new means by which he could tighten his hold on the area. As such, the line was the object of attacks after the Sharīf of Makkah, Ḥusayn b. 'Alī, revolted against the Ottomans in 1334 H/1916 AD and ultimately the trains were stopped and parts of the line blown up in 1335 H/1917 AD (Ḥāfiẓ, 1984). Several efforts were made later on by the Saudi, Jordanian and Syrian governments towards its reconstruction but these were unsuccessful (Makki, 1982). It has now been replaced by a highway network and air links that operates between the Saudi cities and neighbouring countries.

The Ottoman troops continued to stay in Al-Madinah until January 19th, 1919 AD, after the end of World War One. With the evacuation of the Turks, the city fell into the hands of the Sharīfs who ruled until it was taken over in Djumāda I 19th, 1344 H/December 5th, 1925 AD by 'Abdul'azīz b. Sa'ūd, who had already entered Makkah in 1343 H/1924 AD (Makki, 1982). The two holy cities were thus incorporated into the Saudi state the Kingdom of Saudi Arabia.

As far as the urban morphology was concerned we have a description and a map by Rutter who visited Al-Madinah in 1344 H/1925 AD (Rutter, 1928). He indicated, as did the earlier accounts, that the city consisted of the interior town, an oval form protected by a high strong wall with nine gates, and the south and south-western suburbs, themselves surrounded by a wall with five gates (figure 7.26). These two portions were separated by an open area, the Manākhah, and the fort, to the north. The two walls enclosed some two square miles (about

five square kilometres), considerably less than half of which lay within the inner wall. Outside the northern wall stood many palaces, built by wealthy Turks and others who settled in the town after the opening of the railway line. To the south-west of the city, beside the Bāb al-'Anbaryah, was situated the railway station, whose rectangular walled enclosure projected outside the outer city wall (figure 7.22). In the north of the town there was a third wall of mud and stone which began at the north-east corner of the Ottoman wall and followed a northerly direction, then it continued westward as far as the telegraph compound (figure 7.26). It was known as the Ḥusyn's wall, after the Sharīf Ḥusyn of Makkah who built it during his rule to protect the anticipated northern city expansion.

In regards to the streets, Rutter (1928) reported that they were very narrow apart from the principal ones. In particular, in the quarter of al-Aghwāt, the oldest part of the town located to the south-east of the Ḥaram, the streets were so narrow that two men, walking on foot, could not pass one another without turning sideways (figures 7.27 - 7.30). These streets were roofed and small holes were made to admit light and air into their dark interiors. In enquiring about the reasoning behind these arrangements, Rutter was told by the residents that they built their houses so close to protect themselves from the simūm, the dry burning wind in the summer.

Among the principal streets of the town indicated by Rutter, the Sūḵ Street ran from the Bāb al-Maṣrī to the Bāb al-Salām of the Ḥaram and was lined with small shops, which occupied the front part of the ground floors of the houses. Parallel to this ran another commercial street, al-'Ayniyah, which was opened during the reconstruction of the Mosque under the Sultan 'Abdulmajīd (1255-1277 H/1839-1861 AD) for transporting columns and stone blocks from Wadī al-'Aḳiḳ.

Rutter's map shows a new open area to the north of the Ḥaram. It was said to have been made by the Commanding General of the Turkish forces, 'Umar Fakhrudīn Pāsha, just before the Turks' withdrawal from the city, in order to defend the Mosque (Esin, 1974). In regards to the population of the city, Rutter indicated that it fell from 70,000 or 80,000 at the end of the Ottoman rule to only 6,000 at the time of his visit, as a result of the struggle in the city between the Turks, the Sharīfs and the Saudis (Rutter, 1928).

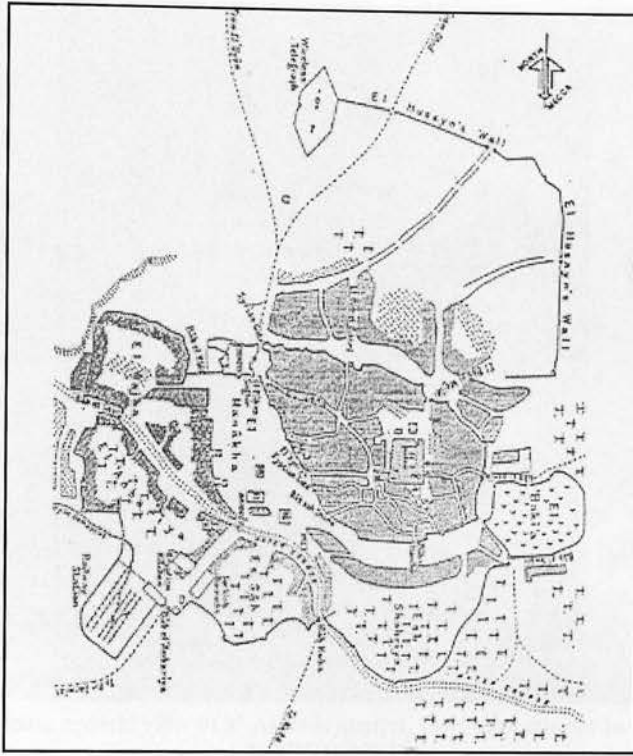


Figure 7.26: Plan of Al-Madinah (1344H/1925AD)<sup>14</sup>

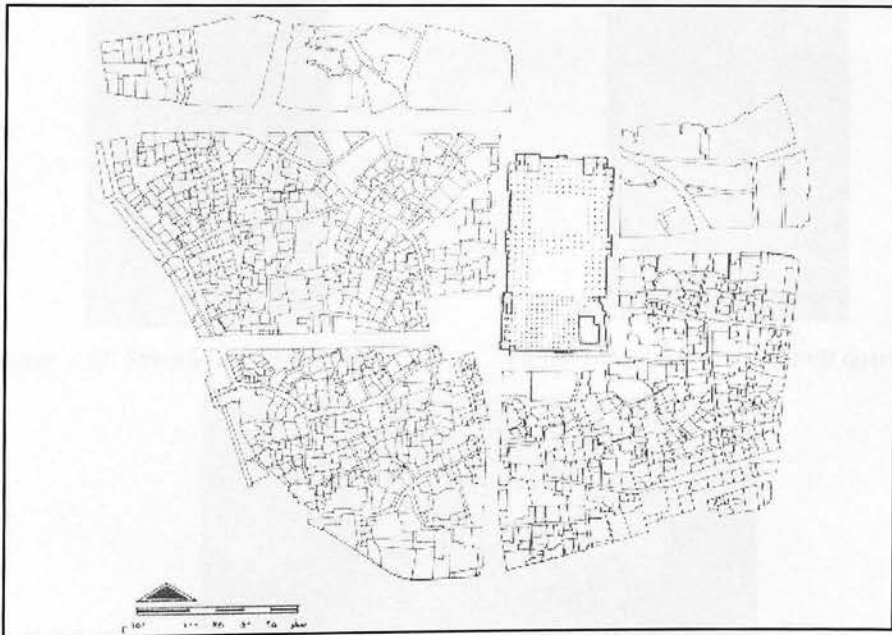


Figure 7.27: Streets and land distribution in the traditional urban fabric of the City, (quarters and al-Ahwāsh) the last remaining demolished between 1405-1407H/1985-1987AD<sup>15</sup>

<sup>14</sup> Rutter, Eldon, 1928, *The Holy Cities of Arabia*, London, V.II, (between p.208 and 209).

<sup>15</sup> al-Hathlūl, Şaleh, A., 1994, *al-Madinah al-'Arabiyyah al-Islamiyyah*, (Arabic-Islamic City), Dār al-Sahn, al-Riyadh, p.50.

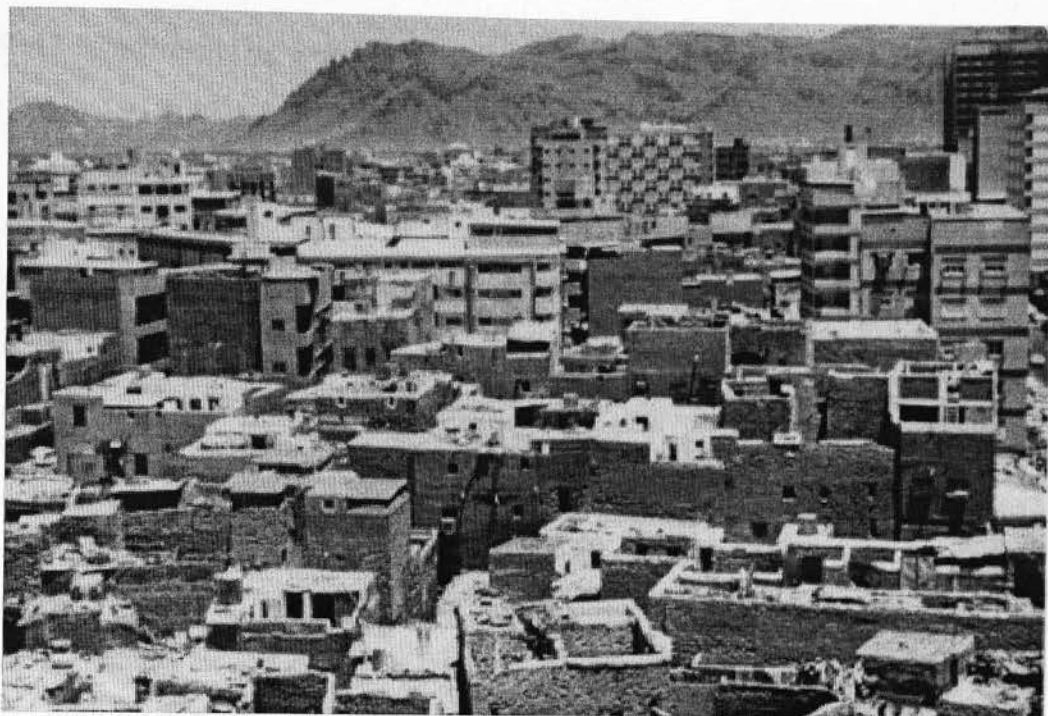


Figure 7.28: Al-Madinah, general view of al-Aghwāt quarter, the oldest quarter in the city, (demolished in 1405H/1985AD)



Figure 7.29: Street in al-Aghwāt quarter



Figure 7.30: Alley in al-Aghwāt quarter<sup>16</sup>

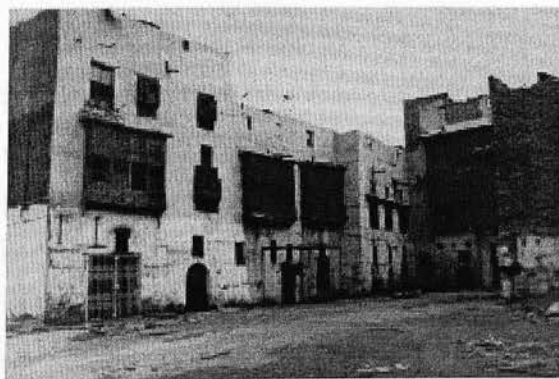


Figure 7.31: Al-Madinah, al-Ahwāsh (sharing courtyard) in al-'Anbariyah area, Hush al-Şulţān

<sup>16</sup> This photograph was taken from Dr. Mohammad A. Al-Hussayen collection.



## **7.5 Al-Madinah During the Saudi and Contemporary Era (From 1336 H/From 1918 AD)**

Seven years after the submission of Al-Madinah to King 'Abdul'azīz, who had confirmed his rule and position in both Najd and Hidjāz, the unification of the country under the Kingdom of Saudi Arabia was announced in Djamād I 21st, 1351 H/ September 23rd, 1932 AD (Daghistani, 1983). Perhaps the most important result of the new regime was the introduction of security, peace and stability to the Arabian Peninsula. Previously to that, the area had suffered from internal war and the fear of raids on urban areas and camel caravans by Bedouins (ibid.).

At the beginning of the Saudi rule the state was in a poor financial condition. The economy was confined to the limited revenues from the yearly influx of pilgrims to the holy places, livestock raising by Bedouins and primitive agriculture (Johanny, 1982) with an estimated 90 per cent of the population subsisting as nomads and peasant farmers (Ministry of Planning, 1980). Oil was first discovered in commercial quantities in 1357 H/1938 AD, but World War II prevented its full exploitation. During the six years following this discovery the Kingdom's total annual revenues did not exceed \$4 million. By 1368 H/1948 AD revenues had risen to \$85 million giving the government more capital to invest in national development (Ministry of Planning, 1980). Since then the Kingdom's mainly oil-based revenues have continued to rise rapidly, particularly in the 1970s.

The four-fold increase of oil prices after the October 1973 Arab-Israeli conflict brought about a phenomenal improvement in the national economy. The government's revenues increased about six-fold in two years. They rose from SR.15,325 million in the fiscal year 1972-73 to SR.41,705 million in the fiscal year 1973-74 and SR.100,103 million in the fiscal year 1974-75 (Ministry of Information, 1979). These trends continued in the late 1970s and the beginning of the 1980s and in the fiscal year 1982-83 the government budget increased to its highest level, SR.313.4 billion (Kisam, 1988).

The rapid development of the national economy of the Kingdom, amongst other factors, led to a profound change in the social, economic and physical structure of Al-Madinah, as with



all other parts of the country.

Three distinctive stages in the development of Al-Madinah during the Saudi reign can therefore be identified: the early Saudi Era; the developments in the 1950s and 1960s; and the developments in the 1970s and 1980s.

### **The Early Saudi Era (1344-1370 H/1925-1950 AD)**

As a result of the security which distinguished the Saudi period from that of the Sharīfs and the end of the Ottoman rule, many of the Madinese who had left the city during the struggle amongst these three powers, returned to it. The population grew from about the 6,000 recorded during the visit of Rutter in 1925 (Rutter, 1928) to 15,000 according to the estimate of Philby in 1931 (Philby, 1946).

However, as far as the urban morphology and the transformation of the city were concerned, it seems that no significant change took place. The account of Philby, an Englishman who visited the city three times in 1931, 1935 and 1938, gives a similar picture to that described by the earlier writers (Philby, 1946). In describing the uniquely inspiring experience of approaching the City of the Prophet, to which every Muslim looks forward and which was recorded by the early writers, Philby, who travelled by motor car, wrote:

"From far off - perhaps some ten miles as the crow flies - I looked down for the first time on the city of the Prophet, set in a grey-blue blur of rock and desert in which, at that distance, it was impossible to distinguish the long thick line of palms of the oasis from the low ridges of out-poured lava that almost completely girdle it with their oval frame within an outer setting of granite and basalt mountains. Of the city itself nothing stood out but the slender spires of the Prophet's mosque - a beacon flashing its message of faith and hope far and wide to west and east and north and south. They were our guide for the rest of the journey as we sped down the slope between scattered basalt kopjes towards the pleasant little palm-groves of Abyr'Ali ... " (ibid., p.50).

As to the structure of the town itself, Philby indicated that it was divided into three parts - the city (the interior town), the camp (the Manākhah) and the annexe (the suburbs) (figure 7.32).

These were enclosed by an outer wall, forming roughly an oval with a length of about 1,676 metres from East to West and a width of about half this distance from North to South. The interior town, with its Ottoman walls still intact, occupied the northern half of the city (figure 7.19), whilst the central feature of the interior town, not far from its eastern extremity, was, naturally, the Prophet's Mosque. The Mosque stood out as the chief architectural feature not only of Al-Madinah, but of all Arabia and, despite some crowding of buildings around its southern side, it had the merit of being visible from several points outside the city walls. (figures 7.17 - 7.19, 7.25 and 7.33).

The annexe (suburbs) occupied the southern and western part of the city. It was crossed by the main street of al- 'Anbaryah which led from the railway station, situated outside the city wall to the south-west, to the Manākhah area. Philby noticed that, apart from the houses which were located along this street, buildings in this part of the town were in a ruinous state as a result of the decline in the population and in the number of pilgrims visiting the city at that time.

The camp area (Manākhah) occupied the area between the interior town and the suburbs. It was still, as in the early times, used as a stopping place for caravans, and for camping (figure 7.18). Whilst around it grew houses and hostel accommodation for visitors (figure 7.35 and 7.36). To the East of the area, near to the Bāb al-Maṣrī, were some aswāḳ mainly specialising in country produce such as fruit, vegetables and meat. To the South were the offices of the chief of police, the town hall and some old mosques, while to the North lay the fort dominating the Manākhah area on one side and flanking the great North Road on the other (figure 7.19).

The street that led from Bāb al-Maṣrī to the Ḥaram was still, as indicated by the early writers, the principal sūḳ of the city. Next to it, along the new thoroughfare al-'Ayniyah Street, some shops were built, set back behind roofed arcades (figure 7.34). Old buildings were concentrated mainly in the quarter of al-Aghwāt, to the south-west of the Ḥaram. The earliest date recorded on a building in this area according to Philby, went back as far as 706 H/1306 AD. It was inscribed on a waḳf (pious foundation) hostel for men.

The only new element introduced to the city at this time seems to be the automobile. The

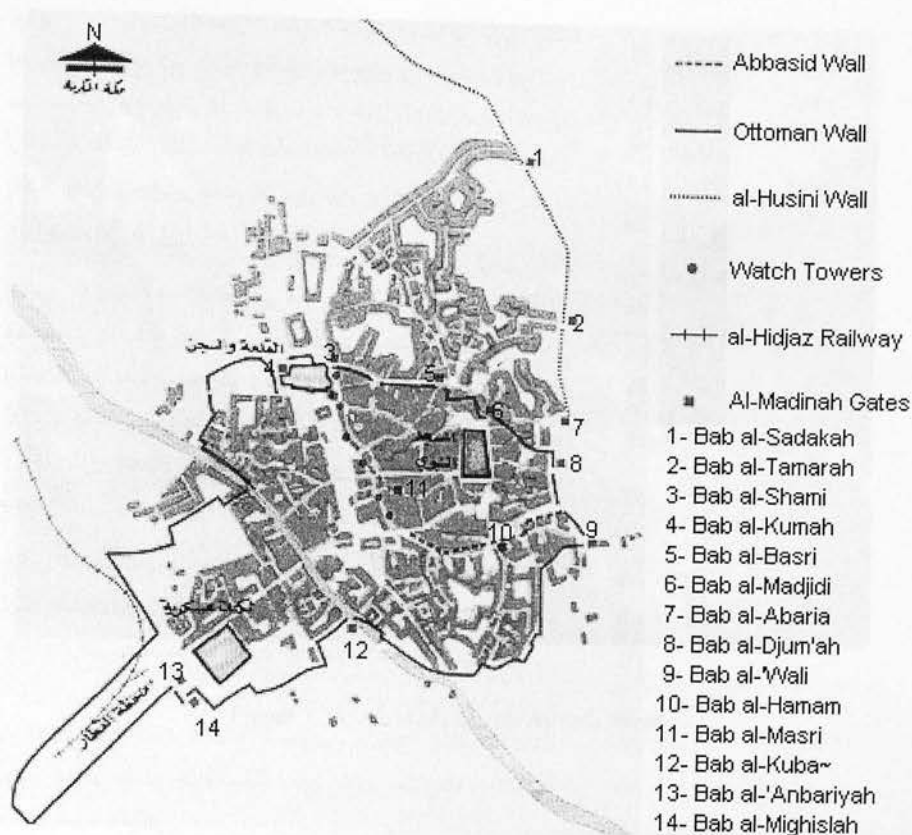


Figure 7.32: Plan of Al-Madinah (1367H/1947AD)<sup>17</sup>

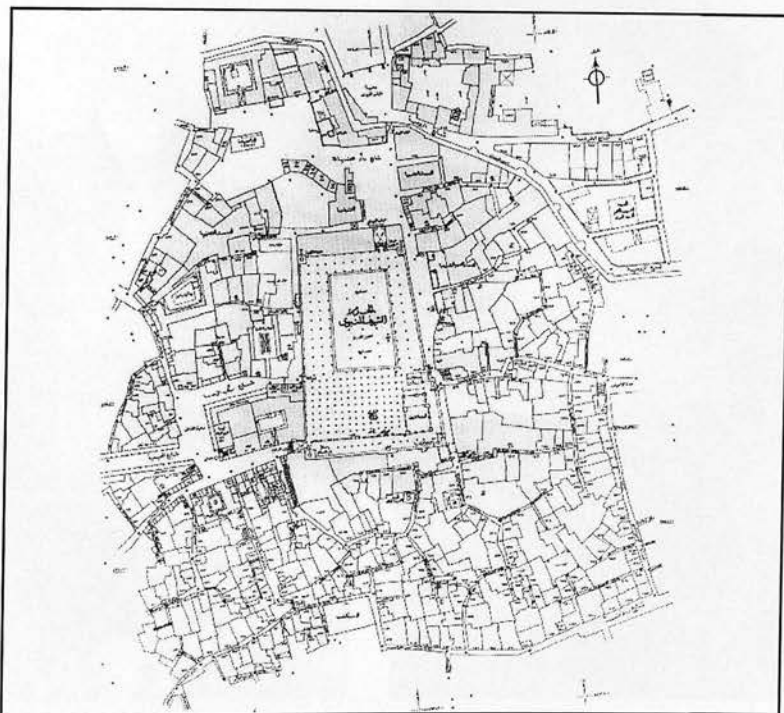


Figure 7.33: Plan of the Prophet's Mosque as it was surrounded by the traditional urban fabric 1951

<sup>17</sup> Makki, M.S., 1982, Medina, Saudi Arabia, a Geographic Analysis of the City and Region, England, p.36.

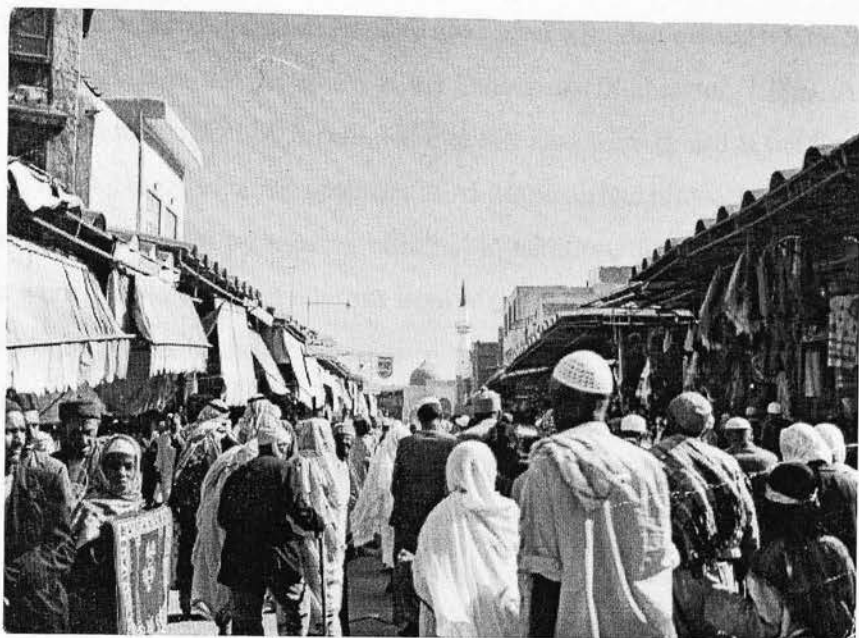


Figure 7.34: Al-Madinah, al-'Ainyah street

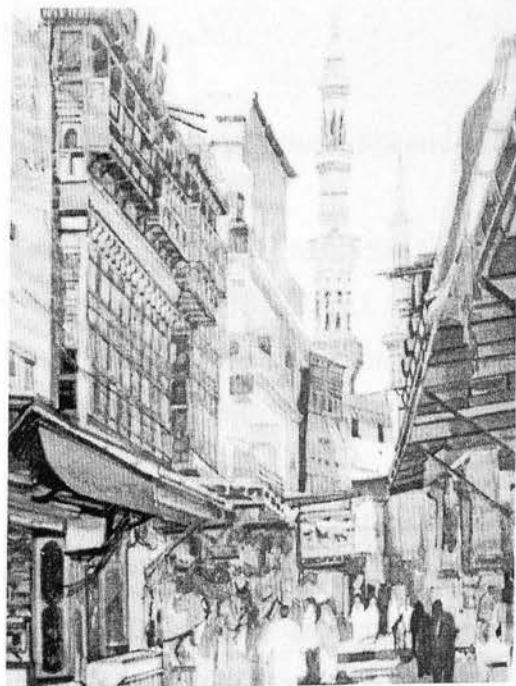


Figure 7.35: Al-Madinah, al-Sahah street

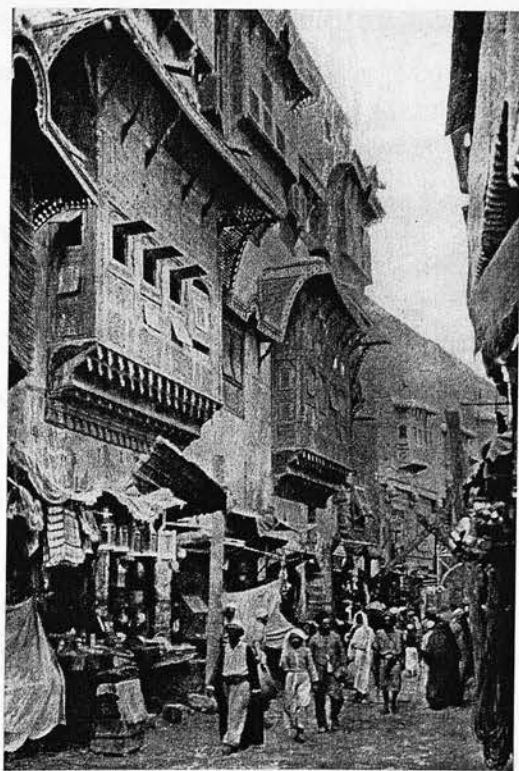


Figure 7.36: Al-Madinah, a residential street



earliest car in use in the Hidjāz is reported to have been with that owned by the Sharīf Ḥusyn b. 'Alī in Makkah, after the departure of the Ottomans (Daghistani, 1983). As far as Al-Madinah was concerned, Philby mentioned that few cars were in use at the time of his first visit, in 1931 AD. He says that the governor of Al-Madinah had his fleet of vehicles and there were another three owned by wealthy citizens. In addition, during the pilgrimage season, some cars were used to transport pilgrims from Makkah and Jeddah to Al-Madinah and vice versa. Thus, the tracks leading to the nearby villages of Ḳubā~ in the South, and Saydnā Ḥamzah in the North, were improved and marked out.

As for the general character of the city Philby wrote:

"It is quite definitely a city with a soul. Its appeal is to the spirit rather than to the mind. And the genius loci, fostered through the long centuries by genuine and unbroken local veneration, pervades the whole atmosphere of Medina [Al-Madinah] even as the steeped casket of its shrine dominates the physical landscape. Though more exposed to the political storms and tempests of the world, the Prophet's city must be more like its old self - in all essentials - than is the great heterogeneous corporation that now fills the valley of Mecca [Makkah],..." (Philby, 1946, p.51).

### **The Developments in the 1950s and 1960s AD**

The first major changes in the Saudi reign that influenced the morphology of the Prophet's city started in 1370 H/1950 AD, following the order of King 'Abdul'azīz to the enlargement of the Ḥaram and the street around it. The inauguration of the new building took place in 1375 H/1955 AD while the other projects were completed at a later date (Ḥāfīz, 1984).

In this enlargement, the northern section of the building including the northern minarets, the eastern wall and the minaret next to Bāb al-Rāḥmah was torn down. The southern prayer hall as well as the southern minarets were maintained and incorporated into the new structure (figures 7.37 and 7.38) which was built of reinforced concrete with a flat roof and took a more symmetrical shape. The new expansion was towards the north, east and west. The north to south length, was extended to 128 metres and the northern wall measured 91 metres in length, increasing the total area from 10,303 square metres to about 16,500 square metres.



Another courtyard was introduced to the building and two minarets, each 70 metres high and in neo-Mamluk style, were constructed in the northern corners. In addition, four new gates were added: Bāb 'Abdul'azīz in the middle of the eastern wall; facing it in the western wall Bāb Su'ūd; and Bāb 'Umar and Bāb 'Uthmān in the western and eastern corners of the northern wall (Ĥāfīz, 1984).

The transportation developments accompanying the project resulted, as did the Mosque itself, in large scale demolition of the traditional urban fabric of the city (Figs. 7.39 and 7.40). The aim was to facilitate traffic by admitting the new guest, the motor car, to the area. Thus, new large, straight streets were opened, some of the aẓīḡah (alleys) widened, and the traditional aḥwāsh (large shared courtyards, secured by gates locked at night, surrounded by thirty to forty houses) were altered. These, together with the compensations that were given to the people whose properties were affected, led to an increase in land prices compared with the period preceding the projects. As a result upward growth in the area started. Blocks of four to six storeys took the place of the two to four storey traditional buildings as it became lucrative to build hotels or flats for rent (Makki, 1982).

The streets encircling the Ĥaram were widened and paved with mosaic. A new square was made in the north of the Mosque and the old one opposite the Bāb al-Salām and Bāb al-Rāḥmah, in the west of the Mosque, was enlarged and paved with mosaic, too. This square was connected to the Darb al-Djanāz Street with a completely new road, 12 metres wide. An asphaltite street, King 'Abdul'aziz Street, was constructed after some clearances. This leads from the Mosque to Abī Dhar Street in the east. The streets of al-Maḡār (airport), and Abī Dhar were also widened and asphaltite. In addition, the streets of al-'Anbaryah, Ḥubāḥ, Saydnā Ĥamzah (to the north) and Sulṡānah (to the north west) were asphaltite (Ĥāfīz, 1984). With these developments large parts of the old city walls gradually disappeared under bulldozers. According to Philby in 1957 only some fragments of them could still be seen (Winder, 1986). The city expanded in every direction where land was available and the urban area increased from 250 hectares in 1945 to 800 hectares in 1964 (GACDAR, 1980).

The improvements in urban traffic routes were complemented by two major transport projects, namely the construction of an asphaltite road linking the city with Jeddah, the main seaport and airport of the western part of the country; and the building of Al-Madinah's

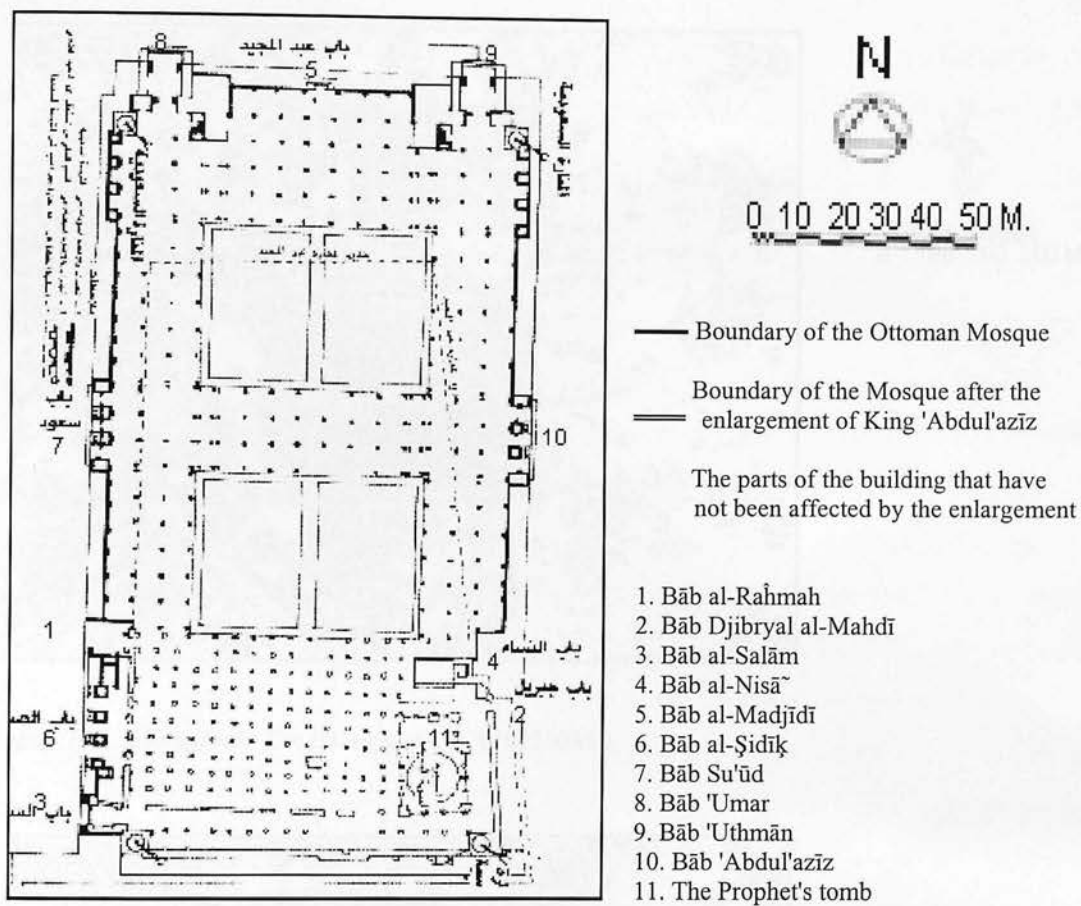


Figure 7.37: Al-Madinah, The Ĥaram after the enlargement of King 'Abdul'aziz, (1370-1375H/1950-1955AD)<sup>18</sup>



Figure 7.38: Al-Madinah, The Ĥaram after the enlargement of King 'Abdul'azī

<sup>18</sup> ḤāFīz, 'Alī, 1984, *Fuṣūl min Tārīkh al-Madina*, Jeddah, p.100.

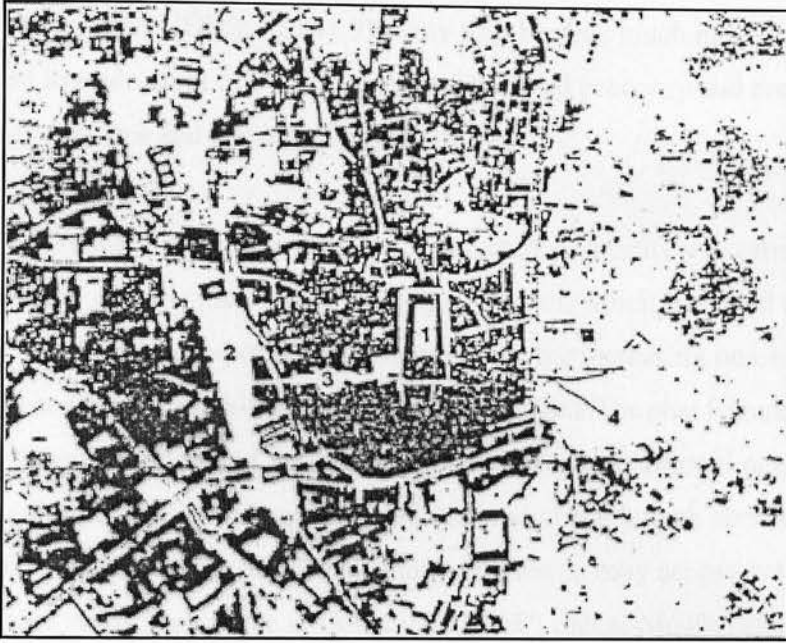


Figure 7.39: Al-Madinah, The Ĥaram area (1370H/1950AD)



1. The Ĥaram
2. al- Manākhhah area
3. al-'Aīnyah street
4. al-Baḳī' cemetery

Figure 7.40: Al-Madinah, The Ĥaram area (1373H/1953AD)<sup>19</sup>

<sup>19</sup> GACDAR, 1982, Project No. 202, Ministr of Municipal and Rural Affairs, Riyadh, Report No. 13, pp. 18 and 20.

airport that connected the city with the different parts of the Kingdom and indeed with the outside world (Ĥāfīz, 1984). The city thus became much more easily accessible to visitors and to trade, both of which stimulated the local economy and created a further demand for new services and expansion of the city.

The process of changing the physical structure of the city was carried a stage further in 1381 H/1961 AD this time by the municipality itself, which launched a new plan, mainly aimed at facilitating transport and accommodating the increasing numbers of motor vehicles that the new Al-Madinah-Jeddah road had encouraged. The plan featured more wide streets, street lighting, planting and pavements for pedestrians. Additional new streets were cut into the traditional fabric, for example al-Saḥah and al-Sunbulyah streets, in order to connect Abī Dhar street with the Manākhah and to provide an easy access to the Ĥaram from the north. Other roads such as the al-'Anbaryah, Ḳubā~, Bāb al-Madjīdī and al-'Awālī were widened. Entrances to some of the old ahwāsh were also widened, while some other ahwāsh were opened up by new streets crossing through them. In addition the old Ottoman fort, at the north of the Manākhah, was torn down in order to give part of its site to the new Manākhah boulevard that was planned to allow the flow of the north-south through traffic (Ĥāfīz, 1984).

These street constructions were followed by other public and private building developments. The former include building governmental offices, schools, hospitals and other local community facilities and services for pilgrims. Private development was represented mostly in the construction of hotels, guest houses and apartment buildings and in catering, mainly aimed at meeting the increasing demand for accommodation of pilgrims. The number of overseas pilgrims increased more than four-fold in a decade, rising from 23,863 in 1360 H/1942 AD to 100,578 in 1370 H/ 1951 AD. By the end of the next decade (1380 H/1961 AD) it had jumped to 285,948 and to 431,270 in the pilgrimage of 1390 H/1971 AD.

These developments certainly created new jobs and enhanced the standard of living in the city. Together with the city's religious sanctity, improvements in community services and cheap travel, the developments attracted more immigrants from the surrounding rural areas as well as from outside the country. As a result the city's population increased from 40,000 in 1959 AD to 50,000 in 1962 AD; a growth rate of 7.7 per cent a year. In the next seven years it more than doubled with an average annual growth rate of 11.9 per cent; by 1969 AD



the population of the city was estimated at 110,000.

At this stage the city's growth may be characterised as a polynuclear development. It took place in four satellite suburbs outside the city walls, which developed along the newly constructed roads leading to the old settlement of *Ḳubā* to the south, the airport to the Northeast, *Sayd al-Shuhadā* area to the North, and along *al-Sayḥ* street in the West. The increasing population, progressive demolition of the traditional City, and relatively cheap land in these suburbs attracted further developments until they eventually were integrated as quarters of the City. However, many vacant plots in these areas, as in other parts of the city, are still to be seen today. To a large extent they have been left undeveloped in anticipation of a further increase in land prices and land speculation.

The height of buildings as well as the quality of construction depended on the location of the site in relation to the *Ḥaram*. The closer the area to the *Ḥaram*, the more expensive the land and consequently the higher the buildings and the better the quality of construction. Heights ranged from a single storey to six storeys. Buildings in the vicinity of the *Ḥaram* and along the main streets were typically constructed of reinforced concrete, with large balconies replacing the traditional *rawāshīn* and outer yards of villas replacing the inner courtyards of the traditional houses.

Buildings further away from the *Ḥaram* and off the main roads however, were still built of stone and sun-dried bricks during the 1950s and 1960s. In some cases traditional and new materials were combined, with stone used on the ground floor and concrete blocks above. The former is more insulating, whilst the latter gives a thinner wall construction thus creating larger rooms (Makki, 1982).

### **The Developments in the 1970s and 1980s AD**

During the 1970s and 1980s the city has undergone greater physical changes than at any previous time. Development processes were stimulated further by the 1970s economic boom and its associated social and economic pressures. The economic growth prompted a manifold increase in public expenditure on the physical development projects which can be classified into two categories:



Firstly, there are the projects financed directly by the state. These include development of the infrastructure of the city, for example roads, water supply and electricity networks; and community services such as schools, hospitals, public housing and governmental offices. Secondly, there are the projects that are supported by the Real Estate Development Fund (REDF), a new government agency established in 1394 H/1974 AD. The REDF basically offers two types of long term (25 years) interest free loans to Saudi nationals for construction projects. Private loans are granted to land owners for building private houses. These loans should not exceed 70 per cent of the cost of the building, with a maximum limit of SR.300,000. Additionally, investment loans are given for the construction of commercial projects such as hotels, offices and large scale housing developments. These loans are restricted to a maximum of 50 per cent of the total cost of the project with an upper limit of SR.10 million. The conditions that the applicant should own the land and should contribute towards the cost of the building from his/her own resources limits the number of the people eligible for these loans. However, it is reported that 14,000 applications were approved by the REDF in Al-Madinah between 1975 and 1984 AD (Abdulaal, 1985).

These developments required an extensive skilled and non-skilled labour force that could not be met by the city's previous population growth rates. However, the sanctity of the city and the sharp increase in wages which resulted from the rising demand for employees, attracted more migrants from rural areas within the Al-Madinah region and from outside the country. The population of the city increased to about one and a half times its former size in three years, with the highest annual growth rate (13.1 per cent) since the end of the Ottoman era. In 1971 the architectural and planning firm Robert Matthew, Johnson Marshall and Partners, depending on a sample survey, estimated the population of the city at 137,000, and according to the 1974 census, it had risen to 198,055. In 1978 a sample survey carried out by the GACDAR (Group of Arab Consultants for Development and Reconstruction), showed that the population had increased to 311,284, at a rate of 11.9 per cent a year (GACDAR, 1980). This survey indicated in addition that immigrants constituted a significant proportion of the population. It showed that about 44.6 per cent of the total number of heads of households were born in Al-Madinah, while the rest (55.4 per cent) were born outside the city. Saudis constituted about 64.2 per cent of the immigrants while the remaining 35.8 per cent came from outside the country (ibid.). Furthermore, the construction sector in the employment structure of the population jumped from 4.9 per cent in 1971 to 11.4 per cent in 1978 (ibid.).

The overall growth rate of the city population was predicted by the Municipality of Al-Madinah as 4.5 per cent as a low forecast and 6.5 per cent as a high forecast (Municipality of Al-Madina, 1987). This would give a projected population of 480,000 for the low estimate and 580,000 for the high estimate in 1988.

The rapid population growth of the city was accompanied by a corresponding increase in the number of visiting pilgrims. For example, the total number of pilgrims from both inside and outside Saudi Arabia, of whom 80 per cent visited Al-Madinah in 1978 according to GACDAR (Municipality of Al-Madina, 1987), almost doubled in nine years, jumping from 1,079,760 in 1390 H/1971 AD to 2,079,689 in 1399 H/1979 AD. The peak, however, was in 1403 H/1983 AD when the number of pilgrims reached 2,501,706. The number then declined as a result of the government's restriction of the numbers of pilgrims from inside the country and by 1407 H/1987 AD it dropped to 1,619,324 pilgrims.

As for the urban area, it has continued to increase rapidly, but at a slower rate than the growth of the population which suggests an increase in the overall population density. The area from 1,300 hectares in 1971 to 2,360 hectares in 1978, at a rate of about 8.9 per cent a year. In the next seven years it almost doubled to 4,691 hectares with an annual growth rate of 10.3 per cent

The Ĥaram Area in particular, was the most affected by these recent developments. Its historical character and the traditional urban fabric that had developed and been refined over centuries became obsolete before the bulldozers. In 1970 a large part of the traditional quarter to the west of the Mosque was demolished and temporary canopies were built to provide a shaded prayer area for the increasing numbers of pilgrims and residents of the city (figure 7.41). In 1975 the rest of the quarter up to the al-Manākhah Street was cleared for extending the canopied area (figure 7.42) (GACDAR, 1980). These extensions added an area of 45,000 square metres to the 16,500 square metres permanent building (the Editors Msgazine, 1986).

In 1975 a fire broke out in al-Shūnah quarter, to the south west of the Ĥaram, resulting in the loss of a further portion of the traditional city (figure 7.43). Through this quarter ran the sūḵ (market) of al-ḵmāshah, the sellers of textiles. The narrow winding street was lined on both sides with about 400 small shops (each 2-2.5 metres in width) specialising in the single

commodity of textiles (Ĥāfiẓ, 1984). The site of this quarter was consequently occupied by a large car park.

In addition a new road, the First Ring Road, encircling the Ĥaram Area, was constructed after the acquisition and clearance of many traditional buildings, mostly houses. This resulted in a further disintegration of the traditional urban fabric of the city, especially in the area to the west of al-Manākhah Street, that consisted principally of old aĥwāsh. To improve the traffic flow of this road, originally built to solve the transport problems in the area, an overhead bridge and tunnel were built in the early 1980s. The bridge was constructed along the southern part of the Ring Road, stretching between the junctions of the al-'Anbaryah and Ḳurbān roads, while a tunnel was built under al-Manākhah Street to ease the north-south through traffic in the city (Ĥāfiẓ, 1984). These developments have further exposed the Ĥaram Area to traffic, which has had an obvious impact on its peaceful and historical character. The Ring Road and the bridge in particular also resulted in the present physical separation of the area from the rest of the city, which had, through centuries, evolved as a natural extension of the Mosque (figure 7.46).

Further areas of the traditional city were cleared in the last four years to make way for the largest ever extension of the Ĥaram (figures 7.44 and 7.45). These included the quarter of al-Aghwāt, to the south-east of the Ĥaram. This was the oldest part of the town with its historic covered alleys some of which are said to have been in use since the Prophet's time (figure 7.30) (GACDAR, 1980). The quarter also contained some historic buildings one of which was a waḳf (pious foundation) hostel. As mentioned earlier, it said to have dated from the beginning of the 8th H/14th AD century (706 H/1306 AD) (figures 7.27 - 7.30). The demolition also extended to the areas in the north and east of the Mosque, which contained the last remains of the traditional aswāk, and which for centuries characterised the city (figure 7.35 - 7.36).

With the clearance of the Bāb al-Madjīdī quarter to the north of the Ĥaram in particular, the city lost in addition, the last fragments of its finest architectural heritage. This area was the last remains of the northern suburb that developed towards the end of the Ottoman period. Buildings along the principal street of this quarter were three to four storeys, built of stone, with shops at ground floor level and dwellings in the upper ones. The facades of the upper



Figure 7.41: Al-Madinah, The Ĥaram area (1390H/1970AD)



1. The Ĥaram
2. al- Manākhah area
3. al-'Aīnyah street
4. al-Baqī' cemetery
5. The first ring road

Figure 7.42: Al-Madinah, The Ĥaram area (1395H/1975AD)<sup>20</sup>

<sup>20</sup> GACDAR, 1982, op. cit., Report No. 13, pp. 21 and 22



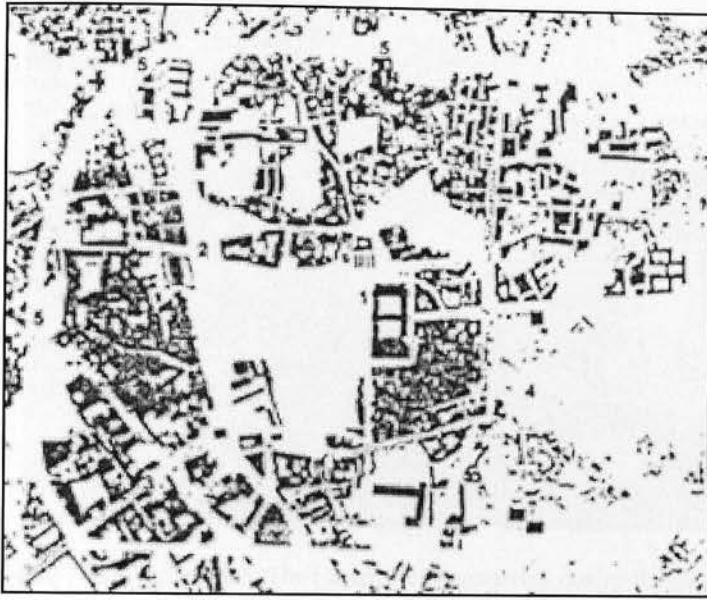
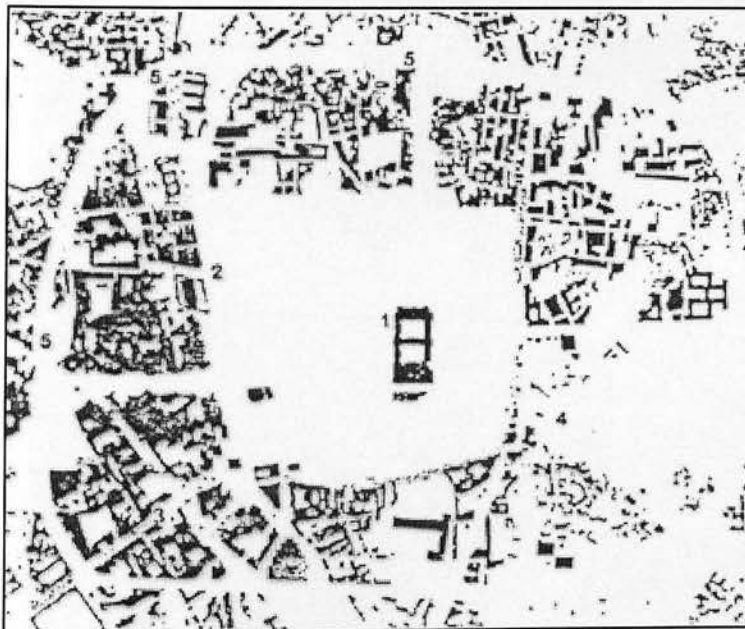


Figure 7.43: Al-Madinah, The Ĥaram area (1397H/1977AD)<sup>21</sup>



1. The Ĥaram
2. al- Manākhah area
3. al-'Aīnyah street
4. al-Baḳī' cemetery
5. The first ring road

Figure 7.44: Al-Madinah, The Ĥaram area after the clearance of the old parts of the city by 1987

<sup>21</sup> GACDAR, 1982, op. cit., Report No. 13, p. 27.



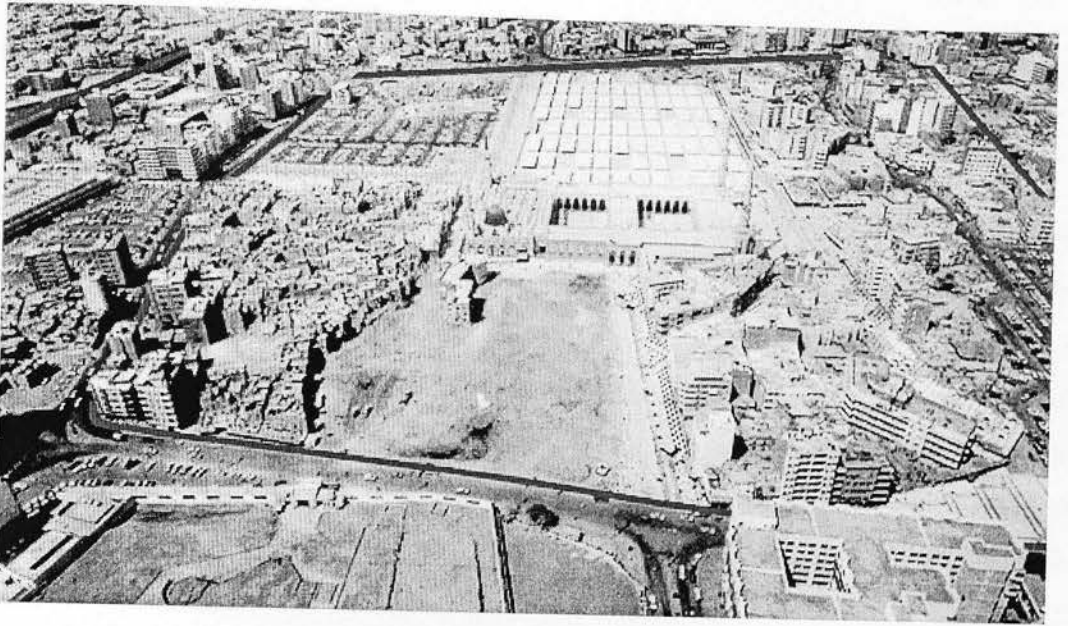


Figure 7.45: Al-Madinah, The Ĥaram area boundaries, during the clearance of the old parts of the city<sup>22</sup>

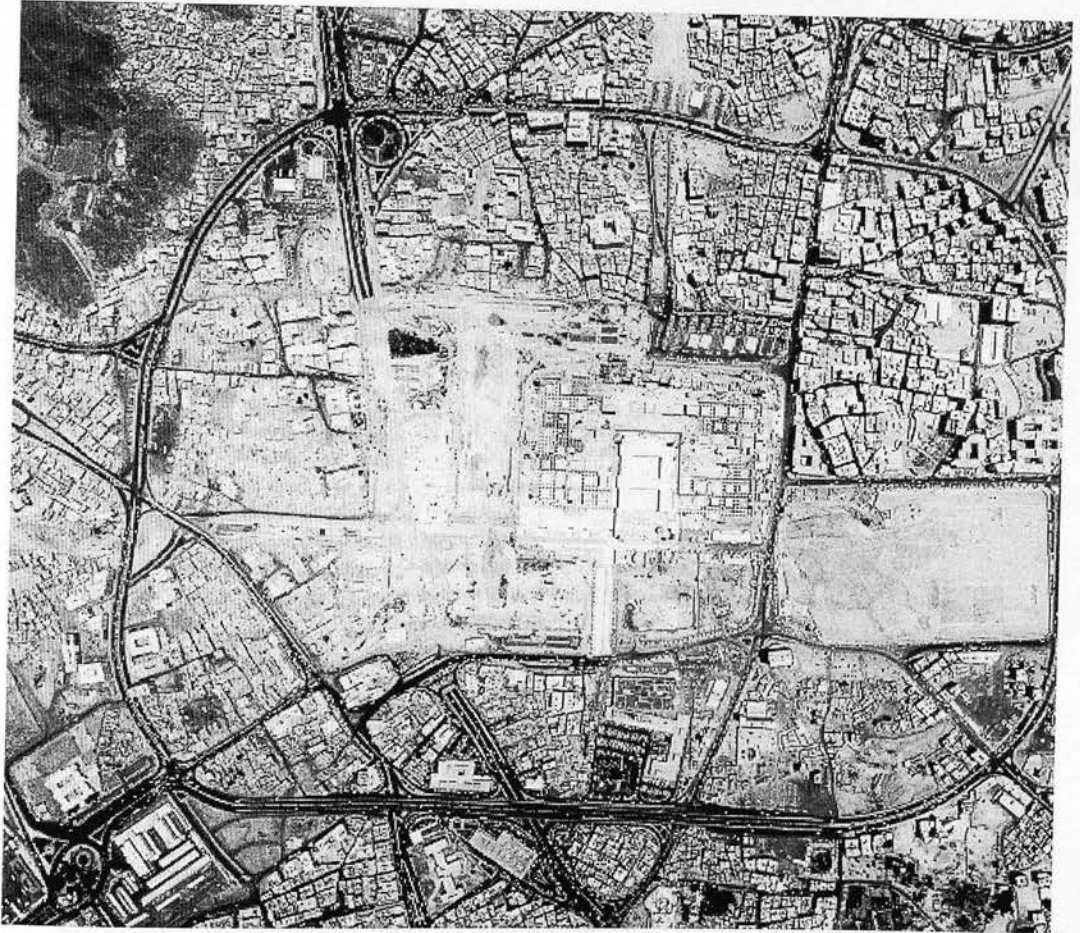


Figure 7.46: Al-Madinah, The Ĥaram area, air view, 1987

<sup>22</sup> Executive Committee for the Development of the Central Area, 1990, *Idea and Application, the Development Project of the Central Area, Al-Madinah*, pp. 20 and 22.

floors were covered with a series of high quality wooden screens, *rwāshīn* (figures 7.47 - 7.52).

The enlargement of the Ḥaram was ordered by the Custodian of the Two Holy Mosques, King Fahad b. 'Abdul'aziz, in Radjab 1403 H/May 1983 AD (Winder, 1986), and the actual construction work was started in Muḥaram 29th, 1406 H/October 3rd, 1986 AD (the Editors Msgazine, 1987) and finished in Dhu al-Ḥi'dah 5th, 1414 H/ May 1994 AD. It increased the original Mosque to about six times its previous capacity, from about 28,000 to 165,000 worshippers. In addition, the possibility of the use of the roof of the new structure as a prayer area was considered in the design, which increased the total capacity of the Mosque to about 255,000 worshippers<sup>23</sup>.

The new reinforced concrete extension encompasses two-thirds of the southern part of the traditional building and is sympathetic with the existing façades (figures 7.53 and 7.54). It adds 79,000 square metres to the basement, 82,000 square metres to the ground floor and 67,000 square metres to the roof. The basement is allocated to such services as storage and the installation of electricity and air-conditioning. The ground floor and the roof are used for prayer. Six further minarets, each with a height of 92 metres are added to give a total of ten in all. The number of gates is increased from eight to seventeen. In addition to stairs, some eighteen escalators are provided to help people to reach the roof more easily. Other supporting facilities, for example fountains for drinking water and ablution services, are considered in the extension. Furthermore, the whole building is air-conditioned with the plant located outside the city, at a distance of seven kilometres from the Mosque; the two are connected by means of underground pipelines carrying cold water. This scheme was accepted because of the enormous size of the machinery, and the resultant noise and air pollution.

<sup>23</sup> For the description of the new extension of the Ḥaram and the projects accompanying it, see for example:

- Ibid., pp.12-17.

- Editors, "'Amārat al-Masjdīd al-Nabawī 'Abr al-Tārīkh", *Igraa*, No. 591, October 23rd, pp.10-24.

- al- 'Umārī, 'Abdulmdjīd, Mashrū' Tawsi'at al-Ḥaram al-Nabawī, *al-Yamāma*, No. 1014, Dhū al-Ḥidja 7th 1408, pp.68-71.

- al-Djūharī, Usāma, "Al-Madina al-Munwara, Taḥdīd al-Niṭāq al-'Umrānī, Tawsi'at al-Ḥaram al-Nabawī al-Sharīf", *Albenna*, No. 37, V.7, October-November, 1987, pp.25-45.

- Editors, "SR 5b Prophet's Mosque Expansion in Progress", *Arab News*, August 15th, 1987, p.2.



Figure 7.47: Traditional stone house, al-Sāhah street, demolished in 1407H/1987AD

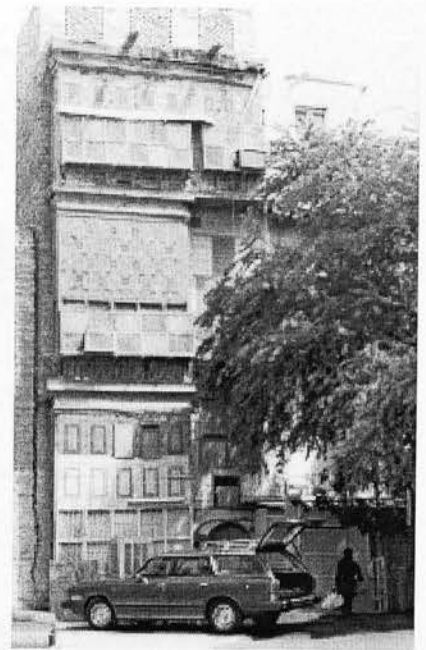


Figure 7.48: Zuḳāḳ al-Ṭayār, an elevation's house covered with one continuous rwāshīn

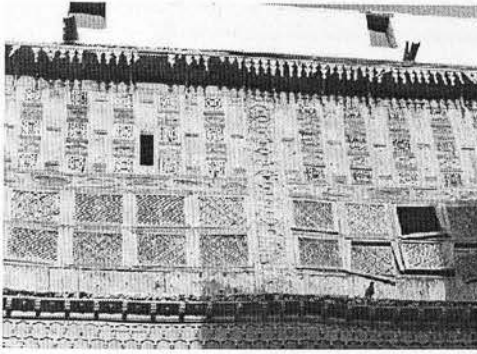


Figure 7.49: Details of some rwāshīn, in zuḳāḳ al-Ṭayār, demolished in 1407H/1987AD

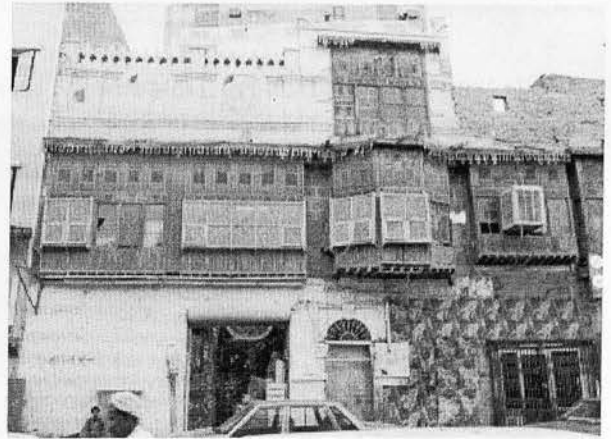


Figure 7.50: Stone house covered with wide mishrabiya

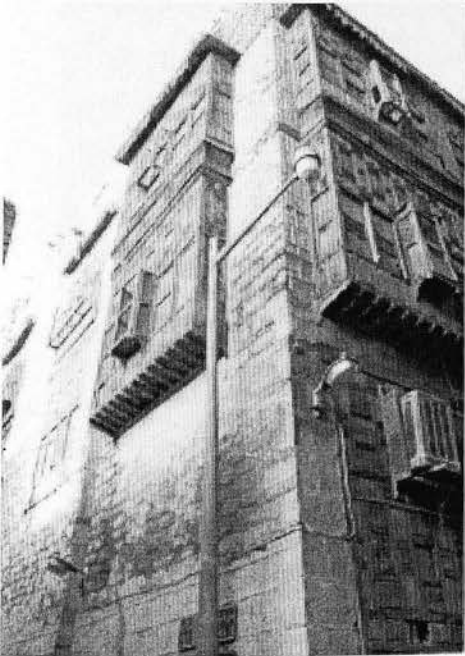


Figure 7.51: Traditional stone house, Bāb al-Madḳīdī, demolished in 1407H/1987AD

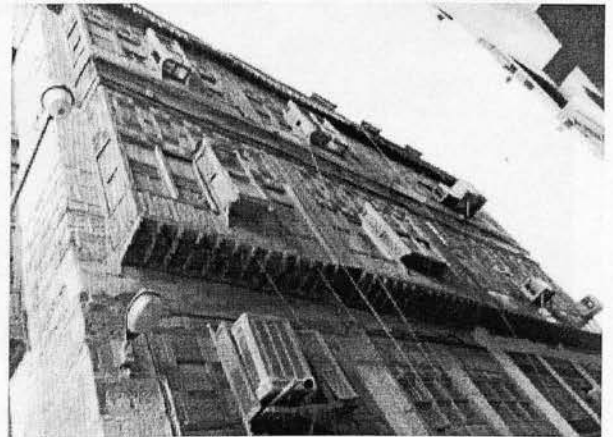


Figure 7.52: Stone house covered with wide rwāshīn



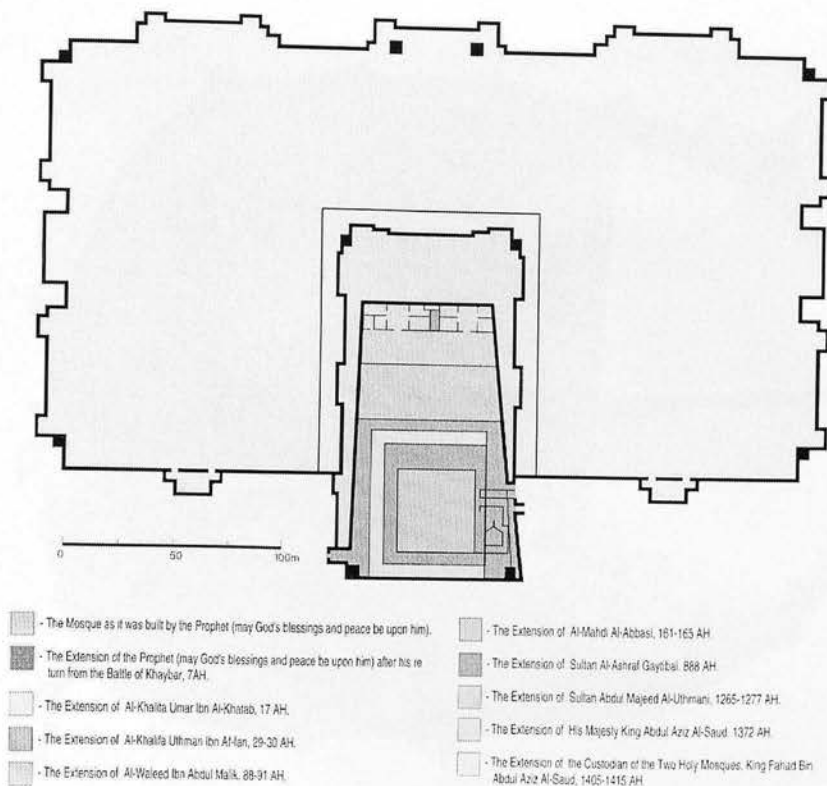


Figure 7.53: King Fahad's enlargement projects of the Prophet's Mosque (1405-1415H/1985-1995AD)



Figure 7.54: The Prophet's Mosque after King Fahad's enlargement projects (1413H/1993AD)<sup>24</sup>

<sup>24</sup> Al-Heraki, op. cit.

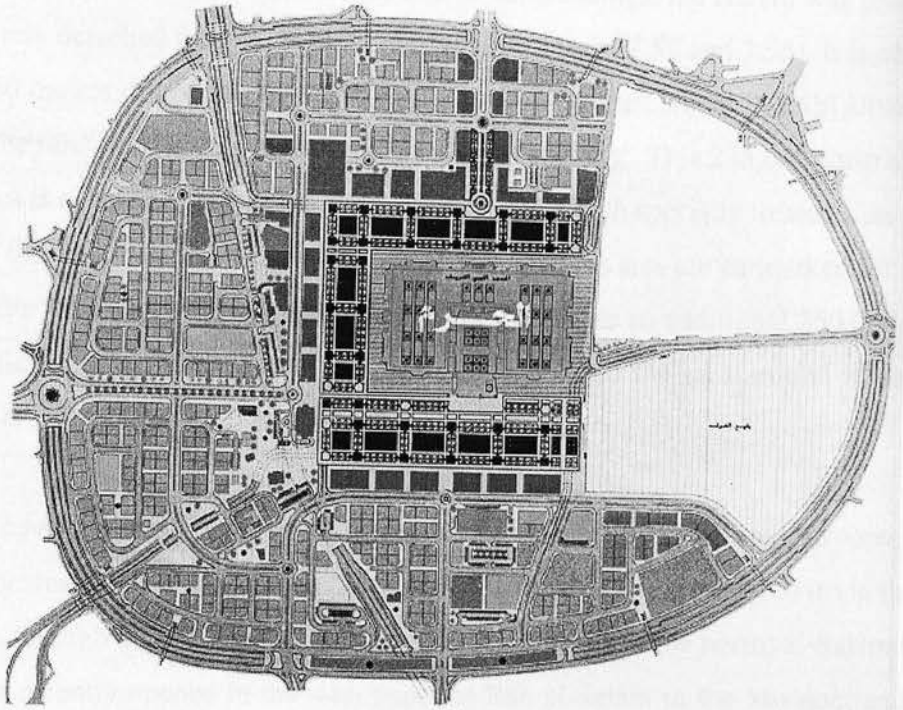


Figure 7.55: Al-Madinah, the final plan for development of the central area<sup>25</sup>



Figure 7.56: Al-Madinah, general view of the central area

<sup>25</sup> Executive Committee for the Development of the Central Area, op. cit., p. 43.



As to the relationship between the Mosque and its surroundings, the Ĥaram was planned to be completely detached from the buildings around it (figures 7.55 and 7.56). It is encircled by 100-150 metres of open area on all sides, except in the east where the Abī Dhar Street separates the new extension from the old cemetery of al-Baḳy'. This 235,000 square metres of open area is covered, like the roof of the Mosque itself, with specially treated tiles that do not absorb the sun's heat. About 135,000 square metres of the area are earmarked for use for prayer in the season of pilgrimage. These can accommodate an additional 250,000 prayer places, which brings the total capacity of the Mosque, and the area around it, to about 500,000 worshippers.

Under this open area some ablution facilities and two storey car-parking are also constructed. The parking was planned to accommodate about 4,000 cars. Motorists get to it via the First Ring Road, through three main streets: King 'Adul'azīz Street in the north; al-Salām Street, a new road recently opened in the west opposite Bāb al-Salām in the Mosque; and King Fahad Street, another new road opened to the north of the Mosque.

Development of the rest of the area within the First Ring Road was granted to a privately owned company, Sharikat Taybah. Its shares were sold to residents of Al-Madinah as well as other Saudi citizens from different parts of the country. The aim of the company was mainly to resolve ownership problems of the land and old buildings in the area, and to develop it in a more profitable way (figure 7.57). Vacant lands and the sites of old buildings were, at most, small in size and not suitable for large redevelopment projects. Some of these were owned by awḳāf (pious foundation; plural of waḳf) that could not be changed to uses other than those specified by the individuals or groups who dedicated them. Others belonged to unknown people or to people that could not be located. The company managed to acquire these properties and compensated their owners, who have become shareholders in the company. In the case where people are unknown or unlocatable, the government keeps the money until some evidence is shown to prove the ownership of the property. In the awḳāf cases, the people responsible for these were compensated towards relocation outside the Ĥaram Area.

When the areas were acquired they were cleared of small buildings and redeveloped with a totally new master plan of four sectors, which includes mixed land use (figure 7.55). The

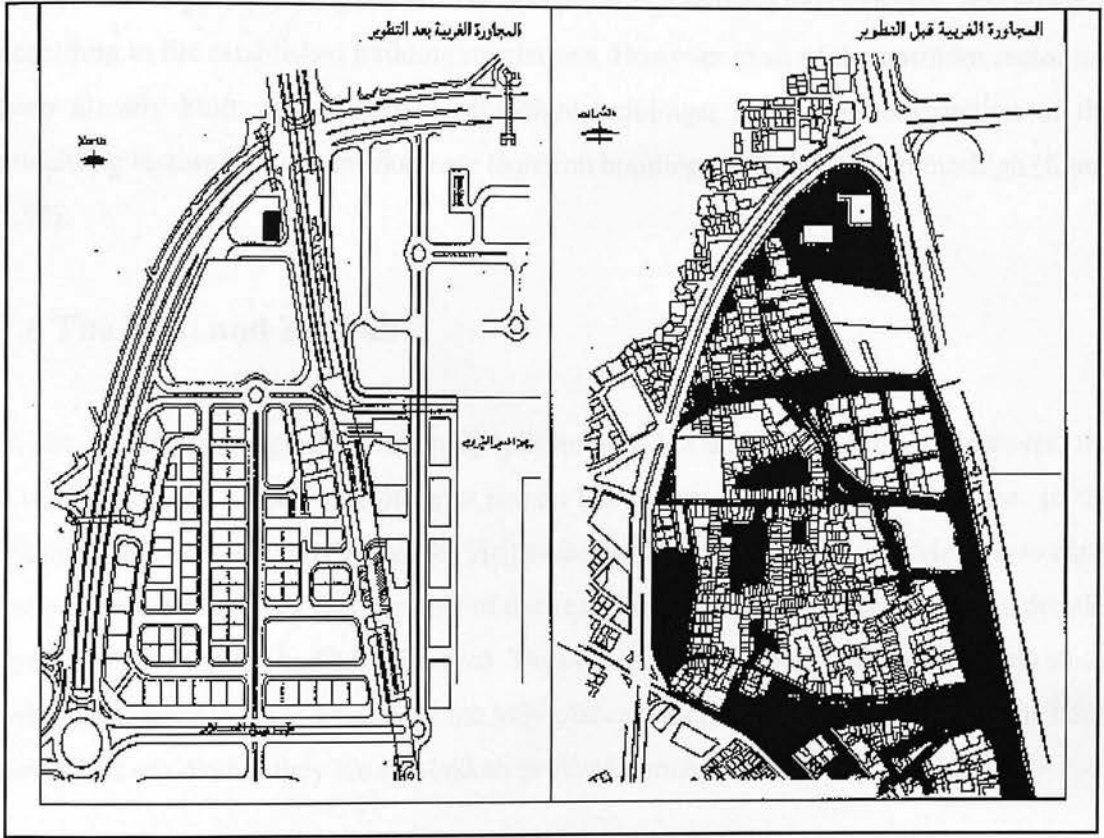


Figure 7.57: The western neighbourhood before and after development<sup>26</sup>

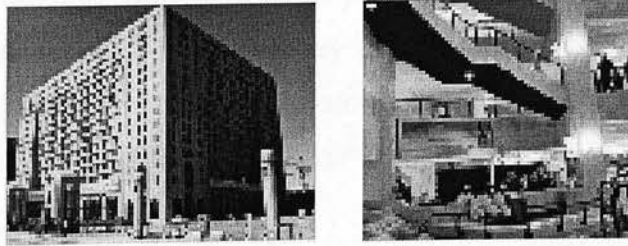


Figure 7.58: Al-Madinah, Sixteen-storey-height building, in the northern sector, general view from outside and inside the building<sup>27</sup>

<sup>26</sup> Executive Committee for the Development of the Central Area, op. cit., p. 45.

<sup>27</sup> Al-Heraki, op. cit.

construction of large multi-storey commercial buildings, such as hotels, apartment blocks, offices and shops has already started. The detailed design of these developments was revealed according to the established building regulations. However most of the northern sector has been already built with sixteen-storey-height buildings; while the construction of the remaining sectors is under development to permit buildings up to twelve-storeys high (figure 7.58).

## 7.6 The Ĥadj and Ziyārah

In the Arabic language the word ĥadj (pilgrimage) has several meanings. However, the intention to visit a venerated place or person has become the most prevalent one. In the Islamic literature the word denotes the visit to the holy places in and around Makkah to carry out prescribed rituals at a specific time of the year (Mecci, 1979). The people who undertake those rituals are called ĥudjādĥ (pilgrims). Thus the use of the word "pilgrims" in this study will be restricted to those who are in the holy places principally for the purpose of the ĥadj, regardless of whether they are in Makkah or Al-Madinah.

The Prophet Muĥammad (pbuh) who found his contemporaries observing the ĥadj, confirmed the ritual and fought for it to be performed in worship of the One God, as was first decreed upon Prophet Ibrāĥīm. It became a fardĥ (obligatory duty) on every Muslim man or woman who has reached the age of puberty, and who is free and of sound mind, to perform the ĥadj once in his or her life time, provided that they are able to do so. Ability is defined as possessing the necessary funds for the journey and for subsistence of the pilgrim's own family during his or her absence, and being physically fit for undertaking the journey (Sābiĥ, 1985). Some of the many verses in the Holy Ķurĥān in this connection read:

"The first House [of worship] appointed for men was that at Bakka [Makkah]: Full of blessing and of guidance for all kinds of beings. In it are signs manifested; [for example], the Station of Abraham; whoever enters it attains security; pilgrimage thereto is a duty men owe to God, those who can afford the journey; but if any deny faith, God stands not in need of any of his creatures" (The Holy Ķurĥān, c.3, v,96-97).

In addition the ḥadj is one of the five pillars of Islam, as denoted by the saying of the prophet:

"Islam is founded on five [pillars]: witnessing that there is no god but Allah and that Muḥammad is the Messenger of Allah, keeping prayers, alms-giving (Zakāh), fasting [the month of] Ramaḍān and performing the ḥadj if able to" (al-Halāwī, without date).

The ḥadj ritual was enjoined in the sixth, some say ninth or tenth, year after the Hidjrah (in 1 H/622 AD) (Sābiḳ, 1985). It takes place on the same date of the lunar calendar, between the eighth and the twelfth of the month to which it gives its name Dhū al-Ḥidjah (the twelfth month of the Hidjrah calendar). The pilgrimage falls each year ten or eleven days earlier than the preceding solar year and thus runs through the whole cycle of the seasons in 32 to 33 years (Lewis, 1971). Many pilgrimage rituals need to be performed in certain places and at specific times and in a specific order. The rituals include, for example, iḥrām (putting on the sacred garment), ṭawāf (walking around the Ka'bah), sa'y (walking between Ṣafā and Marwah, two small hills near the Ka'bah about 400 metres apart), staying on the ninth day of Dhū al-Ḥidjah in 'Arafāt (25 kilometres east of Makkah), visiting Muzdalifah (15 kilometres east of Makkah), and spending the three days between the tenth and the twelfth of Dhū al-Ḥidjah in Minaī (12 kilometres east of Makkah), in which three pillars symbolising the devil are stoned (Sābiḳ, 1985).

The 'umrah is a visit to the Great Mosque of Makkah, comprising the rituals of iḥrām, ṭawāf and sa'y. It is a sunah (desirable act), according to some juridical schools, while others consider it as an obligatory duty. This ritual can be performed before or after ḥadj or at any other time of the year (Sābiḳ, 1985). However, it is highly desirable in the month of Ramaḍān for the saying of the Prophet: "An 'umrah in Ramaḍān is an equivalent (in reward) to a ḥadj" (ibid.).

The ziyārah (visit) to the Prophet's Mosque at Al-Madinah is a *sunah* according to all the juridical schools. It is not part of the ḥadj and can be made at any time, before or after the ḥadj. However, for convenience, many people, particularly those from outside the region, undertake the ritual in conjunction with the ḥadj (al-Halāwī, without date). The Prophet is reported to have said:



"A prayer in this Mosque of mine holds more good than a thousand prayers in any other, excepting the al-Masdjīd al-Ĥarām [the Great Mosque of Makkah], and a prayer in the al-Masdjīd al-Ĥarām holds more good than a hundred thousand prayers in any others" (Sābiq, 1985).

Anyone setting off on a sacred journey other than purely to visit one of the three Mosques benefited no religious value through their travels, as the Prophet said:

"No travelling [of a sacred journey] except for three mosques: the al-Masdjīd al-Ĥarām, this Mosque of mine and al-Aḵṣāi Mosque [at Jerusalem]" (Sābiq, 1985).

It should be mentioned here that the Prophet, as well as his first two Caliphs, Abū Bakr and 'Umar b. al-Khaṭāb, were buried in the room of 'Ā'ishah (one of the Prophet's wives) which at that time was outside the Mosque proper (Āl al-Shyakh, 1984). It was incorporated within the enclosure of the Mosque in the enlargement of the building by al-Walīd b. 'Abdulmalik in 88 H/797 AD, as previously mentioned.

Apart from praying in the Prophet's Mosque, the ziyārah, unlike the ḥādj or 'umrah, does not involve specific rituals, although it has become traditional for people to visit certain places. After praying in the Mosque, visitors may follow the example of 'Abdullah b. 'Umar b. al-Khaṭāb (one of the companions of the Prophet). It is reported that when he returned to Al-Madinah from his travels, he used to approach the burial place of the Prophet and the two first Caliphs and greet the Prophet saying: "Peace be upon You, Messenger of God" and he repeated the same greeting to Abū Bakr and his father, 'Umar b. al-Khaṭāb (Āl al-Shyakh, 1984).

People also visit the Mosque of Ḷubā' , the first mosque that the Prophet founded in Al-Madinah. In regards to this Mosque the Prophet is reported to have said:

"He who purified (performed the ablution) himself in his house and then went to the Mosque of Ḷubā' and prayed in it, he would have a reward equivalent to that of a 'umrah" (Sābiq, 1985).



In addition many people, particularly pilgrims, visit other historical mosques and sites in Al-Madinah during their stay in the city. For example, there is the *Ḳiblatyīn* Mosque where it is reported that the Prophet was ordered by God in 2 H/624 AD to change the direction to which he faced whilst praying, from Jerusalem to the Ka'bah (Mostafa, 1981). Also there is the *al-Fataḥ* Mosque, one of the Mosques which makes up a group known as the Seven Mosques that were built on the site of the battle of *al-Aḥzāb* (also called the battle of the *Khandaḳ*), which took place in 5 H/627 AD (*ibid.*), and the cemetery of the *al-Baḳya'* where many of the Prophet's companions are buried (*al-Halāwy*, without date).

Since the *ziyārah* is optional, there is no specified length of time for which the visitor has to stay in Al-Madinah. However, many people, particularly pilgrims, are keen to offer forty consecutive Daily Prayers in the *Ḥaram* and this takes eight days (five prayers a day). It is said that the Prophet mentioned that such prayers would ensure ones salvation from the fire, penalty and hypocrisy (*Sābiḳ*, 1985).

## Concluding Remarks

The Development and the Transformation of the City: In pre-Islamic times, or what might be called in Arabic the Era of *Djāhilya* (ignorance), *Yathrib* was not a compact town but a group of *manāzil* (independent settlements) surrounded by groves of date-palms and cultivated fields. This formation might have been due to, among other factors, the distribution of wells and springs around which tribes and clans settled. In spite of the physical separation, contact did exist between the various settlements sometimes in the form of alliances whilst at other times, in warlike confrontations (*al-Samhūdī*, 1981).

*Yathrib* was the name of Al-Madinah before the immigration of the Prophet (peace be upon him) in 622 AD. Books of history mention that the first to inhabit *Yathrib* were the Giants, then the Jews. The two Arabic tribes, *al-Aws* and *al-Khazraj* came later. They were divided and engaged in a long-lasting feud. Thus, *Yathrib* was individualised by certain characteristics and events such as the imposition by the inhabitants of their own traditions and way of living in that they built numerous forts, dug many wells, planted palm trees, established markets, opened roads and the like.

The Prophet (pbuh) came to Al-Madinah, the home of His immigration, and was welcomed by al-Anṣār (His protectors and helpers in Al-Madinah). He (pbuh) started from the first day of His arrival to this sacred spot to establish the core foundations of the Islamic State and built the Mosque of Ḳubā'. From Al-Madinah He (pbuh) went on with His noble Companions to spread Islam to His people and the world and to confirm the pillars of Islam by building Mosques which brought a deep sense of security and peace for people that have been terrified and divided by long wars and hostility. Al-Madinah experienced a period of wealth and development which was witnessed by the City's expansion and the construction of new houses and markets therefore determining the sacred borders of Al-Madinah.

Different Islamic periods followed and Al-Madinah, up to recent times, still carries on its land, under its sky and among its walls, the memories of the glorious past represented in its traditional places and through the distinctive Islamic architecture of its alleys, traditional quarters and lanes. This valuable cultural and religious heritage has been threatened by recent developments which resulted in many of these traditional areas being rapidly swept away. This action appears to have changed the identity of Al-Madinah and violated its monuments and shattered its coherent and unique old structure. It is associated with the car-owning lifestyle that has demanded new planning systems and a new infrastructure alien to the traditional city and its Islamic culture (figure 7.59).

Al-Madinah today has inherited a cultural, religious and historical significance unlike that of any other city. Its character is thus unique. The life of its people centres around the Mosque and around catering for the many pilgrims who flock to Al-Madinah from throughout the Muslim world. For these reasons, any research carried out in Al-Madinah can only apply to this most sacred of Islamic cities.

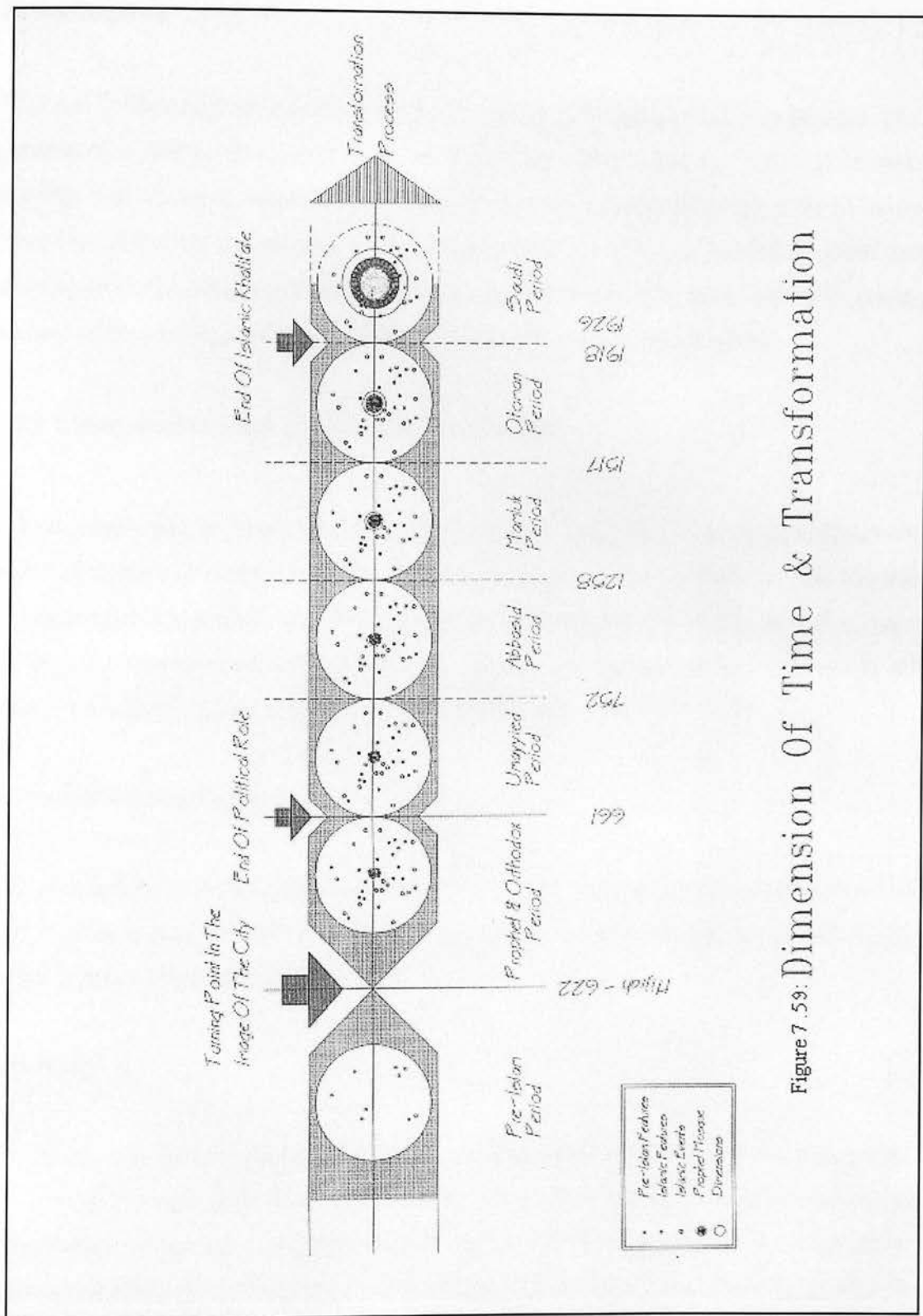


Figure 7.59: Dimension of Time & Transformation

### **Introduction**

This part of the survey reviews and analyses the results of the open-ended questionnaire. This part has been divided into five sections. Section A concentrates personal information while sections B, C, D and G, which contains seventeen questions, concentrate on different issues covering all the aspects relating to the image of the City such as: historical events and development, historical and architectural features, traditional urban fabric and open spaces, natural environment, social and cultural activities and customs and tradition.

### **7I.1 Compilation and Analysis of Responses**

All responses will be categorised according to two methods: First: gathering information about all features or events which are related to one another and categorising similar features or components together. These categories are then analysed and reviewed to provide a guide to help the research and avoid protraction. Second: the number of replies given to all questions in that category are arranged in ascending order.

#### **A- Personal Information:**

The personal information includes the following seven items: name, age, gender, period of stay in Al-Madinah, whether or not the person lives in the traditional quarter, period of stay in the traditional quarter and occupation.

#### **A-1 Name:**

The people who answered the questionnaire were given the option either of disclosing their names or not in order to avoid any inconvenience when they mention the facts in answer to the questions. Despite this, 29 people out of 37 mentioned their names, i.e. 75%. This clearly indicates to what extent those people were confident about the facts they revealed about their city. The questionnaire also stirred up their sentiments towards the welfare and development of the city. They answered the questions at length and with sincerity in expectation that this

study will deliver a service to Al-Madinah in particular and the Muslim world in general. They have high expectations to see this vital service being delivered to this city which is considered the first capital of Islam and the centre from which Islam spread to the world.

## A-2 Age:

32 people out of 37 mentioned their age. Table 7I.1 below illustrates the age groups of the people who answered the questionnaire.

Age	20-29	30-39	40-49	50-59	60 +	Not mentioned	Total
Number	3	8	15	5	1	5	37
Percentage	8.2%	21.6%	40.5%	13.5%	2.7%	13.5%	100%

Table 7I.1: Age groups

It is clear from the table above that the age group (40-49 years) represents the highest percentage among the people who answered the questionnaire.

The physical form of Al-Madinah Al-Munawarah had undergone periods of slow change throughout its long history until 1406 H/ 1986 AD and the following two years. At that time, all the buildings adjacent to the Prophet's Holy Mosque were demolished when the Custodian of the Two Holy Mosques' project for the expansion of the Prophet's Holy Mosque got underway. The demolition included all the areas around the Holy Mosque which represents the old city with its buildings, quarters, alleys and courtyards. Under the reconstruction plan, all the demolished buildings were replaced by 16 storey concrete buildings with new wide, straight streets running between them.

Ten years elapsed between the time of demolition in 1986 and the start of this study in 1995. Therefore, the age group which can give us the best idea about the mental image of the old city are those whose ages range between 30 year and above, i.e. 29 people out of 37 excluding those who did not mention their ages. In other words, 78% of the total number. Thus, this percentage gives us a clear idea about the mental image of the city in the past. As for the mental image of the city at present, all the age groups, i.e. 100% of the people who answered the questionnaire, can give us a clear idea about it. People over 40 years old



accounted for 21 people out of the 37 who answered the questionnaire, i.e. 60%. These are the middle aged people who tend to be more concerned about what is going on in the city. The very young are not aware of what is going on while the very old may be less inclined to be interested in current developments.

### **A-3 Gender:**

36 men and only one woman answered the questionnaire. The table below illustrates gender classification.

Gender	Male	Female	Total
Number	36	1	37
Percentage	97.3%	2.7%	100%

Table 7I.2: Gender classification

It is clear from the table above that the majority of the people who answered the questionnaire are men. This has not been done in any way to minimize the significance of women or diminish their role. This aim of this study is to present a clear and realistic mental image of Al-Madinah Al-Munawarah both in ancient and modern times. Since man is the head of the family and the one who is responsible for providing for them by working outside home, he has more direct contact with his environment. This is mainly because he is in close and active contact with the outside environment on a daily basis with all the movement involved in his life. Therefore it is in the interest of the research that predominantly males answer the questions. If the questions are related to the internal environment of the house, then the dominant number of those who answer them should of be women.

### **A-4 Period of Stay in Al-Madinah:**

33 people out 37 answered this question, i.e. 87%. 22 people have stayed in Al-Madinah since their birth. The following table which is divided into categories illustrates their period of stay:

Period of Stay	Less than 5 years	5-15 years	15-20 years	20 years +	Not mentioned	Total
No. of People	1	1	1	30	4	37

Table 7I.3: Period of stay

From this table it is clear that the majority of the people who answered the questionnaire were original or permanent residents of Al-Madinah. Thus their idea about the image of the city with its various aspects both physical (the demolition of buildings, streets etc. and construction of others) and non-physical (spiritual, religious, social, cultural, customs, traditions etc.) would be reflected as the real image of city in their answers. This is mainly due to their personal and real encounter with the environment.

#### **A-5 Have you lived in the Traditional Quarter?**

30 people out 37 answered this question, i.e. 81%. Table (7I.4) classifies their answers:

Living in the Traditional quarter	Yes	No	Not mentioned	Total
No. of respondents	29	1	7	37

Table 7I.4: Living in the traditional quarter

It is clear from the table above that the majority of people who answered this question had lived in the traditional quarter (before it was demolished to make room for the expansion of the Prophet's Mosque and the development of the city centre). One of the most important objectives of this research is to have knowledge about the image of the city in ancient times. This confirms that great attention will be paid to the questions in paragraph D which are related to gathering information on the social and cultural life, the traditions and customs; and to what extent these are connected to the physical structure of the traditional quarter. These questions will also contain valuable information due to the respondents' actual living and the experience they gained from their residence in the traditional quarter.

#### **A-6 Period of Stay in the Traditional Quarter:**

19 people out of 37 answered this question, i.e. 51%. Although this paragraph is connected

to the previous one with regard to the source of information on the residency and period of stay in the traditional quarter. However, the majority of the respondents had lived in the traditional quarter, the subject of the previous question. What concerns us most in this paragraph is not the number of replies, it is rather the variety replies with regard to the difference in the periods of stay. The following table which is divided into duration of stay illustrates the period of stay in the traditional quarter:

Period of stay in the traditional quarter	Less than 5 years	5-15 years	15-20 years	More than 20 years	Not mentioned	Total
No. of respondents	1	4	4	10	18	37

Table 7I.5: Duration of stay in the traditional quarter

As it clear from the table above, more than half the respondents had lived for more than 20 years in the traditional quarter.

The responses on period of stay extend from 3 to 40 years, which means a whole life span that begins from childhood, adolescence and ends with manhood. The disparity in being aware of the environment at each of these stages is quite clear. This will in turn serves the purposes of this research as far as the image of the traditional quarter is concerned. Added to that, to what it was suitable and successful in meeting the requirements such as the cultural and social activities, the customs and traditions of all the age groups that were resident there; and to what extent each affected the other.

### **A-7 Occupation:**

33 people out of 37 answered this question, i.e. 89%. The results of this paragraph revealed the large number and variety of occupations which exceeded seven excluding those who did not mention their occupation. The occupations that are related to a certain aspect of life have been combined as one class. For instance the occupations in the field of education include lecturer, head teacher, educational instructor and a teacher in public schools. The civil servants have also been put under one class regardless of whether the employee is an administrator or a technician such as an architect or an engineer. The merchants and those with free occupations have been classified as self-employed. The last group has been

classified as retired people. The following table illustrates this classification:

Occupation	Educational staff	Student	Civil servants	Self-employed	Retired	Not mentioned	Total
Number	21	1	5	3	3	4	37
Percentage	56.8%	2.7%	13.5%	8.1%	8.1%	10.8%	100%

Table 7I.6: Occupation

### Summary:

From the results we arrived at in this part of the questionnaire we can sum up that all the respondents were adults and educated people who were proud to take part in the questionnaire. The majority of them are men who experienced living in the surrounding environment and involved in outdoor activities. They were permanent residents or had lived for a very long period in the traditional quarter and areas that surrounds the Prophet's Mosque are considered as the nucleus of the whole city. This means that such people know all the parts of the city well and that they are fully aware of the old and modern environments in addition to their involvement in all life activities. They have also experienced all the developments which took place in the city in general and its centre in particular. Hence, they have gained a very rich experience which will be reflected in their answers. Their answers can be described as a true embodiment of the image of the city which was deep rooted in their hearts over the years.

### **B- General Information about the city of Al-Madinah Al-Munawarah.**

This part consists of seven questions. Each question will be analysed separately.

**B-1 Name five events from the general history of the City before the Hidjrah (the migration of the Prophet (peace be upon him) from Makkah to Al-Madinah) which can be mentioned as important features of the City, and how can these be commemorated in the historic fabric?**

This question was answered by 32 persons, i.e. 87% of the sample. This percentage is

relatively high when taking into account the nature of the question which requires deep knowledge about the history of the city since its establishment and up to the Hidjrah. This clearly indicates the awareness of the inhabitants of Al-Madinah and their keenness to manifest this ancient history which is the direct reason why the event of Hidjrah now takes place. This event has in fact been the turning point in the history of Al-Madinah in particular and the Muslim world in general. The responses to the question range between those who mentioned the historic events and those who mentioned the historic features. When we look at these features we find that their existence was mainly due to the occurrence of the majority of those events. The majority of these events can be classified under three main categories, the settlement of different tribes in Al-Madinah; the conflict among these tribes; and Hidjrah initiatives (see table 7I.7).

Categories	Events	Freq	Commemoration of events	Freq	Total
Tribal settlement	Arab tribes (Aws and Khazradj settlement)	14	Abi-Ayūb's house	17	32
			Their other dwellings	15	
	Jewish settlement	7	Tribal settlements	8	21
			Al-Madinah's description	8	
			Their Ūṭum (forts) and market places	5	
	Amelek settlement	5	Their residential areas	4	8
The palm trees			4		
Tribal conflict	Bu'āth Battle	9	Identifying location of event	9	17
			Comparisons between tribes before and after Islam	8	
	Arabian/Jewish conflict	6	The fortresses	6	10
			Identifying location of wars	4	
Hidjrah Initiatives	The Second 'Aḳabah Treaty	4	The Prophet (pbuh) and his companions' migration to Al-Madinah	7	14
			Hidjrah as an Islamic event	4	
			Titling Aws and Khazradj Tribes as al-Anṣār (auxiliaries)	3	
	The First 'Aḳabah Treaty	4	Showing Al-Madinah as peaceful society	6	10
			Spread of Islam in Al-Madinah	4	
	The Small Treaty	4	Dawn of Islam on Al-Madinah	3	3
<b>Total</b>		<b>53</b>			<b>115</b>

Table 7I.7: Events before Hidjrah

In order to create a clear image of the city at that period, these events from the table (7I.7)



reviewed, in the previous chapter (section 7.2 ), according to chronological time of their occurrence.

On the basis of the historical background, the most important thing for those who answered the questionnaire was how to manifest this history in the reality on their present city environment, regarding the preservation of the site of various tribes, the heritage of all the monuments, the mentioning of all the events which took place as well as the evidence / markers of all the sites of the various wars and the reasons behind them. These wars, specifically the Bu'ath battle, are important to history for they make the contrast between the situation among the two tribes of Aws and Khazradj before and after the advent of Islam. Thus it records how Islam ended the tribal in-fighting and how the two tribes united to become the Ansar (Supporters) of the Prophet. It also reveals how that disintegrated society which was blanketed with fear turned into one peaceful society. That history also highly commends those who made the first and the second 'Aqabah allegiances and who had virtue of bringing the people of Al-Madinah into Islam and seeding the spread of Islam there. This was followed by the Prophet's Hidjrah to Al-Madinah, where he named its people al-Anşār and, as was commented by some of those who answered the questionnaire, the residential areas and the main streets in Al-madinah should be named after those who made the first and the second 'Aqabah allegiances.

For these events and the circumstances associated with it, as the author mentioned before, Yathrib was characterised alone with peculiarities and features, the inhabitants had imposed on it. These features can be classified under three categories, the residential features, the economic status and the natural features (table 7I.8).

From the following table the results of responses show the three categories that characterise the city (residential, economic and natural features) with the seven most important feature classifications associated with them. To each single feature is assigned its related aspects of importance as mentioned by the respondents.

**Residential Features:** In most received answers of this question, we find that the residential features were represented by the three main feature classifications: al-Ĥuṣun; Tribal Residences; and Ūṭum.

Categories	Feature classifications	Freq	Features		Related aspects of importance	Freq
Residential Features	al-Ĥuṣun (Fortresses)	17	General mention	10	Preservational	18
			Ka'b Ibn al-Ashraf Fortress	5	Islamic history	14
			Bani-Sa'idah Fortress	2	Ancient history	11
	Tribal Residencies	16	Abi Ayūb House	5	Architectural	8
			Old Sāhah Quarter	3	Archaeological	7
			Ĥarat al-Aghawāt area	2	Social	6
			'Āliyat Al-Madinah area	2	Cultural	5
			Ḳubā' area	2	Local characteristics	3
	Ūṭum	14	al-Djurf area	2	Surviving Features	2
			General mention	8	Lost features	2
Abu-Dudjānah Aṭam			2			
al-Dihāyān Aṭam			2			
Ṣirar Aṭam	2					
<b>Sub-total</b>		<b>47</b>				<b>76</b>
Economic Features	Agricultural	18	General farming	12	Commercial	13
			Palm tree farming	6	Agricultural	10
					Local characteristics	8
	Commercial	13	Old Market	6	Preservational	7
			Old trade route	5	Social	6
		Bani Ḳynuḳā' Market	2	Ancient history	4	
				Islamic History	3	
				Cultural	3	
<b>Sub-total</b>		<b>31</b>				<b>54</b>
Natural Features	Wells	21	General mention	9	Preservational	17
			Rumah Well	7	Islamic History	12
			Ghurs Well	2	Ancient history	8
			al-Buṣāh Well	2	Agricultural	7
			Budā'ah Well	1	Surviving features	5
	Valleys and Springs	9	General mention	4	Local characteristics	2
			al-'Aḳīḳ Valley	2	Cultural	2
			Ḳnāh Valley	1	Archaeological	2
			Mahzur Valley	1	Social	2
			Baḥḥān Valley	1	Lost features	2
<b>Sub-total</b>		<b>30</b>				<b>59</b>
<b>Total</b>		<b>108</b>				<b>189</b>

Table 7I.8: Important features before Hidjrah.

The importance of these features to interviewees come from so many reasons and most of these reasons are common to all of them as follows:

The preservation of these buildings matters because they enshrine, historic values that indicate the architectural progress and the first step towards the establishment of a civilization at that era. They also remind us today of that the inhabitants lived in a state of instability and insecurity as a result of attacks among the different tribes due to their different religions, and as a result of invasions from outside. This led to the establishment of fortresses and *Ūṭum* in the areas where these tribes settled and in which the tribes took refuge during times of danger. The fortresses are therefore very solid and fortified and are designed in such a way that enables the inhabitants to remain inside for a long time. Besides these fortresses, *Ūṭum* and dwellings are cherished by today's followers of Islam as a result of their historic role after the migration of the Prophet to Yathrib and the spread of Islam there. Some of the examples of the dwellings include the house of Abu Ayūb al-Anṣārī in which the Prophet lived for seven months before he moved to his own house. Abu Ayūb's house, which used to be in the southern area of the Prophet's Mosque, was demolished in the last expansion of the Prophet's Mosque. The ancient area of al-Sāḥah and in particular *Zuḳāḳ al-Ṭuwāl* (where the grave of the Prophet's father lies and in which he was buried before the birth of the Prophet when this area was under the ownership of his paternal uncles, Banī al-Nadjār of the Aws Tribe), was also brought inside the Prophet's Mosque after its largest expansion. Furthermore, there still exist some fortresses and *Ūṭum* which the Prophet used in some of his battles. The preservation of such buildings, the maintenance of what remains of them and the identification of their historic role is considered as one of the most important task to be carried out in order to preserve the memory of that historically and spiritually important era for the Islamic city.

**Economic Status:** The economic life of the town was based mainly on agriculture, and dates were the principal crop. The town gained some commercial importance as a trade centre due to its location on the ancient trans-Arabia caravan route that connected Syria with Southern Arabia. Along this route the products of Africa and Southern Asia were transported to Egypt and the Mediterranean (Ilam, 1979). There were four *aswāk* (market places; singular *sūḳ*) in Yathrib. Probably for security reasons, these were separated from the residential areas and located on the fringes of the settlements (Ibn Shaba, 1979).

One of the most famous of these markets is the Market of Banī Qiyūnūkā', which specialised in the gold industry in addition to traditional crafts. It is clear that the most important priorities for the interviewees is the preservation of the sites of the markets and the affirmation of their historical and social values for the lives of the inhabitants. This is in addition to the identification of the ancient commercial route which used to pass through Yathrib, manifesting it as one of the historic landmarks in the same manner by which some researchers tackled the issue of identifying and accounting for the hadj routes.

**Natural Features:** The natural features contains two kinds of feature classifications: Wells; Valleys; and Springs. Wells take the first place in importance to interviewees for many reasons. They are also related to the Islamic history immediately after the Prophet's immigration to Al-Madinah. Many significant historic events took place in their vicinity in addition to the fact that some of these wells were directly linked with the Prophet himself, drinking from or blessing some of them such as Ghurs Well of which he said that it was one of the paradise wells. There is also Rumah Well, whose name is linked with the name of the third caliph as it is alternatively known also as 'Uthmān Well. The Wells will be talked about in detail in chapter eight.

The importance of these historic places and features in people's attitudes is a strong reason to make sure that they are manifested in a way that is relevant to their importance as well as historic and spritual dimensions. In addition, what remains of these wells should be maintained by all possible means and included in the overall plan for the city of Al-Madinah. This is especially true since some of these wells were demolished as result of the modern building projects which destroyed the majority of the traditional and Islamic features of the city. Thus the fact that some of these wells escaped being demolished is considered one of the positive characteristics despite not being enriched as significant features. There also, naturally are other reasons for preserving wells, whether they be functional or for maintaining purely for their historic and monumental value because the majority of them were dug before the advent of Islam and they were characteristic features of Yathrib at that time.

In addition to the fact that Springs and Valleys are considered as natural characteristics of Yathrib, there are many springs and three main valleys (wadis) that traverse Al-Madinah from the South to the North and thus further enhance its historic, social and cultural



importance as previously mentioned (in chapter five). The valleys and springs also play another role in being a source of life since there is little rain in Yathrib and the agricultural lands are irrigated by means of the rainfall from other regions in these valleys' catchment area. Some valleys also have spiritual value, as mentioned by the Prophet such as Wādi al-'Aḳīḳ and Wādi Baḥān, about which the Prophet said that they are on a valley from paradise (see chapter eight). Therefore, the preservation of these valleys specifying their locations and the setting up of road signs that lead to them and identify their status are considered as important tasks.

**B-2 Mention ten events or indications from the historical time of the Prophet (pbuh) and his noble companions which can be pointed to as the main features of the City and how these may be preserved.**

The answers to this question include some indications such as the important events that took place in Al-Madinah and the need for them to be manifested through landmarks or monuments that reveal their importance. Other indications mentioned monuments that were left by the Prophet and his companions and divided into built features and unbuilt sites. The author will, therefore, put these events and features into two separate tables that reveal their importance (see table 7I.9 and table 7I.10).

From table (7I.9) it is clear that the migration of the Prophet from Makkah to Al-Madinah is the strongest indication in the biography (Sirah) of the Prophet in Al-Madinah, for this resulted in the establishment of the Islamic State with Al-Madinah as its capital. This was followed by important projects, such as the building of the Prophet's Mosque, the cornerstone of the global Muslim community, as well as the establishment of the teachings of Islam and implementing them in the real life. As a matter of consequence, there was the reconciliation which the Prophet forged between the two tribes of Aws and Khazradj and which then united the two sides under the one name Anṣar. This has further been enhanced by the brotherhood<sup>1</sup>

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<sup>1</sup> By 'Brotherhood' the author is referring to a specific event associated with the Prophet. When the Muhajreen left the hostile environment of Makkah with the Prophet, taking their religion with them, they left behind their houses, their possessions, their trade and their families and came penniless, homeless and hungry to Al-Madinah. In Al-Madinah, the Prophet agreed with al-Ansar that all immigrants were to be literally brothers to them, each finding a family and sharing equally in its wealth, its land, inheritance and its people. This concept is distinct from the more general Brotherhood of Islam, the sense of community (Ummah) which unites the Muslim people.



Events or Indications	Freq	Commemoration of events	Freq	Total
The Prophet's Hidjrah	24	Preserving the Hidjrah route within the City	7	37
		Emphasising the tribal locations along the Hidjrah route	5	
		Emphasising the historical events associated with the Hidjrah	5	
		Preserving the Hidjrah route from Makkah to ̤ubạ̄	5	
		Celebrating the Hidjrah at new year.	4	
		Emphasising the events behind the construction of ̤ubạ̄ Mosque	4	
		Emphasising the story behind Djuma'h Mosque	4	
		Emphasising the southern Thaniyat al-Wada'	3	
Brotherhood	20	Most important principle	6	31
		Accentuating brotherhood in Islam	6	
		Highlighting Al-Madinah as a place of love and hospitality	5	
		Highlighting the peace agreement between the Aws and Khazradj tribes	4	
		Stressing the meaning of altruism	4	
		Spreading security	3	
		Preservation of cultural norms	3	
Initiating the Islamic State	18	Spread of Islam	9	40
		Establishing Islamic teachings	7	
		Instating an Islamic society	7	
		Declaring Al-Madinah as the first capital of Islam	6	
		Planning of Al-Madinah	6	
		Announcing the new constitution	5	
Al-Madinah's virtues	18	Highlighting the City's Love	8	35
		Emphasising the virtues of the City's natural environment	7	
		Highlighting the virtues of the City's inhabitants	5	
		Showing the City's blessings	5	
		Preserving the City from disease	5	
		Condemning any act of demolishing the City's Ụ̄um	5	
<b>Total</b>	<b>80</b>			<b>143</b>

Table 7I.9: Events or indications from personal career of the Prophet and his noble companions

which the Prophet established between the Ansar and the Muhajreen (immigrants). There was also the act of writing the constitutional documents by means of which the Prophet started his political life on a firm basis and cemented relations among all groups that used to dwell in Al-Madinah, namely the Muslims, the people of the Book (the Jews) and the polytheists. That constitutional document promoted co-existence in peace and as a result, Islam spreaded peace and security prevailed.

Consequently, Al-Madinah flourished in various aspects of life starting with the planning of the city, undertaken by the Prophet himself, and ending with the manifestation of the general virtues of Al-Madinah through presenting the environmental qualities in both physical (natural or manmade) and non-physical (socio-cultural) aspects. The table (7I.10) illustrates the most important features which characterise the city.

The features are divided into four categories: religious, natural, residential and economic features. The different features are classified in accordance with that which pertains to them. As shown in the following table (7I.10).

Categories	Feature classifications	Freq	Features		Related aspects of importance	Freq
Religious features	Mosques	106	The Prophet's Mosque	49	Islamic Spiritual	110
			Ḳubā~ Mosque	33	Preservational	90
			General mention	11	Islamic history	89
			Djum'ah Mosque	9	Religious	79
			al-Muṣalla Mosque	2	Architectural	62
			al-Ḳiblatyn Mosque	2	Political	37
	Battle Sites	40	al-Khandaḳ battle	15	Social	35
			Ūhud battle	13	Cultural	33
			General mention	12	Ancient history	12
	Hidjrah Route features	14	Ḳubā~ - Yathrib route	7	Archaeological	8
			Makkah - Ḳubā~ route	5		
			Southern Thaniyyat al-Wadā'	2		
	Other Religious sites	13	al-Baḳi' cemetery	9		
Bani-Sā'idah shed			2			
General mention			2			
<b>Sub-total</b>		<b>173</b>				<b>555</b>

Natural Features	Mountains and Hills	14	Ūhud mountain	3	Preservational	28
			al-Rumāh mountain	3	Islamic Spiritual	22
			Sil' mountain	2	Islamic history	21
			Sulay' mountain	2	Architectural	7
			'Air mountain	2	Religious	4
			General mention	2	Political	4
	Wells	13	General mention	4	Archaeological	3
			Rumah ('Uthmān) well	3	Cultural	3
			Ghurs well	2	Social	2
Ĥā~ well			2	Ancient history	2	
Arys (al-Khātam) well			2			
al-Ĥarāt (low hilly area)	6	al-Ĥarah al-Sharḳiyah	3			
		al-Ĥarah al-Gharbiyah	3			
<b>Sub-total</b>		<b>33</b>			<b>96</b>	
Residential Features	al-Dūr (Houses)	15	General mention	6	Islamic history	14
			Dār (house) Abi Ayūb	5	Preservational	10
			Dār Kalthūm ibn al-Hadm	2	Islamic Spiritual	9
			Dār Sa'd ibn Khythamah	2	Planning	8
<b>Sub-total</b>		<b>15</b>			<b>43</b>	
Economic Features	Commercial	9	al-Manākhah market	5	Commercial	11
			Old market	4	Islamic Spiritual	5
					Preservational	5
					Planning	5
	Agricultural	5	Palm Tree farming	3	Islamic history	3
			General farming	2	Social	3
					Religious	2
				Cultural	2	
				Political	2	
				Agricultural	2	
<b>Sub-total</b>		<b>14</b>			<b>40</b>	
<b>Total</b>		<b>230</b>			<b>733</b>	

Table 7I.10: The important features from personal career of the Prophet and his nobles companions

the religious category with its four feature classifications took the first place in importance to the interviewees.

From the previous table, we find that mosques in general and the Prophet's Mosque in particular have the greatest importance. This is natural because it is the mosque of the Prophet, which he built by his own holy hands along with his companions. This mosque was the headquarters of the Islamic government where affairs of state were run in times of peace and war. Additionally, it contains a number of Holy Islamic sites with the Holy Tomb of the Prophet at the forefront. On this basis we can study, and shed light on, the historical development for this period, i.e., after the migration of the Prophet to Al-Madinah and up to the end of the Rightly Guided Caliph Era (1-40H/ 622-661AD) with emphases on the construction of the Prophet Mosque the beating heart of the city, and its various expansions (see the previous chapter, section 7.3).

**B-3 List five most important historical features that distinguish the City and give two reasons for each.**

Reviewing the following table (table: 7I.11), we find that most of the categories here are approximately similar to those mentioned in question two, for the addition of the new categories, namely, the public features. The new categories mention some of the features which appeared at different historic periods of Al-Madinah. The formula of the question mentions in general every historic feature which characterises Al-Madinah up to the time before the most recent, modern transformations took place. A large section of these features were demolished and removed as illustrated in the next question (question four).

In order to have a clear idea of the accumulative transformation process of Al-Madinah, it is necessary to mention the most significant historic development which took place after the era of the Prophet and the Right-guided Caliphs, i.e., from the Umayyad Era to the Ottoman Era (36-1344 H/656-1926 AD) (see the previous chapter, section 7.4). This period shows us clearly the historical development of Al-Madinah in general and how the historic features appeared during successive eras with emphasis on the detailed historical developments of the Prophet's mosque, which represents the focal point of Al-Madinah.

Categories	Feature classifications	Freq	Features	Related aspects of Importance	Freq	
Religious Features	Mosques	82	The Prophet's Mosque	42	Islamic Spiritual	76
			Ḳubā~ Mosque	18	Religious	55
			General mention	6	Islamic history	55
			al-Ḳiblatyn Mosque	5	Preservational	34
			Djum'ah Mosque	4	Political	31
			al-Miḳāt Mosque	3	Landmark	29
			al-Muṣalla Mosque	2	Architectural	21
	Battle Sites	54	Ūhud battle	37	Social	17
			al-Khandaḳ battle	14	Cultural	16
Religious Sites	20	General mention	3	Planning	7	
		al-Baḳi' cemetery	16	Archaeological	4	
<b>Sub-total</b>		<b>156</b>			<b>345</b>	
Natural Features	Mountains and Hills	68	Ūhud mountain	25	Islamic Spiritual	74
			Sil' mountain	12	Islamic history	53
			al-Rumāh mountain	8	Preservational	33
			'Air mountain	5	Landmark	31
			al-Rāyah mountain	4	Ancient history	30
			General mention	3	Political	28
			Northern Thaniyat al-Wadā' hill	3	Cultural	26
			Southern Thaniyat al-Wadā' hill	2	Social	22
			Sulay' mountain	2	Religious	21
			Thawr mountain	2	Planning	19
	al-Djmāwāt mountains	2	Architectural	17		
	Valleys and Spring	45	al-'Aḳiḳ valley	17	Archaeological	9
			General mention	11	Agricultural	8
			Baḥḥān valley	8	Commercial	4
			al-'Ayn (spring) al-Zrḳā~	3		
			Ḳnāh valley	2		
Aḍam valley			2			
Wells	15	Muzaynib valley	2			
		General mention	4			
		'Uthmān well	3			
		al-Khātam well	2			
		Ghurs well	2			
al-Ḥarāt (low hilly area)	11	Ḥā~ well	2			
		Budā'ah well	2			
al-Ḥarah al-Sharḳiyah	7	al-Ḥarah al-Sharḳiyah	7			
		al-Ḥarah al-Gharbiya	4			
<b>Sub-total</b>		<b>139</b>			<b>375</b>	



Public Features	al-Ĥidjāz Railway	12	Railway station Railway track	7 5	Architectural	63
	Castles and Towers	8	Ḳubā` castle	3	Preservational	52
			General mention Towers	3 2	Islamic history	46
	Walls and Gates	6	Old walls	3	Landmark	32
			Old gates	3	Cultural	32
	Libraries	6	'Arif Ĥikmat library	2	Social	22
			al-Ĥarm library	2	Archaeological	20
			General mention	2	Religious	19
Schools	6	'Alam al-Dīn school	2	Spiritual	12	
		al-Rustumiyah school	2	Historical	12	
		General mention	2	Political	11	
Asbilah	6	Sabīl Fāṭimah	2	Commercial	9	
		Sabīl al-'Aḳiḳ	2	Planning	8	
		General mention	2			
Facility buildings	5	Communications building	3			
		Public baths	2			
<b>Sub-total</b>		<b>49</b>				<b>338</b>
Economic Features	Agricultural	17	Palm Tree farming	6	Islamic Spiritual	15
			Old farms	5	Agricultural	14
			General farming	4	Commercial	12
			Ḳubā` farms	2	Social	11
	Commercial	6	al-Manākhah market	2	Cultural	11
			Old market	2	Preservational	11
			Old trade route	2	Architectural	11
					Landmark	10
				Ancient history	10	
				Islamic history	8	
<b>Sub-total</b>		<b>23</b>				<b>113</b>
Residential Features	Dūr (Houses)	8	Dūr of the Prophet's companions	2	Architectural	22
			Dār (house) Abi Ayūb	2	Archaeological	17
			Traditional houses	2	Preservational	14
			Old Arbiṭah (houses for the poor )	2	Social	14
	al-Ḳuṣūr (palaces)	7	al-'Aḳiḳ palaces	3	Cultural	13
			Sa'īd bin al-'Āṣ palace	2	Islamic Spiritual	12
			'Āṣim bin 'Umr palace	2	Ancient history	11
Ūṭum	4	Aṭam al-Shiykhiyn	2	Landmark	10	
		General mention	2	Islamic history	9	
al-Ĥuṣun	2	General mention	2	Political	7	
<b>Sub-total</b>		<b>21</b>				<b>129</b>
<b>Total</b>		<b>388</b>				<b>1300</b>

Table 7I.11: The important historical features

**B-4 List five events which have negative affects to change the general view of the City and give a reason for each.**

The answers to this question in table (7I.12) show that most of the events which had a negative aspect in changing the image of the city, whatever their reason, are represented by the process of the destruction and removal of the traditional city which was constructed over several hundreds years. Understanding the circumstances surrounding the distruction of this heritage requires a further knowledge of that particular era, which is the beginning of the Saudi Era and up to the present time (1344H/ 1925 AD) (see the previous chapter, section 7.5).

Aspects	Description	Freq	Reasons	Freq
Demolishing the traditional urban fabric	Demolishing the traditional buildings	10	Neglect of the city's salient features Expansion of the Prophet's Mosque Developing the spaces surrounding the Prophet's Mosque. Re-developing the central area.	12
	Demolishing the City's walls and gates	10		10
	Removing al-Ahwāsh (shared courtyards)	8		10
	Demolishing the traditional quarters	5		10
	Removing parts of the Ottoman buildings and changing the interior colours of the Prophet's mosque	4		8
	Removing the old/traditional market places	4		
	Demolishing the traditional schools, 'Ārif Hikmat Library and al-Arbiṭah	4		
	Loss of al-Manākhah's market function	3		
	Removing the alleys	2		
	Removing the forts and castles	2		
<b>Sub-total</b>		<b>52</b>		<b>40</b>
Not preserving the Islamic Features	Destroying the city's Islamic Heritage	11	Religious	11
	Demolishing the Islamic features	9	In-active heritage organisation	10
	Removing the northern Thaniyat al-Wadā'	4	Lack of identifying the Islamic features within the planning process	8
	Neglect of some of the wells	4		6
	Demolishing historically significant dwellings	4	Excluding historians from the Planning process	4
	Changing physical features of historically significant mosques	3		4
	Neglecting Islamic features relating to the Prophet	3	Lack of awareness towards the preservation of the Islamic features	
	Constructing roads over significant features	3		
<b>Sub-total</b>		<b>41</b>		<b>39</b>

Planning	The use of grid planning approach	11	Ignoring the traditional urban fabric	7
	Replacing the traditional urban fabric with large scale constructions	7	Unplanned expansion of the city	6
	High density of new mix-use building within central areas	7	No existing comprehensive plan	5
	Replacing agricultural land with residential buildings	5	Economic Boom	4
	Changing old names of streets and zones	3	Use of foreign planning firms unfamiliar with local issues	4
	Loss of the City's forbidden boundaries	2	The spread of slums	2
	Unawareness of the local features and zones during the demolitions	2	Lack of control in migration	2
	Relocating new residential areas far from the centre	2	Ignorance of the value of heritage	2
	Introducing new highways	2	Dependency on cars	2
				Lack of teaching of Islamic architecture
<b>Sub-total</b>		<b>41</b>		<b>36</b>
Social	Lack in a sense of belonging	7	Removal of traditional urban fabric	10
	Change in social values	6	Removal of al-Ahwāsh	8
	Loss in social customs and traditions	5	Destruction of traditional quarters	6
	Weakness of family ties	5	Neglect of qualities of traditional planning solutions in new planning approaches	5
	Weakness in social interaction between neighbours	4	Use of multi - story flats	3
	Change in lifestyle	3	The use of grid patterns	2
	Lack of security	3	Globalisation in lifestyle	2
	Relocation of the local inhabitants far from the City's centre	2	Increase in individual income	2
	Loss of privacy	2	Neglecting privacy in new design and planning solutions	2
<b>Sub-total</b>		<b>37</b>		<b>40</b>
Architecture	Neglecting the use of courtyards in new designs	4	New designs lacking continuity with traditional designs	3
	The use of western designs in buildings and residencies	3	Use of foreign designs in buildings	3
	Use of multi - story flats	3	Local authority legislation	3
<b>Sub-total</b>		<b>10</b>		<b>9</b>
<b>Total</b>		<b>181</b>		<b>164</b>

Table 7I.12: The list of events which had negative affects on the City

A comment made by one of the interviewees with regard to the importance of the traditional

city and its historical sites (figures 7I.1 - 7I.4) ably summarises his thoughts on the sad demolition of the city centre in the 1980's. He says, "In fact Al-Madinah has a special status which is different from that of all other cities. Its historic sites have two important factors: religious importance; and historic importance. The religious importance emanates from the fact that some sites are connected with the revelation of a Quranic verse, a religious law or a Prophetic tradition, which aims at teaching the Muslims the rules and teachings of Islam. As for the historic importance, it is a matter of documenting the series of events, rules, and their effect on Al-Madinah with regard to the sites and buildings, which should be considered as witnesses to those eras. The two important factors mentioned above are interconnected. For instance, the expansion of the Prophet's Mosque at the present time, which is the biggest and the most comprehensive expansion, has negative aspects such as the destruction and the removal of all the monuments and historic sites which used to surround the Holy Mosque of the Prophet. The city centre which represents so many rules of Islam in the markets, cemeteries, schools, libraries, etc. has been demolished and thus all these rules and lessons disappeared with it, let alone the pure historic value of that heritage".

**B-5 List five things you wish to happen in the City to improve and enhance its status, giving a reason for each.**

Reviewing the result of the responses of this question (table 7I.13) shows that the respondents were not happy with the current situation of the city. They are not satisfied with the quality of the existing environmental conditions, and because of this, they have shown a great demands for a lot of things to be done in many ways and directions to improve and enhance the status of the City. The respondents showed the strong tendency for a need to preserve the cultural heritage of the city, starting from respecting the spiritual status of the city and introducing its Islamic heritage in different ways through to conserving the religious, historic, and traditional sites and features (see the following table).

Here we mention some of the comments that are made by the interviewees regarding the importance of preserving this heritage as follows:

1- "Holiness and sanctity is not for any human being to decide upon so nor to increase or decrease at will. It is neither a bounty from Allah, who grants it to whom ever he wills of



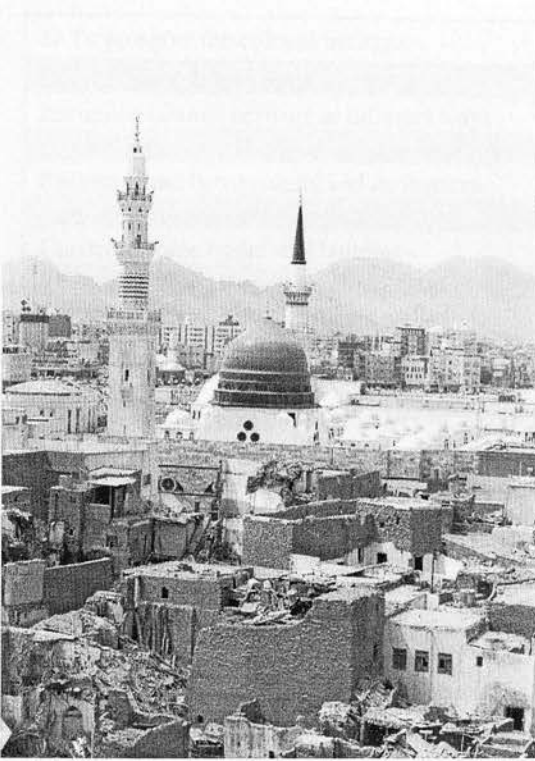


Figure 7I.1: Quarter of al-Aghwāt, the closeness quarter to the Prophet's Mosque, during the demolition of the area

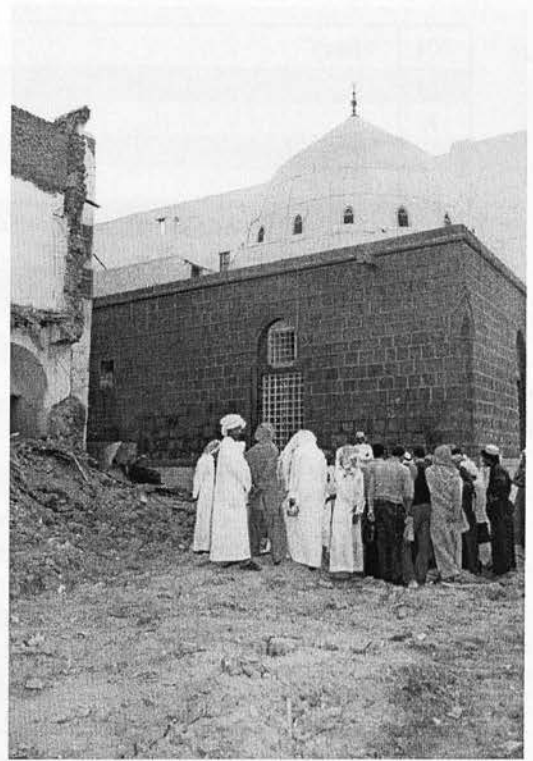


Figure 7I.2: Quarter of al-Aghwāt, the location of dār Abi-Ayūb after demolished



Figure 7I.3: Quarter of al-Aghwāt, the traditional courtyard house, during demolishing



Figure 7I.4: Zuqāk al-Şulġān in al-'Anbariyah area, during demolishing



<b>1- To preserve the cultural heritage</b>	<b>Total=</b>	<b>105</b>
Respect the spiritual status of the City		15
Introduce Islamic heritage in different ways		14
Conserve the historical and religious features		14
Restore Ūhud battleground and its features		10
Conserve the rest of the green areas		8
Conserve some traditional buildings		6
Preserve the historical and religious sites		5
Conserve historically significant wells		4
Preserve the historically significant mosques		3
Preserve the traditional markets		3
Preserve the features of the Prophet's Mosque		3
Maintain al-Khandaḡ battleground and its features		3
Restore the tombs of the Prophet's companions in al-Baḡī' cemetery		3
Maintain the traditional names of streets and quarters		2
Sustain domestic customs and traditions within contemporary designs		2
Clarify the locations of historical features within Ḳubā' Mosque		2
Clarify the locations of historical features within al-Ḳiblatyn Mosque		2
Clarify the locations of historical features within al-Miḡat Mosque		2
Preserve the local characteristics of the city		2
Clarify the hidjrah route		2
<b>2- Constructions of new buildings</b>	<b>Total=</b>	<b>41</b>
Museum to commemorate the City's history		5
Construct new quarters using traditional urban configurations		5
Construct new mosques within spiritual sites		4
Build monuments to define historically significant locations within destructed sites		4
Rebuild historical buildings in new locations		4
Restore the old gates		3
Rebuild abi-Ayūb al-Anṣārī house		2
Locate sufficient services within each quarter		2
Build recreational buildings		2
Build educational buildings		2
Build industrial buildings		2
Build an international airport		2
Build a university		2
Build a railway station		2
<b>3- Improving the existing situation</b>	<b>Total=</b>	<b>33</b>
Improve services for pilgrimage		6
Restore street and pedestrian conditions		4
Replace the new planning system (grid pattern) with the traditional systems (al-Ahwash)		4
Enrich urban spaces		4
Create more green spaces		3
Improve the highway network		2
Enhance the City's services		2
Increase parking spaces within the central zone		2
Enhance the aesthetic quality of the city		2
Improve the health service		2
Restore the condition of the market and shops		2
<b>Overall Total</b>		<b>179</b>

Table 7I.13: The list of things that people want to see happening in the City

mankind and whatever he wills of places and times. The Holiness of this City cannot be increased by the vast number of buildings no matter how high they may reach into the air. What is required here is the respect of the whole of this Holy City by both its residents and its visitors".

2- "The Honourable and famous status of this City is only made evident by the fact that the Prophet walked on its soil and thus honoured it by his residence there. Therefore, I hope that whatever remains of its features at present should be preserved because they are connected with the Holy Prophetic history. What has disappeared of these features and places should also be manifested".

3- "Nothing could *increase* the status of this Holy City and Holy Land. The site of the monumnets, which have been demolished and removed are well known. If they are to be rebuilt in the modern structure of architecture along with the history of each side; that will be the best thing to do".

The respondents also desire more new construction of buildings for museums, mosques and cultural monuments to commemorate the City's history, in addition to facilities and service buildings. The reason behind the significance of these buildings can be illustrated by some of the interviewees' comments which reveal their wishes such as:

1- "In fact I was hoping that the relevant authorities in Al-Madinah had preserved some of the rare traditional buildings and thus left us features of the City. Even if circumstances dictated that they have to be demolished, then it should be possible to choose a certain area which would be fenced and then these buildings transferred there after the dismantling by technical means.... [as] an example of what Al-Madinah used to contain: stone engraved buildings with unique designs. Such buildings could have created a museum of traditional buildings of Al-Madinah. The establishment of the scientific historic museum, which portrays the most significant events which took place during the Prophetic Era and the Rightly-Guided Caliphs Era and onwards when Al-Madinah was flourishing is an important task. Such a museum will be a place where people take lessons which benefit the city. When people see the comments of this museum, they will have a better idea about the architecture, civil and social progress that took place throughout the different eras in Al-Madinah".

2- "The setting up of memorials on the sites of monuments which were demolished in order to enlighten people about the site and the cause and significance of this Islamic monuments, besides the lessons that could be learnt. In addition, illustrative maps should be made to illustrate the sites of the Islamic monuments, so that both residents and visitors can easily have access to them. Add to that, there should be a brief account the significance of these monuments, the date when they were erected and the reason behind them".

Finally, people showed a great need to improve the existing services in general, and especially pilgrims' services. In terms of planning issues there should be application of the traditional patterns (ahwash, shared courtyard) and greater responsiveness to the need to improve the condition of streets to have more pedestrian paths, open spaces, as well as more green areas.

In order to identify the reason behind the significance of this aspect, we mention two of the interviewees' comments:

1- "The preservation of the local architecture style of Al-Madinah and its protection against outside invasion, as well as banning the introduction of any architectural styles that are alien to the environment. Thus the true spirit of the city and its traditional buildings will be revealed in order to prevent a discontinuity in the relation between these traditional buildings and the areas in which they exist".

2- "Part of the new residential areas should be built in accordance with the previous architectural style in order to form a link between the present architecture with the past architecture for the purpose of comparison".

It is interesting to note that these comments focus on the physical and architectural elements of the past as a means of maintaining the spirit of Al-Madinah. This is in contrast to those opposing socio-religious forces that seek to promote the spirit of Al-Madinah even at the cost of its physical and architectural fabric.

**B-6 List five things you do not wish to happen in the City and give a reason for each.**

<b>1. Ignore preserving the cultural heritage</b>	<b>Total=</b>	<b>81</b>
Disrespecting the spiritual status of the city		14
Squandering religious and historical sites		10
Destruction of traditional buildings		8
We should immediately halt the destruction process in order to preserve some traditional buildings		7
Change in the social customs and traditions of the City's inhabitants		7
Destruction of religious buildings		5
Eradication of palm trees and green lands		4
Destruction of the traditional quarters and al-Ahwash		3
Ruining the traditional urban fabric		3
Neglecting the agricultural areas in the central areas		3
Not restoring abi-Ayūb al-Ansari house		3
Changing the identity of the City		2
Not restoring the historically significant mosques		2
Expanding and changing the Prophet's mosque both internally and externally		2
Destruction of Islamic monuments		2
Neglecting to preserve the historically significant wells		2
Destruction of the old walls and gates		2
Changing the traditional names of streets and quarters with new ones		2
<b>2. Negligence of updating the administrative situation</b>	<b>Total=</b>	<b>54</b>
Ignoring the qualities inherent in the traditional urban fabric for use in contemporary plans		9
Not clarifying the locations of the historical features incorporated within the expanded perimeters of the Prophet's mosque		7
Remotely locating the new quarters from the City's centre		5
Avoiding the construction of a historic museum		5
Permitting buildings surrounding the Prophet's Mosque to go highrise		4
Urban sprawl towards the agricultural areas		4
Lack of concern with traditional architecture within academic teachings		3
Disregarding traditional construction methods for future use		3
Not outlining an overall plan for future development of the City		2
Facilitating migration to the City in an uncontrolled manner		2
Irregular urban sprawl		2
Lack in updating planning policies		2
Not improving the pilgrims services		2
Driving the popular market places far from the centre		2
Increasing the number of bridges and tunnels		2
<b>3- Destructing existing Islamic features</b>	<b>Total=</b>	<b>40</b>
Demolishing al-Musala Mosque		7
Demolishing al-Baḳī' cemetery		6
Demolishing abi-Bakr al-Sidik Mosque		5
Demolishing Umar bin al-Khatab Mosque		5
Demolishing 'Ali bin abi-Talib Mosque		5
Demolishing the Seven Mosques Mosque		5
Demolishing the Rumah Mountain		4
Demolishing the old train station		3
<b>Overall Total</b>		<b>175</b>

Table 7I.14: The list of things that people did not want to see happening in the City



Reviewing the responses to this question from the previous table shows that responses in general enjoyed the past and appreciated everything times antique. The things they do not wish to happen in the city are almost perfect opposites to the results of the previous question (B-5) (see table 7I.14).

The responses ranged from *not preserving the cultural heritage in all its aspects to not respecting the spiritual status of the city* which are considered the key points and the main factor in the destruction of the traditional urban fabric which was established on the basis of the values inherited over centuries. This is in effect led to the loss of the Islamic identity of the city. One of the interviewees described this situation by saying: "these radical changes and this haphazard demolition of all the historic and monumental features of Al-Madinah, the birth place of the message of Islam, has led to the loss of their historic meanings and made people forget them. The majority of young people these days do not know the historic events that took place in the city because they do not know their sites. We are only left with the memory of these monuments, we seek help from Allah alone and all power lies with him alone".

In a realistic view, far from feeling sorry for what happened with regards to loss of the traditional urban fabric, one of the interviewees says, as he also has reported in one of the national newspapers: "May Allah protect Al-Madinah from every evil. I do not want to talk about something which had already happened and became past history. Since the traditional urban fabric of Al-Madinah had disappeared, we could at least establish a similar framework which reflects, and stands as a witness for how marvellous the traditional urban fabric was. This could be done through the establishment of a similar framework for the individual monuments such as quarters, Ahwash, and the old markets, etc. This is not a difficult task and those people who have good intentions can do it".

The second aspect concerns the deficiency of the administrative condition. In this respect we mention some of the comments of the interviewees about some of the reasons such as:

1- "There was a disregard of studying the objectives and the concepts of the traditional architecture by not including their theories in the syllabi in the faculties of architecture and building. Such studies can be done through establishing scientific departments specialising



in the further studies of traditional architecture, manifesting its characteristics and linking them to the religious teachings and concepts upon which they were established. Thus the characteristics of traditional architecture can be revived in a new form that would preserve its origins as well as portraying its characteristics for the benefit of people".

2- In another comment, one of the interviewees suggested to stop the haphazard movement from villages to Al-Madinah, he says that "development projects should be set up in the villages surrounding Al-Madinah. Such projects would provide suitable work for the inhabitants instead of encouraging them to desert their villages and move to the City for better working opportunities. This would only result in an increased rate of unemployment which leads to the destruction of the basic infrastructure of the city, extra pressure on public amenities and services, then deficit in residential units and the appearance of unplanned buildings (squats).

3- Concerning the planning of the City centre and the construction of the highrise buildings stepping on our ancestors' heritage around the Prophet Mosque, one of the interviewees wished that such high buildings (16 storey high) had never been built. He stated the reason by saying: "Because Al-Madinah is a Holy City in the first place, it has never been a city of commerce; it is, rather, a spiritual city where people feel near to Allah, unlike the western cities of business and trade. Therefore the height of buildings should increase towards the outside of the city and not vice-versa as it is the situation at present.

The last aspect which respondents indicated not wanting to happen is the further destruction of the Islamic features which still exist. However, the author would stress the fact that some sites are impossible to demolish such as the main cemetery of Al-Madinah (al-Baḳī'), where the household of the Prophet, his companions and the followers were buried. When people saw the destruction of the traditional City in the space of just a few years they were terrified that anything could happen in view of the absence of spiritual, religious and ethical awareness.

Some interviewees mentioned the situation in a brief manner, that destruction of the buildings came after the destruction of the meanings that stood behind them. The traditional city was built on the basis of those meanings. People at that time paid attention to the quality and

style of architecture on the basis of the high principals there were living and practicing in their daily life such as respecting the privacy of others, doing no harm to the neighbours and brotherhood co-operation. At the same time the choice of the style and the quality of architecture was motivated by the climate and the need to build adjoining buildings and narrow streets.

**B-7 Mention five phenomena which visitors wish to observe in the City and give a reason for each.**

From the following table (7I.15) we find that the main objectives of the visitors of Al-Madinah are to visit the Prophet's Mosque, pray inside it, visit the Prophet and his two companions (Abī Bakr and 'Umar), and visit whatever that is related to the Prophet and his companions.

All interviewees made an urgent demand that the traditional features of Al-Madinah should be preserved. The author will provide a summary of their comments in this regard and the reasons they stated, such as the visitor to Al-Madinah being generally ignorant about the features of the city. However, on imagining that every space in the city is a feature in its own right and that the residents of the city are the neighbours of the Prophet, the visitor expects, first of all, humane and good treatment. Secondly, the visitor expects to be able to pray by himself at the sites where the Prophet performed the battles and where other events took place within and around Al-Madinah, to be able to see how the Prophet and his companions exerted themselves in those battles. Furthermore, he will have the opportunity to visit the places where the Prophet used to stay, walk on the streets, contemplate the Islamic events that took place, see the surroundings of the ancient sites and drink from the wells for blessing and following in the footsteps of the Prophet. In addition, the visitor will be able to see the places where the Prophet used to live in order to have an idea about the humble way of living of the Prophet and his companions. Al-Madinah offers an unmatched opportunity to visit all these sites and remember the events which took place there in order to draw lessons from them.

In order to illustrate how significant the visit to Al-Madinah is, the author mentioned the rules set by Islam for such a visit which normally increase during the Ĥadj season (see chapter seven, section 7.6).

Features classification	freq	Features or Aspects	
Mosques	104	The Prophet's Mosque	59
		General mention	22
		Ḳubā` Mosque	11
		al-Ḳiblatyn Mosque	9
		Djum'ah Mosque	3
Battle sites	51	Ūhud battle	23
		al-Khandaḳ battle	21
		General mention	7
Religious sites	44	General mention	17
		al-Baḳi' cemetery	14
		All the sites related to the Prophet's actions	13
Religious features	35	The features of the Prophet and his companions	7
		Hidjrah route features	6
		The seven Prophet's wells	5
		al-Khātam well	3
		Ūhud Mountain	3
		Mashrabat um-Ibrahīm	3
		Dār Abi Ayūb	3
		Dār Klthūm ibn al- Hadm	3
		The Prophet's companions Dūr (dwellings)	2
Historical features	33	General mention	17
		Old walls and gates	4
		Old and traditional markets	4
		Traditional buildings	2
		Complex for printing the holy Ḳurā`n	2
		al-'Ayn (spring) al- Zrḳā`	2
		Farms	2
Facility abundance	26	Social aspects	8
		General services	5
		Museum	4
		Cars parking	3
		Informations and maps	3
		Access road	3
<b>Total</b>	<b>293</b>		

Table 7I.15: The list of features or phenomena that visitors wish to observe or visit in the City

### C- Special Information about Mosques, Historical Places and Ecological Sites in Al-Madinah Al-Monawarah.

This part consists of four questions. Each question will be analysed separately.

#### C-1 List the ten most important historical mosques in the City and give reasons for each.

Mosques	freq	Reasons or Significance	freq	Total
All Mosques and sites related to the Prophet' prayers	37	A prayer place of the Prophet and his companions Islamic historical events	50 8	58
The Prophet's Mosque	30	The Prophet's tomb Virtue of prayer in it A prayer place of the Prophet and his companions Foundation by the Prophet Visiting the Prophet's and his two companions' tombs The Holy Rawḍah (Rawḍah from paradise) The centre of ruling and transcending faith	10 7 7 7 6 5 5	47
Ḳubā' Mosque	28	The first Mosque in Islam built by the Prophet Performing prayer in it equals 'Umrah A prayer place of the Prophet and his companions Associated with Hidjrah events	24 10 7 4	45
Djum'ah Mosque	27	Performing the first Djum'ah prayer in Islam A prayer place of the Prophet and his companions Associated with Hidjrah events	16 11 4	31
al-Ḳiblatyn Mosque	26	Changing the direction of Ḳiblah A prayer place of the Prophet and his companions	21 12	33
al-Muṣalla Mosque	23	The location of the Prophet's rain prayer The location of the Prophet's 'Eid prayer A prayer place of the Prophet and his companions	12 11 9	32
The Seven Mosques	19	The Prophet's prayer in al-Faṭḥ Mosque Associated with al-Khandaḳ battle	18 16	34
Abī-Bakr al-Ṣidīḳ Mosque	17	A prayer place of the Prophet and his companions The location of the Prophet's 'Eid prayer	12 6	18
'Alī bin Abī Ṭālib Mosque	17	A prayer place of the Prophet and his companions The location of the Prophet's 'Eid prayer	12 6	18
al-Edjābah Mosque	16	A prayer place of the Prophet and his companions Associated with the Prophet's prayer event	11 9	20
'Umar bin al-Khaṭāb Mosque	16	A prayer place of the Prophet and his companions The location of the Prophet's 'Eid prayer	11 6	17
al-Miḳāt Mosque	14	A prayer place of the Prophet and his companions The place of İhrām to performing Ḥadj or 'Umrah The location of the Mosque in al-'Aḳiḳ valley	7 7 3	17

al-Mustarāḥ Mosque	14	Associated with Ūhud battle	9	15
		A prayer place of the Prophet and his companions	7	
al-Sabḳ Mosque	13	Associated with the horse racing at Prophet's time	9	15
		A prayer place of the Prophet and his companions	6	
al-Faḍīkh Mosque	13	A prayer place of the Prophet and his companions	9	15
		Associated with forbidden Alcoholic	6	
Abī Dhar Mosque	9	A prayer place of the Prophet and his companions	9	11
		Associated with the Ḳurāṅ nic verses	2	
'Uthmān bin 'Affān Mosque	8	A prayer place of the Prophet and his companions	7	9
		The location of the Prophet's 'Eid prayer	2	
al-Dir'a Mosque	7	A prayer place of the Prophet and his companions	6	8
		Associated with Ūhud battle	2	
al-Rāyah Mosque	5	A prayer place of the Prophet and his companions	4	7
		The location of Prophet's flag	3	
Bani Ḳurayzah Mosque	3	A prayer place of the Prophet and his companions	4	6
		Islamic historical events	2	
Sayid al-Shuhadāṅ Mosque	3	A prayer place of the Prophet and his companions	2	4
		Associated with Ūhud battle	2	
al-'Anbariyah Mosque	2	Historical landmark	2	2
<b>Total</b>	<b>334</b>			<b>462</b>

Table 7I.16: The list of most important historical Mosques in the City

From the previous table (7I.16) it is clear how the mosques are significant in the life of Muslims in view of the religious and spiritual link they provide. We also find that they have their own characteristic architecture which single them out from any other architectural environment. However, the mosques in Al-Madinah have a further characteristic which distinguishes them from the other mosques in the world. This characteristic is their connection to the Prophet and his honourable companions, mainly because it was the prophet who built some of these mosques with his holy hands such as the Prophet Mosque, the place from which Islam went out to the world and considered the original example of mosque architecture in the world, as well as Ḳubāṅ Mosque.

In addition, the Prophet and his companions prayed in some other mosques as a result of certain events such as the Mosques of Djum'ah, al-Muṣalla, al-Ḳiblatyn, and others. Some



other sites were honoured by the Prophet performing prayer on their soil and thus turn into mosques which are linked to his later biography. This is what has been confirmed by the results of the answers to this questions with all the mosques that are linked with the Prophet have been mentioned despite the fact that there are so many other mosques in all the residential areas of the city. However, these mosques do not represent for the residents the same high status as that which is represented by the mosques in which the Prophet performed prayers. There are many sites where the prophet and his companions performed prayers; however, just a few of them were built as mosques. If the rest of these sites were built as mosques then this would have saved the city the task of building other mosques. This is in addition to the benefits from historic events and the lessons which can be drawn from those sites. This is because all the built mosques and the unbuilt sites are connected with events and stories that took place in the Holy Prophetic and the Companions' Era. Such events were closely connected with that flourishing era which is considered the golden era of the Islamic State.

Only a single mosque built during the ottoman Era, which is al-'Anbariyah Mosque, was mentioned. This mainly because of its historical value and its marvellous stone architecture, which gives it its distinctive character and makes it one of the eminent features of the city. We can sum up by saying that the mosque architecture should be strongly built with beauty in view because, in the end, it is the mosque which expresses the Islamic character in any built environment.

## **C-2    Mention ten architectural and historical buildings in the City and explain why.**

There are numerous buildings of historical and architectural value with regard to their functions or the objectives for which they were built (table 7I.17). All these buildings share the historical values although they differ to a certain extent with regards to their style of architecture. The majority of these building were built along the Ottoman Style. This is natural because the city remained under the Ottoman rule for a long time. Therefore, that style of architecture is quite evident in the Ottoman architecture of the Prophet's Mosque, al-Hijaz Railway Station, al-Anbariyya Mosque, and the ground floor of the Salah al-Din Islamic College which later became Tyiba Secondary School.

Categories	Buildings classifications	freq	Buildings		Related aspects of Importance	freq
Historical Buildings	Castles and towers	27	Ḳubā~ castle	10	Historical	46
			General mention	8	Architectural	28
			Bāb al-Shāmī castle	5	Security	24
			Towers	4	Functional	21
	Walls and Gates	24	Old walls	9	Preservational	13
			Old gates	7	Landmark	12
			Bāb (gate) al-'Anbariyah	3	Not exist	9
			Bāb al-Maṣrī	3	Exist	7
			Bāb al-Mad̄jīdī	2	Ancient history	4
	al-Ḥidjāz Railway	20	Railway station	18	Political	3
Telecommunications	13	Railway buildings	2	Locational	3	
		Wire and wireless communications building	11	Social	2	
al-Ḳuṣūr (palaces)	7	Building's wall and towers	2	Economical	2	
		al-'Aḳiḳ palaces	3	Archaeological	1	
		Sa'īd bin al-'Āṣ palace	2			
The Springs buildings	7	'Āṣim bin 'Umr palace	2			
		General mention	5			
al-Ḥuṣun	5	al-'Ayn (spring) al-Zrḳā~	2			
		General mention	3			
Asbilah (drinking water)	4	Ka'b Ibn al-Ashraf Fortress	2			
		General mention	2			
		Sabīl Fāṭimah	1			
Ḳuṣūr	3	Sabīl al-'Aḳiḳ	1			
		General mention	2			
Ḳuṣūr	3	Aṭam al-Shiykhiyn	1			
<b>sub-total</b>		<b>110</b>				<b>175</b>
General services buildings	Libraries	33	'Arif Ḥikmat library	17	Architectural	28
			General libraries	16	Social	21
	Schools	30	General mention	13	Cultural	17
			Ṭaybah secondary school	9	Preservational	16
			Dār al-'Iytām school	3	Historical	13
			al-Rustumiyah school	3	Functional	5
'Alam al-Dīn school			2	Locational	5	
Hospices	24	al-Takiyah al-Maṣriyah	16	Not exist	5	
		Old Arbiṭah (poor houses)	6	Landmark	2	
		Rubāṭ (hospice) maḏhar	2	Comercial	1	
Puplic Baths	8	Ṭaybah bath	5			
		al-'Anbariyah bath	3			
Markts	7	al-Manākhah market	3			
		al-'Aniyah market	2			
		Suwaḳah	2			
<b>sub-total</b>		<b>102</b>				<b>113</b>

Religious buildings	Mosques	30	The Prophet's Mosque	13	Islamic Spiritual	25		
			al-'Anbariyah Mosque	6	Architectural	21		
			General mention	3	Islamic history	12		
			Ḳubā~ Mosque	2	Locational	11		
			al-Muṣalla Mosque	2	Historical	10		
			Northern Thaniyat al-Wadā' Mosque	2	Preservational	9		
			al-Rāyah Mosque	2	Spiritual	4		
			Associated buildings with battle sites	17	Associated buildings with Ūhud battle	9	Political	3
			Associated buildings with al-Khandaḳ battle	8	Not exist	2		
			Religious buildings	10	Bani-Sā'idah shed	5	Landmark	2
Associated buildings with natural sites	9	Associated buildings with mountains and valleys	3	Functional	1			
		Associated buildings with al-'Aḳiḳ valley	2	Security	1			
		Associated buildings with Ḳnāh valley	2					
<b>sub-total</b>		<b>65</b>			<b>101</b>			
Residential buildings and areas	Residential buildings	20	General mention	7	Architectural	24		
			Dār (house) Abi Ayūb	5	Not exist	18		
			Biyūt (homes) Hashim	2	Spiritual	9		
			Biyūt al-Madanī	2	Suitable/climatic	9		
			Biyūt abu 'Azah	2	Historical	7		
			Biyt (home) al-Khiradjī	2	Islamic Spiritual	4		
Residential areas	6	al-Sāhah area	4	Locational	4			
		Ḥārat al-'Aghwat	2					
<b>sub-total</b>		<b>26</b>			<b>75</b>			
Recent buildings	General buildings	12	The Royal palace	3	Locational	5		
			The Canonical Court	2	Architectural	2		
			al-'Aulūm al-Shar'aiyah school	2	Political	2		
			Complex for printing the Holy Ḳurā'n	2	Landmark	2		
			Al-Madinah airport	1	Cultural	2		
			King 'Abdul-'Aziz library	1	Functional	1		
			International market	1				
			<b>sub-total</b>		<b>12</b>			<b>14</b>
<b>Total</b>		<b>316</b>			<b>478</b>			

Table 7I.17: The most important architectural and historical buildings in the City

We also find the Ottoman Style in the building of fortresses such as the *Ḳubā~* Fortress and the Telecommunication building and many other residential buildings of three to five stories. The Ottoman Style is unique in the art of buildings, rich in its details and of a manifest historical value and architectural strength. The majority of these buildings were built of the solid and strong black stones, characterised by a white colour and were beautifully decorated.

We also find different styles of architecture such as the Mamluk Style in the construction of the old minaret in the Prophet's Mosque and the green dome which stands now as a witness of the great art of its period. This is in addition to the Egyptian Tekiyya which is distinguished by the late Egyptian Style of building which goes back to the Era of Ibrahim Pasha who was the ruler of Egypt. There are a few buildings that were built after the Syrian and Indian styles. The richness in the building styles was the result of the pilgrims and visitors coming to the city including craftsmen who practiced their art and building in the city and were influenced by their homelands' architectural styles.

**C-3    Mention five historical sites or locations in the City which enhance the city's structure and give reasons for each.**

The majority of the sites in Al-Madinah are historical sites although the central area is the richest of these. This area surrounding the Prophet's Holy Mosque was established fourteen centuries ago, with the exception of some sites of fortresses and Utums that existed before the Prophet's migration.

The importance of the central area of the city lies in its historic importance as a result of the traditional urban fabric and the religious sites it contained. In addition to that, this traditional urban fabric is closely connected to the historical development and its long history when the traditional markets, schools, libraries, walls and gates, and many other secular buildings appeared in that fabric.

Despite the absence of this traditional urban fabric after its destruction, the central area still remains the most important of historical sites in the mind of the interviewees. There are also many historical sites outside the central area, such as the site of Uhud and Alkhandaq battles which took place in the third and the fifth year after Hijrah, the Tarsees Area which includes

the Telecommunication Building which was surrounded by stone walls with four towers for protection built during the Ottoman Era, as well as Al-Hijaz Railway Station which includes the railway station in addition to the services building inside the station parameter walls (see table 7I.18).

We can deduce from this question that the majority of these historical sites are physically and spiritually connected with the residents' life. The majority of the residential, commercial and educational buildings etc, especially within the zone of Al-Madinah, have become parts of these historical sites. For instance, all the new residential quarters which lie on any part of the city already occupy a historical, or previously built site.

Categories	Sites or locations classifications	freq	Sites or Locations		Related aspects of important	freq
Religious sites	Mosques	66	The Prophet's Mosque	24	Islamic Spiritual	31
			Ḳubā~ Mosque	15	Islamic history	27
			General mention	10	Architectural	25
			al-Ḳiblatyn Mosque	8	Preservational	21
			al-Muṣalla Mosque	7	Landmark	17
			al-Miḳāt Mosque	2	Locational	13
	Battle Sites	39	Ūhud battle site	22	Political	11
			al-Khandaḳ battle site	12	Not exist	5
			General mention	5		
	Natural sites	33	Ūhud mountain	12		
			Sil' mountain	5		
			al-'Aḳiḳ valley	5		
			General mention	5		
Baḥhān valley			2			
Farms			2			
Salmān al-Fārisī farm			2			
Religious Sites	25	The Wells	11			
		al-Baḳī' cemetery	8			
		General mention	3			
		Bani-Sā'idah shed	3			
<b>sub-total</b>		<b>163</b>				<b>150</b>



Historical sites	Walls and Gates	11	Old gates	6	Architectural	21
			Old walls	3	Social	17
			Bāb al-Maṣrī	2	Cultural	17
	Historical sites	10	General mention	6	Preservational	16
			al-Sāhah area	2	Historical	11
			al-'Awālī area	2	Functional	10
	Sites of Springs	7	General mention	5	Locational	10
			al-'Ayn (spring) al-Zrḳā~	2	Not exist	7
al-Ĥidjāz Railway	6	Railway station	4	Landmark	3	
		Railway track	2			
Castles and towers	6	General castles and Towers	3			
		aTarsīs site	3			
al-Ĥuṣun and Ūṭum	5	General Fortresses	3			
		General Ūṭum	2			
al-Ḳuṣūr (palaces)	4	al-'Aḳiḳ palaces	2			
		Sa'īd bin al-'Āṣ palace	1			
		'Āṣim bin 'Umr palace	1			
Asbilah (drinking water)	3	General mention	1			
		Sabīl Faṭimah	1			
		Sabīl al-'Aḳiḳ	1			
<b>sub-total</b>		<b>52</b>			<b>112</b>	
The sites of general services	Markets	19	General mention	8	Architectural	10
			al-Manākhah market	6	Comercial	10
			al-'Aniyah market	5	Social	8
	Libraries	5	'Arif Ĥikmat library	3	Cultural	8
			General mention	2	Preservational	7
	Hospices	5	Old Arbiṭah (poor houses)	3	Spiritual	7
al-Takiyah al-Maṣriyah			2	Historical	7	
Schools	4	General mention	2	Functional	5	
		al-Rustumiyah school	2	Landmark	3	
Public Baths	3	General mention	3	Locational	3	
Not exist					3	
<b>sub-total</b>		<b>36</b>			<b>69</b>	
<b>Total</b>		<b>251</b>			<b>293</b>	

Table 7I.18: The most important historical sites or locations in the City

**C-4 Mention five places of the City in which you like to meet friends or relatives, give two reasons for each.**

When we look at table (7I.19) we find that the religious places come first and the most favourite for the residents where they meet their friends and loved ones. The most important among these places are the mosques where people pray and, in addition to that, they provide a good opportunity to meet friends either after or before prayers. The Holy Mosque of the Prophet is the best place for such meetings, where the residents also feel another aspect which reminds them of the Prophet's meetings with his companions to confer on daily affairs. The residents are also reminded of the bounty of living and staying in Al-Madinah where the Prophet used to live and where he was buried, and thus they are the neighbours of the Messenger of Allah (pbuh) who recommended Muslims to treat their neighbours well in many of his traditions (Aḥādith).

There is also al-Baḳī' cemetery which is favoured by the residents to meet their friends because it reminds them of deceased family members and to ask Allah to forgive them. In addition to that, it is considered as a link between this world and the Hereafter because it reminds people of their fate in this life, i.e., that one day they will die. Thus they will heed the message and consequently try to show good manners and treat people in a good manner in order to be safe in the Hereafter, as well as maintaining the quality of their social environment.

Furthermore, meeting friends at the site of battles and touring with them recalls the eternal glories of Islam. As for the natural sites, many acquired a religious characteristic because some Islamic events took place on their soil. There are therefore two reasons for meeting friends in these pleasant settings: to remember these events, and take lessons from them.

Regarding the historical areas which are the second favourite place for meeting friends, we find that various historical events took place in most of them, as mentioned in the table. For instance, the Ḳubā' Area is one of the most ancient areas where the Arab and Jewish tribes settled before Islam and where they built fortresses and Utums. In addition to that, it has among the most fertile agricultural land where many orchards of palm trees still exist up to the present day. Therefore, the chance meeting of friends in these orchards carries a lot of

meaning in addition to the beautiful scenery and the cool under the shade of palm trees.

Categories	Places classifications	freq	Places	Related aspects of important	freq	
Religious places	Natural places	51	Farms	18	Agricultural	26
			al-'Aḳiḳ valley	14	Islamic Spiritual	25
			Ūhud mountain	7	Islamic History	25
			Ḳnāh valley	5	Preservational	20
			Baḥhān valley	3	Local characteristics	17
			General valleys	2		
			Sil' mountain	2		
	Mosques	49	The Prophet's Mosque	36	Cultural	15
			Ḳubā~ Mosque	8	Social	13
			General mention al-Ḳiblatyn Mosque	3 2		
	Battle places	23	Ūhud battle place	20		
			al-Khandaḳ battle place	3		
	Religious places	14	General mention	6		
al-Baḳi' cemetery			4			
Around the Prophet's Mosque			2			
The Wells			2			
<b>sub-total</b>		<b>137</b>			<b>141</b>	
Historical places	Historical places witen the City quarter	55	Ḳubā~ area	14	Islamic History	22
			'Iyrwah area	14	Agricultural	17
			The central area	10	Local characteristics	12
			al-'Awālī area	6	Ancient history	12
			~Bār 'Alī area	4	Social	11
			al-'Uyūn area	3	Spiritual	10
			Ḳurbān area	2		
	Sulṭānah area	2				
Sites of	2	All Sites of Springs	2	Cultural	8	
<b>sub-total</b>		<b>57</b>			<b>92</b>	
General places	parks	12	All modern public parks	9	Agricultural	12
			The wild park (al-Biḍah)	3	Social	9
	Residential	5	Homes	5	Cultural	6
	Libraries	2	General libraries	2	Comercial	4
	Markets	2	General markets	2		
<b>sub-total</b>		<b>21</b>			<b>31</b>	
<b>Total</b>		<b>215</b>			<b>264</b>	

Table 7I.19: Preferred places to meet friends in the City

We also find that the public places including the modern public parks come third as favourite

places for meeting friends. These parks are specially designed as mainly entertainment places. However some interviewees described such places, especially the modern ones, as lacking spirituality and the modest way of life. From all that we can deduce that the richer a place is in history, the more favoured it becomes as a place for meeting friends.

#### **D- Special Information about the Cultural and Social Life (Customs and Traditions) in Al-Madinah.**

This part consist of five questions. Each question is analysed separately and all the responses are categorised according to the nature of each question.

##### **D-1 Mention five most important customs and traditions which distinguishes the people of the City and its relation with the traditional urban fabric.**

Table (7I.20) shows that Customs and Traditions are divided into two categories: Occasional Custom and Social Customs, this division based on the time dimension. The occasional customs are practiced or take place at certain times regardless of specifying a limit of time, i. e. daily, weekly, monthly or even annually, and regardless of the length of time whether under an hour, a number of hours, or a number of days. As for the social customs, we find that there must be a time dimension for practicing them. This is because they are closely connected with the individuals in that society; and in the end they reveal the true character of the society. For instance, the customs and traditions in the Muslim society of Al-Madinah are based on the teachings that emanate from Islam. Since Islam is a religion of worship as well as a complete system of life we find that it is not imposed on the places where these customs and traditions are practiced.

The Islamic occasions whose rituals such as prayer and khutba (religious sermon) are performed in mosques in general and the Prophet's Mosque in particular. However, we also find that the ceremonies that celebrate these occasions cover all the quarters and residential areas of Al-Madinah for some days depending on the sort of the occasion. In addition to that, whereas the celebrations marking the social occasions such as marriage and others take place in the quarters and residential areas of the city, we find that the marriage contract takes place in the Holy Prophet's Mosque along with many other activities.

Categories	Customs classification	Freq	Customs and traditions		Aspects related to traditional urban fabric	Freq		
Occasional customs	Islamic occasions	54	'Eid al-Fiṭr celebration	16	al-Aḥwash planning and design system	38		
			'Eid al-Adḥā celebration	12				
			Ramaḍān celebration	8			Ḥārah planning and design system	32
			Sha'bān celebration	6				
			Radjab celebration	4			Prophet's Mosque and houses relationship	30
			al-Mawlid al-Nabawi	2				
			New year	2				
			Performing Ḥadj	2			Walking distance relationship	25
			Visit al-Baḳī' cemetery	2				
	Social occasions	33	Wedding celebrations	15	Urban and social spaces	20		
			Funerals	13				
			'Aḳiḳah celebration	5			Gardens and houses relationship	17
Traditional occasions	28	Promenade in gardens	9	Courtyard house	17			
		Visiting the Prophet's Mosque	7			Dividing the city to four main quarters	16	
		Playing games	5	Traditional housing design	15			
		Traditional foods	3					
		Visiting the Islamic monuments	2	Elements of traditional house	15			
		Memorising Ḳurā'n	2					
<b>Sub-total</b>		<b>115</b>				<b>225</b>		
Society customs	Social solidarity	48	Visits	10	al-Aḥwash planning and design system	30		
			Co-operation	8				
			Participation	8			Ḥārah planning and design system	27
			Assistance	8				
			Commiseration	7			Family's house	23
			Environmental and social awareness	7				
			Social relations	31			Family ties	14
	Neighbourhood rights	8			Traditional open suḳ	22		
	Extended family	6					Maintaining and sharing quality	18
	Cultural belonging	3						
	Social values	30	Altruistic	8	Enclose environment	17		
			Hospitality	5			Urban and social spaces	16
			Kindness	5				
			Good treatment	5			Society relatives	15
			Respecting elderly people	4				
Morals	3	Pedestrian network	13					
				Traditional schools	10			
		The use of building code and natural material	9					
<b>Sub-total</b>				<b>109</b>				<b>222</b>
<b>Total</b>		<b>224</b>				<b>447</b>		

Table 7I.20: The most important customs and traditions distinguishes the residences with it's relation to the traditional urban fabric



The relationship between the social customs and traditions, and the traditional urban fabric is a very strong and inseparable one where they mutually affect one another. This is based on the assumption that any urban environment is built on the basis of a cultural background and a religious belief (Khalil, 1994). In order to understand this urban environment, one has to understand the nature of this belief and how the environment was developed on its basis. Since the social customs and traditions originate from Islam, this means that the traditional urban fabric is basically built on a number of customs and traditions which give some kind of organisation for both the social life and the urban environment. In other words, the customs and traditions are not formed on the basis of what surround them, i.e. the traditional urban fabric but, on the contrary, they represent part of the Islamic code or law that is embraced by the society (al-Hadhlül, 1994). This Islamic law forms the environment which is built in a way that enables it to implement such law in the society and safeguard its continuity.

When we look at the traditional urban fabric of Al-Madinah we find that it is divided into four quarters. This division, which was well known among the inhabitants, has helped them to visit one another during religious ceremonies, especially 'Eid al-Fid'r (at the end of Ramadān). Each day of the four days of the ceremony is allocated for visiting each one of the four quarters, where people congratulate one another on this happy occasion. This is in addition to the Prophet's Mosque which used to be at the centre of that urban fabric, and which strengthened the relation among the inhabitants because of the performance of the rites of Islamic occasions at the Mosque. Furthermore, the celebration continues in the residential quarters within a network of streets and alleys that traverse that fabric where pedestrians move about into urban open spaces of different shapes, areas and purposes. Therefore, this network is full of different activities and the happiness about these occasions is clearly visible in a positive atmosphere where people meet, become acquainted with one another, congratulate one another as well as buy and sell various items.

The traditional urban fabric of Al-Madinah used to consist of a number shared courtyards (al-Āhwāsh) which were a group of houses adjacent to one another with a semi private open space in the middle and only the inhabitants surrounding it can share its services and benefits. This social space used to be allocated for a number of purposes such as marriage and naming ceremonies as well as funerals, and these services were extended to inhabitants around that

space.

It was a compact and well controlled space that was supervised by the eldest man in the families surrounding the space and who was considered as the mayor who spontaneously accepted his duty out of his keenest on the safety and security for all the inhabitants around that space as well as their children who play in the space and pass their leisure time. The eldest man also acted a judge who settled disputes among children as well as among families if any such disputes arose. Because of that, he enjoyed respectability from all members of the families.

The design of traditional houses and the homogeneity of their heights in the urban fabric had played the biggest role in achieving privacy in this fabric on the one hand and the close and intimate relations among the family members on the other hand. The house types in the traditional urban fabric can be categorised as follows: courtyard houses, houses with halls (roofed courtyards) and houses with *mashrabiya*s (wooden oriels or screened windows). Despite the various shapes and styles of these houses, however, the dominant style was the house with a courtyard in the middle and all the rooms overlooking it (figure 7I.5)

The house with a hall consists of a central courtyard with a ceiling that is known as the hall which represents the main reception room. This reception room is divided into three parts. The middle part continues up to the roof and ended with an opening which has a moving cover known as *Djila* whereas the two side parts have a low ceiling with one or more floors above it (figure 7I.6) (al-Hadhlul, 1994).

The house with *mashrabiya* has windows that overlook the street and each window is fitted with *mashrabiya*. In the outer elevation of the house there are high windows in a way that they do not expose or reveal what is inside other houses yet allow the sunlight and air to get in (figure 7I.7).

The heights of these houses range between two floors (courtyard house), or three floors (hall house) and up to four or five floors (*mashrabiya* house). It is rare to find these different heights in one quarter (al-Hadhlul, 1994).

Figure 7I.5: The courtyard house

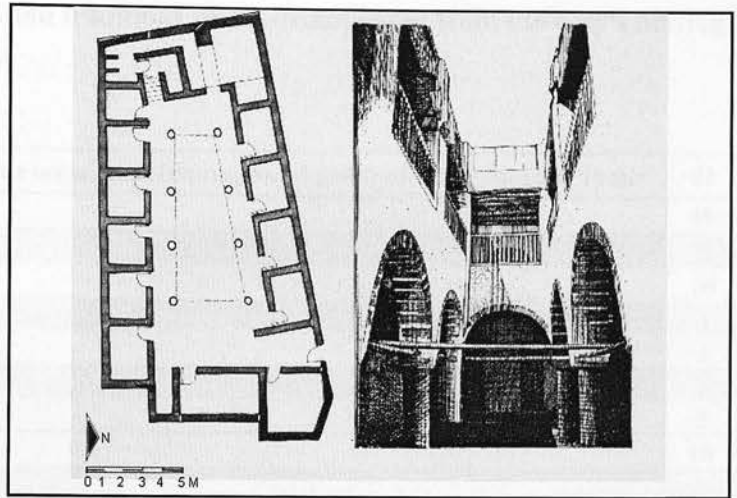


Figure 7I.6: The house with halls (roofed courtyards)

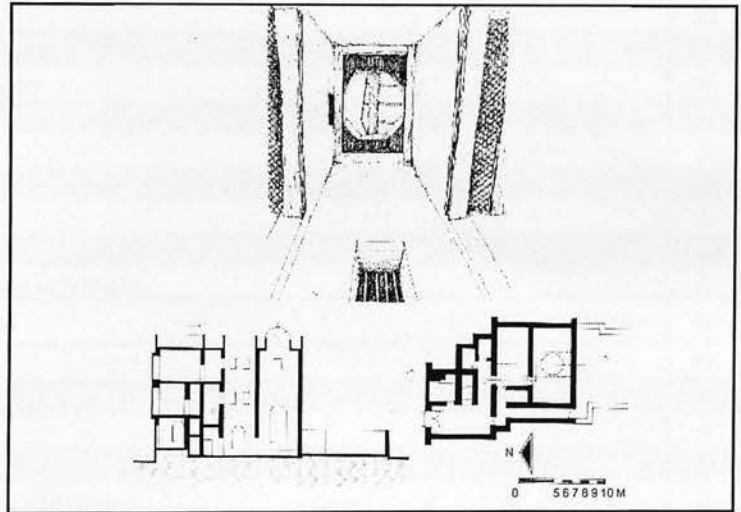
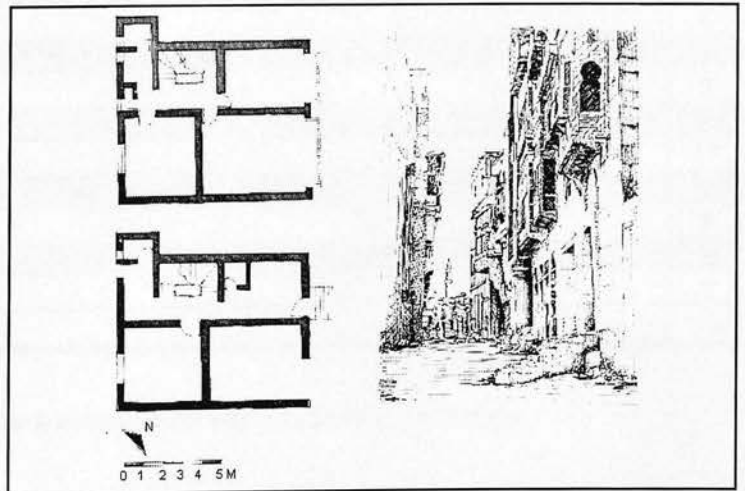


Figure 7I.7: The house with mashrabiya<sup>27</sup>



<sup>27</sup> al-Hathlūl, op. cit., pp. 98, 99 and 100.

**D-2. Mention five customs and traditions which disappeared from the City's heritage and explain why?**

<b>1- The weakness of celebrating the occasional (Islamic, social and traditions) customs Total=</b>	<b>82</b>
<b>Islamic occasions</b>	<b>40</b>
'Eid al-Fiṭr	19
'Eid al-Adḥā	10
The month of Ramaḍān (fasting month)	3
The month of Sha'bān	3
Performing Ḥadj	3
All Islamic occasions	2
<b>Social occasions</b>	<b>18</b>
Weddings	10
All social occasions	5
Funerals	3
<b>Traditional occasions</b>	<b>24</b>
All traditional occasions	5
Visiting the Prophet's Mosque	4
Memorising Ḳurā'n	3
Playing games	3
al-Tawdjibah (the visits paid by women to their neighbours in the morning)	3
Traditional foods	2
Traditional clothes	2
The exchange of food among neighbours	2
<b>2- The weakness society customs Total=</b>	<b>74</b>
<b>Social solidarity</b>	<b>19</b>
Visits	8
Assistance	5
All social solidarity	4
Environmental and society awareness	2
<b>Social relation</b>	<b>38</b>
Family ties	13
Neighbourhood rights	9
Extended family	7
Cultural belonging	7
Social ties	2
<b>Social values</b>	<b>17</b>
Respecting elderly people	10
Morals	3
All social values	2
Hospitality	2
<b>Overall Total</b>	<b>156</b>

Table 7I.21: The lost customs and traditions of the City's heritage

It is clear from the previous table (7I.21) that the weakness which be set the celebration of Islamic occasion such as the ostensible feelings of happiness, the ornaments and exchange

of visit, was the result of the disappearance of the urban fabric around the Prophet's Mosque, the centre of these occasions. This led to the new residential areas being a part, which, in turn, led to the expansion of Al-Madinah in all directions. There were also some changes in celebrating the social occasions such as marriage and other celebrations especially after these celebrations have moved to hotels and the places allocated for such occasions.

Therefore, the celebration of these occasions became somewhat isolated from the social environment of the inhabitants following the change in the residential environment and it was difficult to find the social spaces, such as the courtyards of the past, in which such occasions were celebrated. This also led to the disappearance of some traditional customs such as memorising the *Ḳurān* which became restricted to only some families and individuals. The traditional games, the exchange of food among neighbours, the visits paid by women to their neighbours in the morning, have all disappeared. People also paid less attention to wearing traditional clothes and cooking national dishes. Less attention was paid to the social traditions, the social integration and social relations on all levels of the society and the social values have changed in the contemporary urban environment. This environment has introduced building which consist of flats that are only connected to the surrounding environment through streets as we have previously mentioned. In addition less attention was paid to the neighbour and neighbourhood rights as the same time as the inability for this built environment to accommodate the extended family.

**D-3    Mention five general activities which were exercised in the City and mention the places in which they take place.**

The public activities are divided into four categories: religious, social, commercial and cultural activities. This division was made according to the type of these activities (see table 71-22).

Religious activities occupied the first place in the answers of the interviewees. Such activities included the religious duties such as daily prayers, *Djum'ah* prayer (Friday prayer), fasting in the month of *Ramadān* and pilgrimage (*Ĥadġ*) to the Holy Mosque in Makkah as well as the celebration of Islamic occasions such as 'Eid al-Fġir, 'Eid al-Adġā and others.



Categories	Activities	Freq	Activity's place	Freq
Religious activities	'Eid al-Fiṭr celebration	12	The Prophet's Mosque	15
	Visiting religious sites	8	Farms	14
	Daily prayer	7	Quarters and al-Aḥwāsh	13
	Ramaḍān celebration	7	al-Manākhah market	13
	'Eid al-Adḥā celebration	6	Open spaces and alleys	12
	Sha'bān celebration	5	Houses	7
	Performing Ḥadj	4	al-Aghawāt quarter	6
	Friday prayer	2	al-'Anbariyah quarter	6
	Radjb celebration	2	Ūhud battle site	6
	al-Mawlid al-Nabawi (Prophet's birthday)	1	Ḳubā~ and general mosque	5
	New year	1	al-Baḳī' cemetery	2
<b>Sub-total</b>		<b>55</b>		<b>99</b>
Commercial activities	Shopping	17	al-Manākhah market	17
	Hand crafts	15	General markets	6
	Selling traditional foods	4	al-'Ainiyah and swiḳah	4
<b>Sub-total</b>		<b>36</b>		<b>27</b>
Social activities	Playing traditional games and football	12	Quarters and al-Aḥwāsh	12
	Promenade in gardens and parks	8	Open spaces and alleys	10
	Weddings	4	The Prophet's Mosque	5
	Memorising Ḳurā~n	3	Farms	5
	Visiting	3	Houses	5
<b>Sub-total</b>		<b>30</b>		<b>37</b>
Cultural activities	Educational circles	6	The Prophet's Mosque	6
	Cultural and general lectures	6	Houses	5
	Religious circles	5	al-Dikāk (platforms)	4
			General mosques	2
			Traditional schools	2
<b>Sub-total</b>		<b>17</b>		<b>19</b>
<b>Total</b>		<b>138</b>		<b>182</b>

Table 7I.22: The general activities in the City and its places

As for the places where these religious activities take place, they range from mosques, farms, religious and historic sites to the urban environment and markets. The Prophet's Holy Mosque occupies the centre of all these activities. After that come the other places which represent in general the urban and natural environment. This indicates that the religion of

Islam cover all the aspects of life and that it is impossible to separate between its religious rules and between the social, cultural, political and economic life of the society. This fact is farther confirmed by the social and cultural activities which practice some of their activities in the Prophet's Mosque in particular and the other mosques as general.

The various commercial activities take place in the traditional markets such as al-Manākhah market in particular and the other markets in general. The commercial activity is the only Public activity that is not practised inside the mosques. This is because the Prophet (pbuh) prohibited people from buying and selling in mosques. Furthermore, this activity causes much of idle talk, argument and clamour which does not befit mosques, these being dedicated to the reverence and worship of Allah.

**D-4 Mention the five most important activities which distinguish the daily life style of the City dwellers and give reasons why.**

Categories	Daily Activities	Freq	Total
Social activities	Visiting family and friends	22	51
	Promenade in gardens and parks	7	
	Daily home activities	6	
	al-Tawdjibah	4	
	Attending weddings	3	
	Sitting in traditional cafés	3	
	Attending funerals	2	
	Visiting charity houses	2	
Religious activities	Playing traditional games and football	2	41
	Praying in the Prophet's Mosque	27	
	Visiting Ūhud battle site	4	
	Praying in Ḳubā' Mosque	3	
	Visiting al-Baḳī' cemetery	3	
	Praying in general mosque	2	
Commercial activities	Visiting religious sites	2	36
	Shopping	14	
	Commercial transaction	8	
	General business	7	
	Hand crafts	5	
Cultural activities	Selling traditional foods	2	17
	Attending religious and educational circles	6	
	Sharing general cultural activities	6	
	Attending schools	5	
<b>Total</b>			<b>145</b>

Table 7I.23: The inhabitants' daily lifestyle activities in the City

There are numerous activities for the inhabitants of Al-Madinah which range between the religious, social and business activities in addition to the cultural and leisure activities and the private and general visits (see the above table 7I.23).

The daily activity of the inhabitants can be divided into five stages. this division is encouraged by the performance of prayer which is performed five times a day and usually takes place in the Prophet's Holy Mosque.

The daily activity starts with the Adhān (fajr prayer) which is performed a few hours before sunrise. Then people return home for a little rest and wake up again to have breakfast or go to the wholesale market to do the shopping because this particular time of the day is blessed as the Prophet (pbuh) said "Allah blessed the dawn time for my Ummah" (Muslim Community). After that, people go to work and undertake various activities each in their own specialisation or domain until the time of midday prayer (Ẓuhr). They performed Ẓuhr prayer at the Prophet's Mosque and then resume work for a short while. After that they return home to have dinner and sleep for a short while in what is known as *ḵilulah*, following the tradition of the Prophet (pbuh).

When the sun goes down towards the West, the people wake up to perform 'Aṣr prayer. After this everybody indulges in free activity which includes visiting relatives and friends, going into coffee houses, going for a walk into the orchards, undertaking commercial activities for merchants, visiting historic sites, visiting al-Baḳī' cemetery or attending religious lessons in the Prophet's Mosque until Maghrib prayer after sunset. The free activity also continues after that until 'Isha prayer, around one hour and a half after Maghrib prayer. The people return home to have supper and be reunited with their families and sleep early in order to wake up early for Fajr prayer.

It is noticed that many of these daily traditions have changed as a result of modern entertainment such as television, going for a night out with friends and staying outside the house into the late hours of the night. Therefore, the demolition of the traditional environment that surrounds the Prophet's Mosque and relocation into a modern lifestyle that contradicts the values of the society have in turn led to the changing of many of the customs, traditions and lifestyles of Al-Madinah's society.

**D-5 Mention five factors which enhance the relationship between the visitors and the City dwellers which therefore reflect the City's status and explain why.**

From table (7I.24) many of the pilgrims are not only uninformed about the rituals of the ziyārah and ḥadj but also about other basic aspects of their religion.

Factor classification	Description	Freq	Total
Social behaviour	Good treatment	16	45
	Offering assistance	11	
	Moral	7	
	Fidelity and truth in transaction	7	
	Offering guidance and advice	4	
Residents' behaviour	The thoughtfulness of the residents towards visitors	19	39
	Good relationship between residents and visitors	13	
	Preserving the traditional customs of the residents	7	
Facilities	Providing information and maps	13	36
	Preserving the Islamic monuments	13	
	Preserving the traditional markets	6	
	Providing local product	4	
Services	Providing suitable accommodation	10	31
	Providing necessary services	10	
	Providing health services	7	
	Providing car parking	4	
<b>Total</b>			<b>151</b>

Table 7I.24: The factors that enhance the relationship between visitors and residents

For a further utilisation of available facilities, the people of Al-Madinah, and especially those who live near the Ḥaram, could be encouraged to accommodate pilgrims in their own houses during the season of pilgrims. This might be achieved by a good public campaign. Residents could re-lease parts of their houses as rent or donate them to pilgrims as they always did in the past and a few still do today. This would be made much easier if such possibilities were considered in the design of new buildings. In addition to alleviating the increasing demand for pilgrims' accommodation, this could be of mutual benefit and interest for both residents

and pilgrims. It would provide more local families with an extra annual income and enable them to learn something of the culture of the pilgrims' home countries. At the same time pilgrims would be able to communicate with more local people and benefit from their services. By doing this the people of Al-Madinah would return to their historical role as the hosts of the guests of Allah.

**G- Write, from your knowledge, any extra information about Al-Madinah which you believe could help in the research.**

Some extra information has been written by a third of the interviewees (people who answered the questionnaire). We can sum up this information in the following points:

With regard to the size of the questionnaire, the variety and kind of questions, the interviewees thought that they were sufficient and comprehensive. One of them said: "This is not a questionnaire, it is rather compiling of a book and it is not an easy job. I suggest that everyone who answered the questionnaire should be given a copy of the dissertation although this will cost a lot".

As far as filling in the questionnaire is concerned, one interviewee mentioned: "When I filled in the questionnaire, I did not have to go back to any references. This is because I imagined that what is required here is to fill in the questionnaire according to what exists in memory". This is exactly what the objective of the questionnaire is about, i.e., drawing the image of the city according to its inhabitants and bringing out what they store in their memory about the city, their daily life as well as their prospects for the future of the city.

The information is taken from the inhabitants of the city themselves especially the elderly. Therefore the study is not limited to books and reference material. This confirms the right of the inhabitants to take part in making decisions about their city or at least give them a chance to play an active role, express their opinion and make sure that they express what they prefer to happen in their environment. This is because they are, in the end, the curators and inheritors of the city and this is why the researcher has chosen to distribute the questionnaire among the inhabitants of the city, especially the more experienced among them, rather than among visitors to the city.



The strong support of the inhabitants to this kind of study is made clear from the praise of the work and hopes expressed that this study would come in reality upon this blessed land. This can only reveal how much the people love their city and truly desire that it should be manifested in the way that reflects the elevated status of Islam, its Messenger and his Companions who lived on the land of this city and died in defence of this religion which we practice as a form of worship but do not live as a way of life in reality. This is what we are trying to achieve in this research. Here are some opinions of the interviewees:

"Al-Madinah has lost the features of its character for a number of reasons, and this is sad. It will be better if the research study contained a proposed method, programme or image to be implemented in future regarding the development of the city so that it can regain the features of its character such as its historic features and architectural phenomena as well as social activities".

"The cultural establishment which characterises this city, in the historic, social, civil and archaeological images, has collapsed and what is left is only the demolished remnants. Consequently, the inhabitants of the city became even more ignorant in knowing its historic features and the role it plays than its visitor who comes in with a cultural background about the city. For instance, I asked a student, who stays in Al-Madinah, about the location of the grave of Abu Bakr al-Şidīk and he did not know the location. I also asked him about the simple historic features of the city and still he did not know. We do not need any further comment about what has become of the city and its inhabitants".

## **Concluding Remarks**

For many Muslims, the physical features of Al-Madinah convey strong messages. People are usually overwhelmed by strong feelings and affections through which they connect with the great spirit of Islam and its teachings.

The setting of Al-Madinah both natural features, such as hills and mountains, as well as buildings and places have transformed values that collectively draw the spirit of Islam as a

way of living. Messages which emerged from this questionnaire confirm this notion.

The City of the Prophet (pbuh) is more than the summation of its physical features. These are landmarks for the values and traditions that Islam has brought to people. Its values can be easily read and profoundly experienced and communicated to new generations of Muslims. There is, for example, the case of Ūhud mountain. The Prophet (pbuh) said that this mountain loves us and we love Him (see Chapter Eight). Any person who has a glimpse of this mountain does indeed experience a feeling of the love that ties people together. There are numerous other examples inherited from the tradition of Prophet Muḥammad (pbuh), His Companions and His family. On the other hand all the historical events and places of historical significance similarly carry with them valuable messages which collectively draw on the nature and objectives of Islam.

The Prophet's Mosque has been the centre of all the activities in Al-Madinah since it was first built. Until the 1950s the city had evolved around the Mosque as a natural extension to it. Some houses even shared a wall with it. The main streets radiated from the Mosque and often faced its gates. The green dome and the minarets of the building dominated the skyline of the city, visible from a great distance and communicating the spiritual message of the place. They reminded the people they were drawing near to the Holy City and guided first-time visitors to the Mosque.

Today, however, the Mosque is isolated from its surroundings and the integrity of the Holy City is lost. This was an inevitable result of the successive demolition of the historical quarters and the encircling of the Mosque and its extension with urban elements which are incompatible with the spirituality of the building. The inspiring atmosphere inside the Mosque gives one an overwhelming, religious and spiritual sensation. The grandeur of the building and the tens of thousands of fellow Muslims from all parts of the globe, gathered in one place yet each one engaged in private worship until the time of the congregational prayer starts when they stand unified in rows, can only suggest the oneness of God and nearness to Him. In contrast, immediately outside the Mosque one is suddenly pulled out of this peaceful environment and is confronted with large areas of car-parking and crowded streets with hurrying vehicles and traffic noise, as if one leaving a busy airport or railway station.

In addition, the area is dominated by high-rise hotels and apartment blocks of twelve to sixteen storeys high. These disrespectful concrete towers replaced the traditional two to four floor stone buildings with their finely crafted wood lattice façades. Modern structures are not only disrespectful to human scale but also compete in height with the majestic minarets of the Ĥaram and overshadow the actual Mosque and other historical buildings in the area. These modern buildings moreover, are poorly detailed utilitarian blocks, lacking imagination and bearing no relationship to the area in which they are built and badly suited to its climate. They exist in a "nowhere". They are not related to the Mosque and the traditional architecture of the area, nor even to each other, but live their abstract lives as isolated objects.

As a result of adopting modernist planning concepts, streets and squares on a traditional scale, usually covered or provided with arcades, are no longer found in the city. They were replaced by wide and straight streets, ring-roads or car-parks. These make walking extremely difficult. Even if one can escape the hazards caused by the mixed pedestrian and vehicular traffic, one will not be able to avoid the risk of sunstroke resulting from the lack of shade. This is evident in the increasing number of cases treated in the summer season, and the number of temporary clinics set up for this purpose in the pilgrimage time.

In addition to the destruction of the unique character of the city centre, the new, wide streets have created more vehicular traffic problems than they have solved. They have encouraged more traffic into the area which has led to the construction of the overhead bridge along the southern section of the First Ring Road. This not only further exposed the area to traffic but also added another unsightly feature to the city centre which destroyed the scale of the small historical mosques and other buildings around it and contributed further to the isolation of the Ĥaram area and destruction of the integrity of the city.

Moreover, the traditional market atmosphere for which the Ĥaram area, which was well known and characterised the city for centuries, has become a thing of the past. With the latest successive demolition of the traditional quarters adjacent to the Ĥaram and the introduction of mixed retail activities, specialized *aswāḳ* have almost disappeared. Apart from a few markets for vegetables and meat, the old practice of concentrating certain types of retailing establishments in one locality is no longer seen typically the *aswāḳ* that catered for books, gold and jewels, incense and perfume, textiles and carpets.

The spirit of commercialism manifested in the construction of high-rise buildings in the Ĥaram is clear. It can also be seen in the free use of advertising materials. It seems that almost no spot in the city has been spared from such unsightly elements. Neon signs and advertisement boardings are insensitively displayed on the top and across the façades of buildings, on pavements and on the street lighting posts. Some of these have alternating coloured lights, adding further distraction to the people passing by on their way to the Mosque.

The built environment in general no longer possesses the qualities that formerly gave the city its distinctive identity. Unless one is in the Ĥaram or in a place where one can see it or some of the few remaining historical buildings in the area, one cannot tell that one is in the Prophet's City. Visitors do not find a significant difference between the place from which they have come, whether it is in the East or West, and the city of the Prophet.

Finally, the extent of the effect of these recent developments on the city's spirituality can be demonstrated objectively only by examining the views of those most directly concerned about such environmental qualities: inhabitants of and visitors to the area. This will be the main theme of Part Three of this study.

### Introduction

The second technique for gathering information and discovering people's mental picture of their city is the preparation of *cognitive maps*. In the second part of the questionnaire the respondents were asked to draw a rough sketch, referred to as a cognitive map of the city of Al-Madinah. They show their concept, internalised as an **image of the city** of their knowledge of Al-Madinah organised around the most important buildings or features and places. This exercise sets out to demonstrate no pre-fixed set of requirement other than allow the comparison of its results with the results of the first part, the open-ended questionnaire.

With the objective of appreciating the 37 respondents' images of the City through their most important features, the author received 20 cognitive maps and 3 imaginative maps of Al-Madinah Al-Munawarah.

### 7II.1 Cognitive Maps, Hidden Structure and Meaning

Professionals in the built environment are particularly interested in the way that the perceived differences between various parts of the earth's surface generate movements of many different kinds. As an urban designer, the author would like to look at a series of studies in which research workers have assessed ways in which people build up images of other places. From the geographical point of view there is much of interest in the way distance between a person and a place affects the manner of construction and the final product of this image-building process. This study makes some suggestions as to how such images might affect migration and other forms of spatial behaviour, though subsequent work is needed to clarify and test the complex nature of these relationships. From maps of people's 'space preferences' the author attempts to explain the ways in which 'mental maps' are related to the characteristics of the real world.

The cognitive map should not be regarded as restricted to recording objects or elements of the physical environment. It comprises a deeper theoretical perspective, expressing the understanding an individual has of the environment. It has already found its way into various



fields, anthropology, planning, education and sociology (Kaplan 1982). This widespread use of the cognitive map does not imply that it is merely a structure to record physical entities. It should rather be regarded intuitively as a highly general structure of what humans perceive.

In that it demonstrates a 'gestalt' and general nature of the constituents of the spatial settings and their representations, the concept of the cognitive map is a psychological reflection of the individual. It is through the cognitive map that the individual structures relations between the spatial settings in the recognised world. It is not by any means an accurate attempt to record all the details of his/her world; all of those can never be remembered. It is rather a kind of selective reflection of the preferred, most familiar the more utilised landmarks and objects. Thus it is a psychological structuring of the more associated perceived environmental elements and their relations in a more flexible pattern or framework. The cognitive map is therefore a schema.

Such an arrangement of ideas is often referred to as a *model* (Kaplan 1981). This notion of a model is very important because it gives an idea about how people structure their view of the world and therefore how they react with it. It is thus the expression of people's preferences and choices, as well as their emotional reflections and needs, fears, aspirations etc. Thus Forrester (1971, p.54) comments on people's choices based on the models they create of the world: "Each of us uses models constantly. Every person in his private life and in his business life instinctively uses models for decision making. The mental image of the world around you which you carry in your head is a model. One does not have a city or a government or a country in his head. He has only selected concepts and relationships which he uses to present the real system. A mental image is a model. All of our decisions are taken on the basis of models. All of our laws are passed on the basis of models. All executive actions are taken on the basis of models. The question is not to use or ignore models. The question is only a choice among alternative models."

The main argument of Lynch's (1960) work was about the *imageability* of the city. Imageability is the way the city is read and the main core of the argument was that it is proportional to people's enjoyment of a city. The more they are familiar with their city and able to read it as an entity (image) comprising diverse opportunities, the more satisfied they are. The city is thus described by Lynch as having three parts: *identity*, *structure* and

*meaning*. The identity can be distinguished in one of five categories: *landmarks*, *nodes*, *paths*, *districts*, and *edges*. The *structure* is the pattern that links these elements and it is formed by the perceiver to develop a city image. The *meaning*, however, is researched further by Rapaport, being classified into three levels: lower, middle, and high (Rapaport 1990). The *lower* level of meaning is that associated mainly with its function, e.g., a door being an access leading from one place to another. The *middle* level of meaning is a connotative one, more involved with the emotional responses the people develop with the element they perceive, e.g., the door may be regarded by some as a chance to be realised, a way out of the stress of the work, an escape to the street. The *higher* meaning is an abstracted one that refers less to the object than to broader values. We recognise the door as an invitation to experience formless values and structures of connotations understood through "cosmologies, cultural schemata, worldviews, philosophical systems and the sacred" (p.221). It is always after an absolute value.

## 7II.2. Compilation and Analysis of the Cognitive Maps

The author analysed the respondent's cognitive maps in two ways: first by scanning all the maps and grouping those that appear to have similarities, second by looking at collections of maps categorised under contrasting subject groups. In this analysis, the maps appeared to group along two dimensions, that relate to their congruence with the objective plan of the City. Appleyard (1970) applied maps that predominantly used *sequential elements* (paths) or *spatial elements* (individual buildings, landmarks, or districts) in his research. Within each of these map types, four subtypes were identified. Within the sequential type there was a fairly clear gradation from the most primitive-looking, which contained *fragments* of sequences, through *chain*, *branch*, and *loop* maps to more complex, and usually more accurate, *network* maps. The spatial maps were more difficult to place neatly on any gradient. A number were *scatter and cluster* maps of dots, points, or names, and these appeared to be the most primitive. Another set were *mosaic* in form, still others were *linked*. The final group, the more accurately *patterned*, was the only spatial group that stood out definitely as more sophisticated and assured. However, a combination of Appleyard's (1970) sequential / spatial elements and Lynch's (1960) five elements of (paths, edges, districts, nodes, and landmarks) were employed to analyse the cognitive maps of this research. Accordingly, six map types

were identified by the author which are used for grouping 23 cognitive maps received from the 37 distributed questionnaires: *pattern maps*, *diagrammatic maps*, *landmark maps*, *district (location and direction) maps*, *three dimensional maps* and *network maps* (see figures 7II.1-7II.6).

The four *pattern maps* (figure 7II.1) are the more complete and the most evocative of physical cartographical diagrams, with the outlines of areas and natural and historical landmarks as dominant features. They demonstrate the subjects' ability to handle and draw maps.

The three *diagrammatic maps* (figure 7II.2) treat the major components of the City and illustrate the scheme of the old city or the idea for some future plan. Some of these maps are no more than lists of places, others swept the line around in a curve, a small concession to the complex curves and bends of the actual road system.

The six *landmark maps* (figure 7II.3) focus on single, prominent elements and contain elements like individual buildings or establishments which would be grouped together freely without any drawn connections. Frequently, only the names are distributed over the sheet. Some of these maps reflect concrete spatial relationships by distributing the elements more or less in geographically correct positions.

The five *district (location and direction) maps* (figure 7II.4) concentrate more on the central, traditional area where the direction and distance of each point appears to be positioned in relation to the Prophet Muhammad's (pbuh) Mosque, the core of all the cognitive maps.

The two *three dimensional maps* (figure 7II.5) are partial representations of the road system. Places and districts are connected with schematic units which are in any case dominant and used as spatial linkages.

The three *network maps* (figure 7II.6) are more complete road systems. These are cartographically accurate representations of the city image presented by younger respondents. These maps were schematically laid out with the natural and historical areas outlined and the roads correctly located

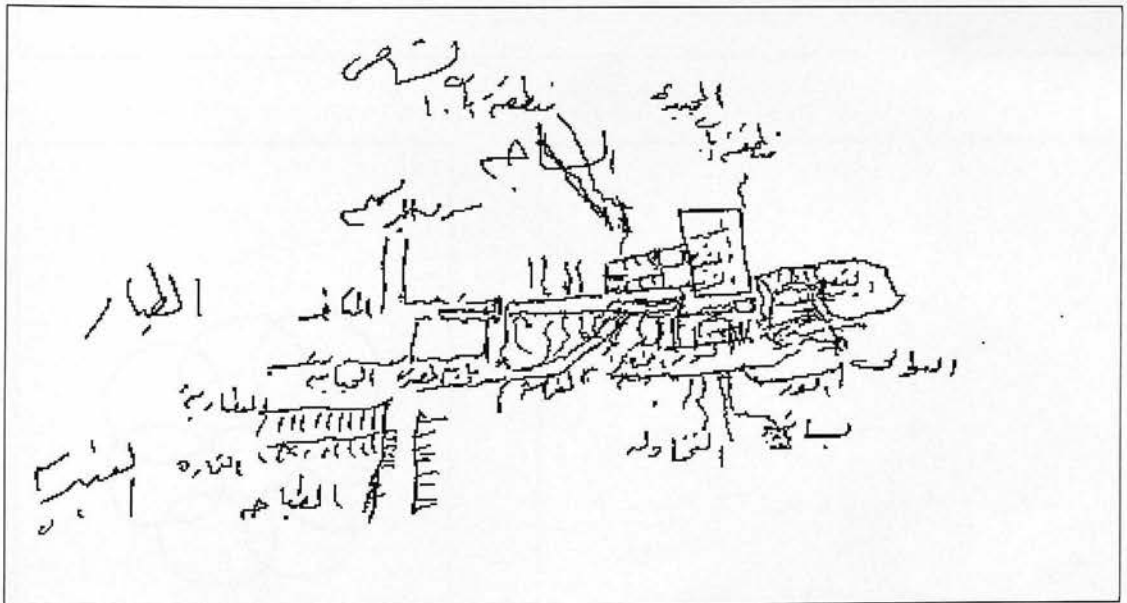
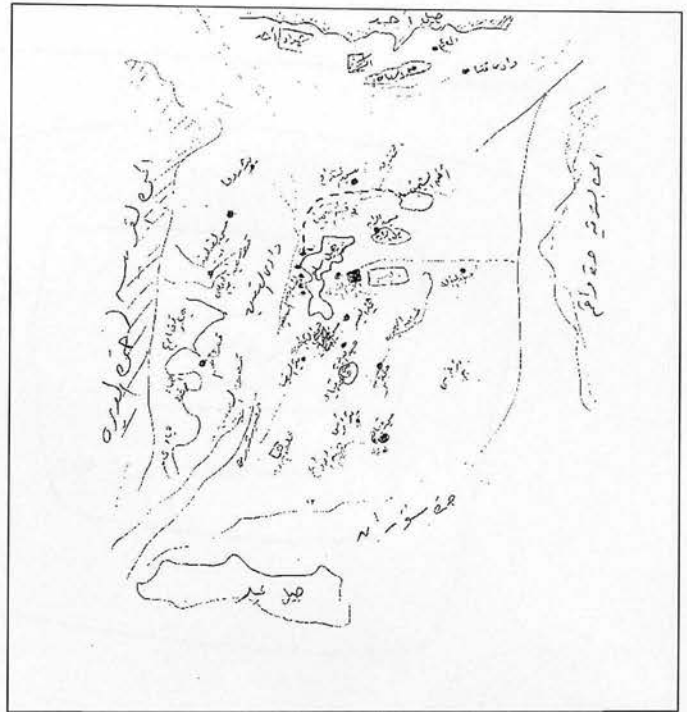
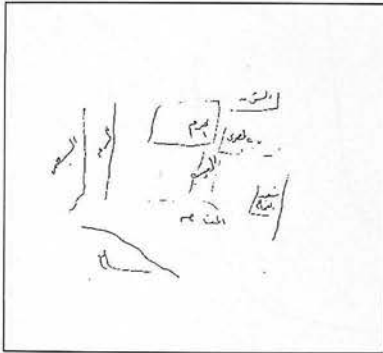
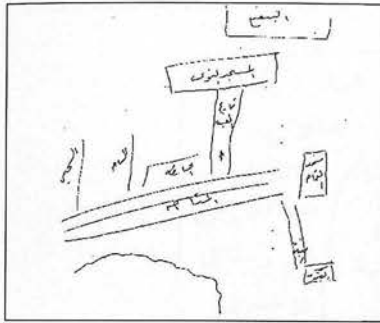


Figure 7II.1: Pattern maps







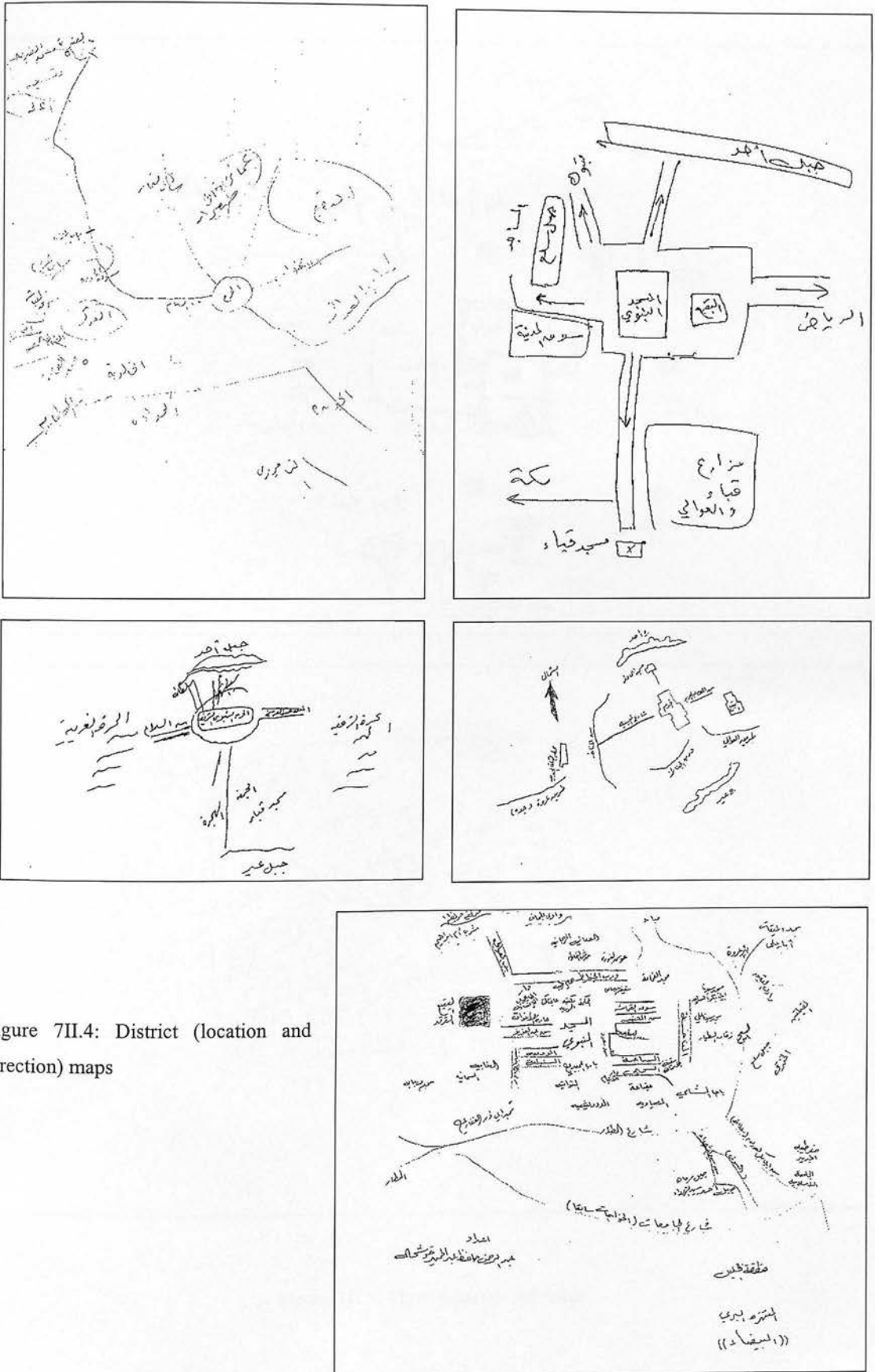


Figure 7II.4: District (location and direction) maps

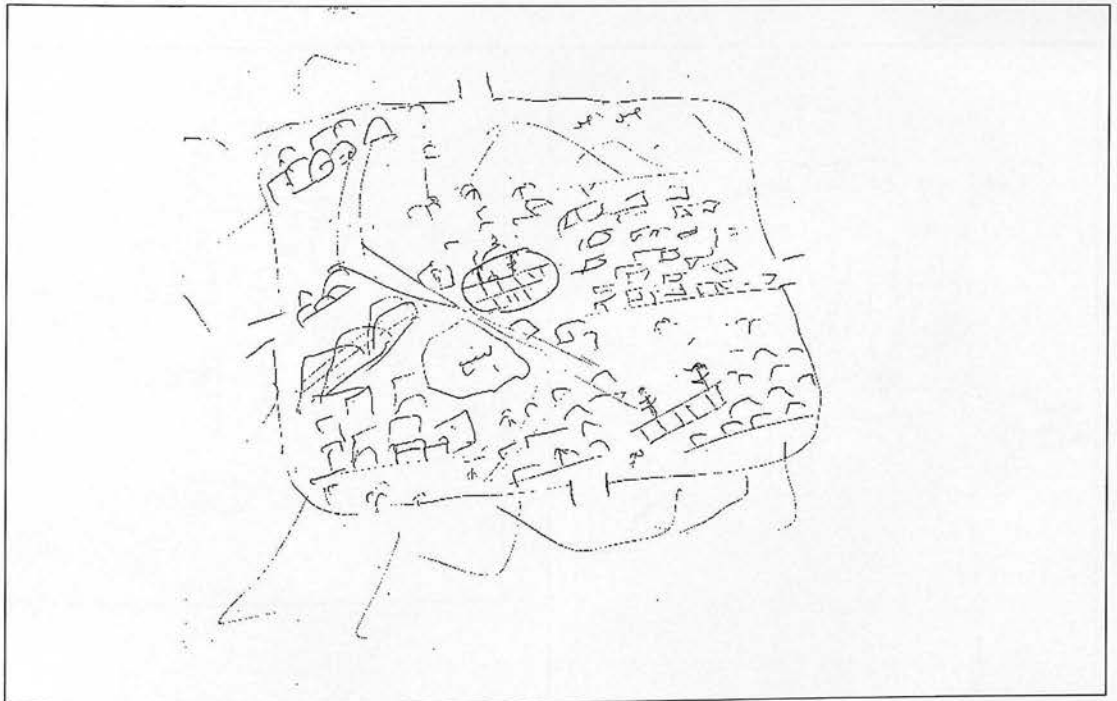
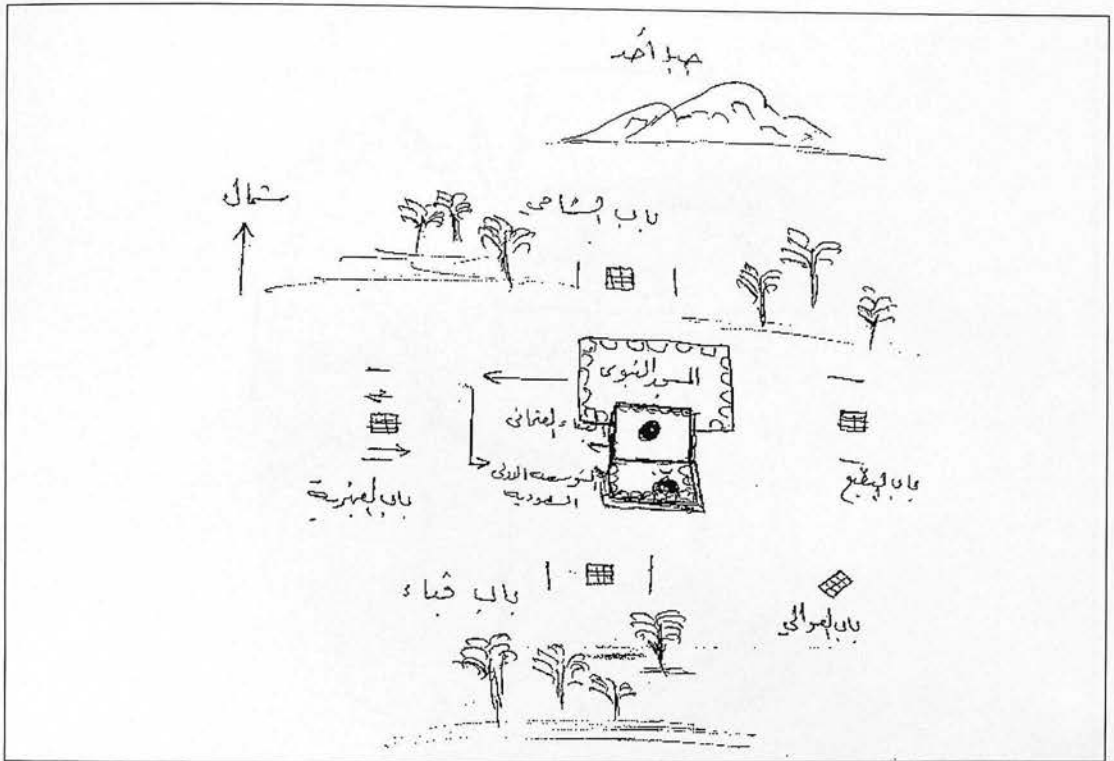


Figure 7II.5: Three dimensional maps

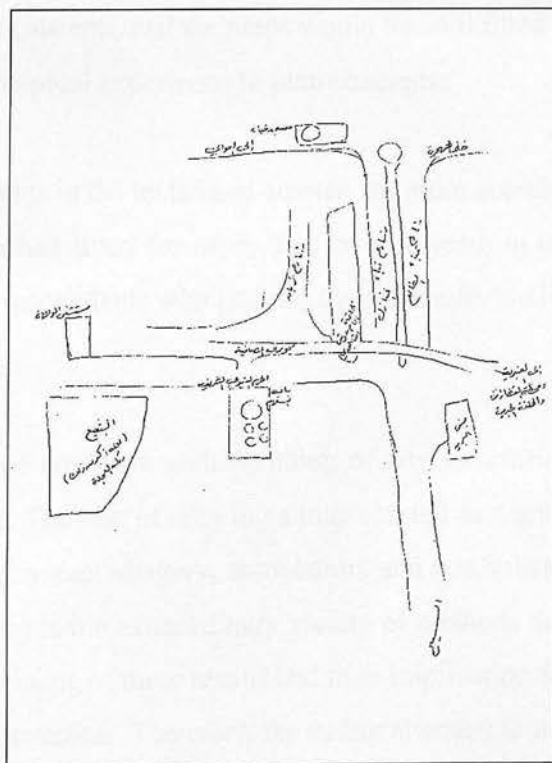
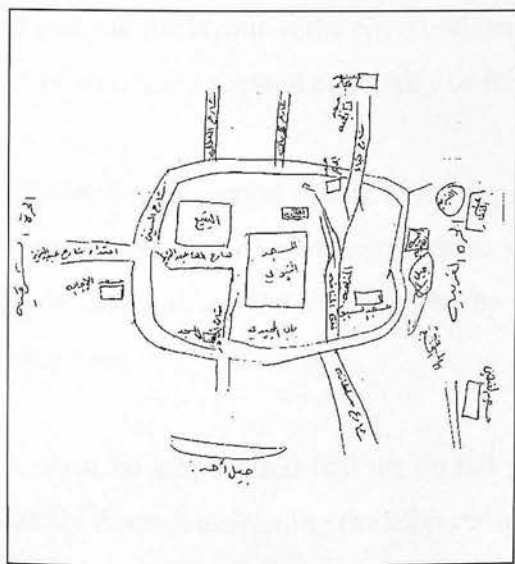
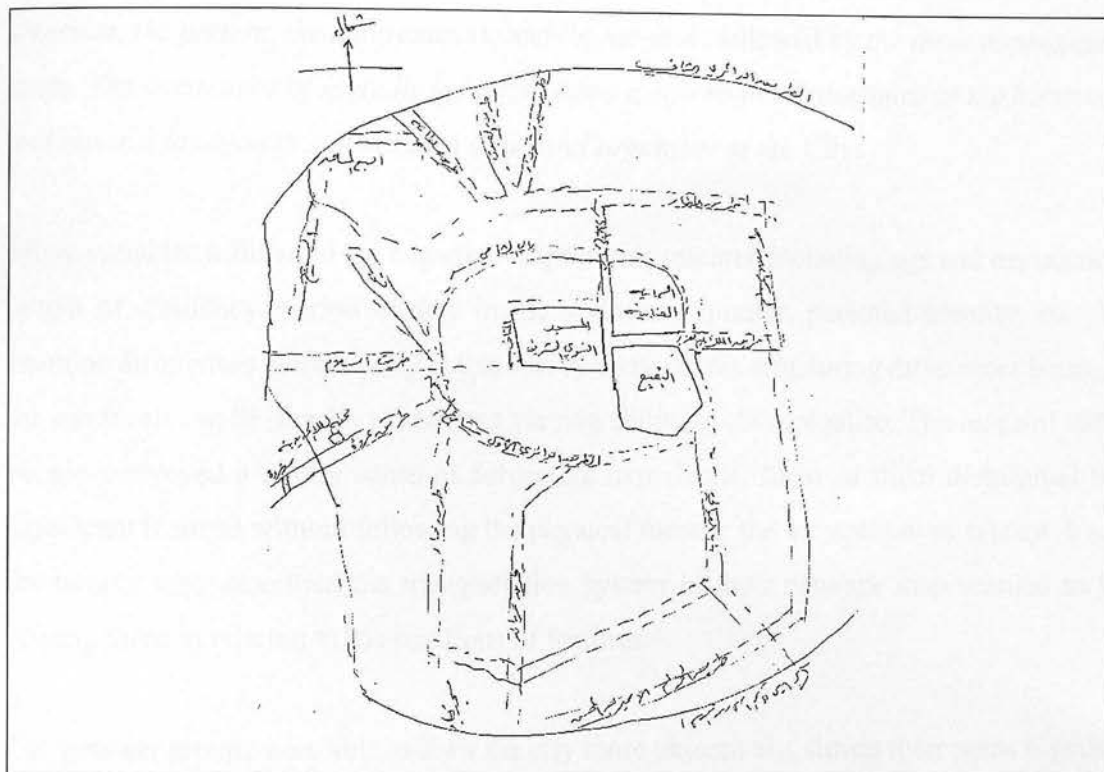


Figure 7II.6: Network maps

To summarise, the most common maps were the *landmark*, the *district location and direction*, the *pattern*, the *diagrammatic* and the *network*, followed by the *three dimensional* maps. *The dominance of spatially dominant maps confirms the importance of the historical and natural landmarks systems as a structural organiser of the City.*

Many variables influenced the cognitive maps of this research including age and experience, length of residency, period of stay in the traditional quarter, personal identity, etc. To examine differences more closely in this survey, many of the structuring differences between the age levels can be directly related to a varying ability to conceptualise. The maps of older people conveyed a strong sense of subjective experience. Most of them distributed the significant features without following the physical form or the transportation system. Even the people who described the transportation system in their network map seemed to be placing them in relation to the positions of features.

The younger groups were able to draw the city more objectively, fitting their maps together more coherently, inferring more about the city, even from limited experience. They would sketch out the layout of the city as schematic concepts, and the maps would be well fitted to the sheet. They seemed better able to fit perceptual experience to plan concepts.

Concerning the period of stay of the respondents in the traditional quarter, the more accurate maps were drawn by the respondents who had lived for more than twenty years in the traditional quarter, the least accurate by the respondents who had not lived there for such a long time.

It must be emphasised that we do not gain a complete understanding of city structuring purely through examining the subjects' maps. The task of drawing a map can tell us a great deal about some structuring methods through visual imagery, association, and symbolism. What these different map types did emphasise is the extraordinary variety of methods that people used to conceptualise the City. The meaning of these results and their implication for planners and urban designers will be difficult to assess. Therefore, the author attempts to use them also as a source of relatively 'raw' information about individual buildings and landmarks to enrich the quality of the questionnaire (see table 7II.1).



No.	Objects	Freq
1	The Prophet's Mosque	22
2	The Traditional Quarters	20
3	al-Ahwāsh	20
4	The Old Gates	20
5	The Traditional Markets	17
6	al-Baqi' Cemetery	15
7	al-Manākhah Market	11
8	The Farms	11
9	Ūhud Mountain	11
10	Sil' Mountain	10
11	The Old Streets	10
12	al-Ħarah al-Sharḳiyah	10
13	Ḳubā~ Mosque	7
14	The Old City (Traditional Urban Fabric) Inside the Wall	7
15	Railway Station	7
16	The City boundary	7
17	Ūhud Battle Features	7
18	The City Wall	6
19	al-Aghwāt Quarter	6
20	'Air Mountain	6
21	.The seven Mosque	6
22	al-Muṣalla Mosque	6
23	The Prophet's Wells	6
24	al-'Ayniyah street	5
25	al-Ħarah al-Gharbiyah	5
26	King Abdul-Aziz Road	5
27	al-'Awālī Road	5
28	al-'Anbariyah Mosque	4
29	The Castles	4
30	al-Ḳiblatyn Mosque	4
31	Sayid al-Shuhdā~ Road	4
32	Sulṭānah Road	4
33	al-'Aḳiḳ Palaces	4
34	Dār Abi Ayūb	4
35	al-Djum'ah Mosque	3
36	Abi Bakr's Mosque	3
37	The First Ring Road	3
38	'Ali's Mosque	3
39	al-'Aḳiḳ Valley	3
40	Abi Zar Mosque	3
41	Ḳubā~ Road	3
42	Ḳurbān Road	3
43	al-Eidjābah Mosque	2
44	Bani Sā'idah Shed	2
45	Hidjrah Road	2
46	Thawr Mountain	2
47	Makkah Road	2
48	'Arif Library	2
49	Baḥḥān Valley	2
<b>total</b>		<b>337</b>

Table 7II.1: The objects (landmarks) presented in the maps

As has been shown from the above table, there are forty-nine (49) objects presented in the maps, with various frequency. One (the Prophet's Mosque) was located twenty-two times while others were located only twice. This big difference in the number of appearances refer to many reasons. For instance, some features were frequently mentioned because they are important, valuable and contain quality and spiritual meaning in the respondents' opinions. For example the Prophet's Mosque, which was the main feature, located in the centre of all maps.

The cognitive mapping technique allows subjects a way to describe network and spatial notions that cannot be revealed in the open-ended questionnaire. The responses are presented differently in scale, clearness, orientation, contents and presentation, that is quite normal and to be expected.

It is understood that a cognitive map is the result of a person's experience with the environment that is lived in. Consequently each image will be unique. But there is possibility for similarities to appear. This can be due to several reasons. The cognitive maps reflect the image of place the respondents have in their minds and is the basic information not only for orientating and route finding within that space, but is the *model* of the environment and the city they live in. This *model* is not equal to the reality, where the real image does not carry emotional implication. It is very common in the cognitive maps that the traditional urban fabric and the old network roads that have been demolished still continue to appear on people's maps.

From the sketches prepared, and as a result of the findings, the following points can be summarised:

With the exception of the three diagrammatic maps - which are non-directional - all maps were oriented with different directions: fourteen maps were oriented with the north at the top of the paper, three maps had east and three maps to south to the top of the paper.

Most, if not all the respondents presented the city centre concentrating on the Prophet's Mosque, the main features such as al-Baḳī', al-Muṣllā Mosque, al-Manākhah market, some parts of the traditional urban fabric (al-Aḥwāsh, the old city wall and gates, the old alleys and

streets, al-Aghwāt quarter) and the railway station.

Most of the maps showed the major and most well known physical features, natural and man-made, such as Ūhud mountain, Sil' mountain, the natural sacred boundary of the city (Thawr and 'Air mountains, al-Ĥarah al-Sharḳiyah and al-Gharbiyah), the farms, Ḳubā~ Mosque, Ūhud Battle Features etc.

Some of the maps were presented in great detail reflecting a clear image of the city in the respondent's mind.

All features, both natural and man-made, that were mentioned in the maps are connected or associated with two type of dimensions, cultural and historical. The cultural dimension correlated with the Islamic teaching and value, which represents the Prophet's career (spiritual dimension) and the application of the Islamic principle on the built environment (religious, social, political etc.). The historical dimension are correlated with the City's history, which is mainly presented in the traditional urban fabric of the City.

## **Concluding Remarks**

In this part, subjective maps were found to provide a rich source of information about urban perception, particularly when correlated with field surveys of the visible, functional and social character of the City. Maps picture spatial relationships which are perhaps impossible to verbalise. That they do not always indicate visual imagery, however, makes it important to devise other survey methods to find out exactly how people structure their images of cities.

The maps differ in size, contents, way of drawing (most of them drawn in plan section and others in elevation view) and differ in accuracy. Distances appear shorter, meandering routes appear longer than straight ones of the similar length. The level of details varies from one to another according to their knowledge background of the place and what parts of the city they tend to emphasise. These differences represent differences in the mental images with the interviewees. In other words, it means that there are correlations between the elements people include in their maps, the importance of these elements and the way they introduce them.

Images are more important than experiences when people's ideal images exist virtually in their minds. However, many residents have experienced daily life in the traditional urban fabric which has now been lost. Also the new generation did not have this experience of the traditional environment. Yet their image in all cases includes features and elements related to the Prophet. The traditional urban fabric is the substance of this history, and it is upon this that the image of the city rests.

The major result of this technique shows that the images of Al-Madinah have become the symbolic form shared by all interviewees, the real residential experience is not the key factor that influences people's city image.

Although all maps (with the exception of the three diagrammatic ones) contained information regarding or depicting physical features and network facts, they all took as their primary source of understanding the history of the Prophet. This one factor overrides all considerations of way-finding or of feature recognition, none of which are shared to as great an extent in any maps. Thus, the distance between the Ūhud and 'Air mountains, some 16 km apart, is irrelevant compared to their close association with the life of the Prophet. Thus, road networks and physical elements often disappear in favour of schematic representations of the Prophet's time.

From this, it can be concluded that, for the respondents, **the life of the Prophet Muḥammad (pbuh) is the model of the City of Al-Madinah.**

### Introduction

Studies of environmental images have used a variety of methods developed by a number of disciplines including sociology, psychology, anthropology, political science and geography. These methods include various types of survey and attitude questionnaires, laboratory and clinical techniques devised by psychologists, participant observation methods, and content and textual analyses of a range of media presentations. All these have both strengths and weaknesses: for example, it is argued that 'one-shot' attitude surveys can lead to distortion and contradiction through over-simplification (Proshansky, 1972; Tuan, 1973), yet it is often only by the use of such methods that representative samples of populations can be considered. Pocock et al. (1978) state that in the 1960s, environmental images and their measurement methodologies were either invented within geography or derived from psychology and measurement theory, bringing strong associations with positivism. In the 1970s, the same source indicates, with increasing interest in the role of the media in relation to image formation, more attention was devoted to methodologies devised in the context of sociological studies. In general, methods used have involved differing and at times conflicting assumptions of the processes and products of measurement.

These methods all derive from the understanding that people conceal their 'true' thoughts beneath 'untrue' opinions, and therefore subtle, indirect means of interview and interpretation are needed. In this section, the main focus is on approaches that attempt to measure people's images directly and by the use of specific methods, rather than reinterpreting data recorded for other purposes. This practice reflects the author's belief that a person's immediate impression of particular features in the City has its own value and depth along with the results driven from the questionnaires and the cognitive mapping that were conducted before applying the first image technique. This illustrates, for example, their religion, emotions etc. and is not based on functional reasons rather on associations and correlations of the City's landmarks. Therefore, people's first image shows relationships and associations of the elements and components of the City; it differs from one person to another in one way and is similar in another way and helps us to go beyond the simple networks of the road systems.



From a visual or design point of view Lynch (1960) showed that the image of the city was organised and remembered by the selection of particular landscape elements - landmarks, districts, paths, nodes and edges. Together, they provide for the legibility and imageability of the city, qualities which are desirable on both pragmatic and aesthetic grounds. The findings of Lynch's work in Boston are different from this work on the first image and the results of mapping and verbal techniques may be compared and interpreted in the light of the discussion in the previous section, i.e. Cognitive Image.

Given the existential basis to Lynch's typology, it has been emphasised that the characteristics of townscape elements are derived partly from their disposition. Knowledge of the urban structure therefore consists not only of the elements or attributes, but also of spatial characteristics in terms of distance, relative location and directional relationships (Pocock et al., 1978, p. 52). This study therefore extracted the 150 dominant features<sup>1</sup> identified through the questionnaire and presented these, four months later, to the same people. Because the list of feature names was no longer fixed in a pre-ordained contextual relationship, the questions were looking for the images attached specifically to the physical components. The author first asked the respondents about the features located in the central area of Al-Madinah and expanded them to different directions to cover most of the historical and traditional features and sites of the City.

Distance, the key geographical variable, is traditionally measured in physical terms of miles or kilometres, or functionally in terms of effective cost, time or effort. A series of projective exercises have shown cognitive distance to be related to town form and structure in general, and to be a function of attributes of the route and destination or end points in particular (Briggs, 1973; Stea, 1969a). Interpretation, however, should always be qualified by the type of destination, whether a 'virtual trip' of a perceived journey or a series of bee-line or crow-flight estimates. While the former, which has been applied in this research, may demand no more than memory recall of a particular experience, the latter is said by Canter (1975) to be important in that it implies that the respondent is drawing on some cognitive representation of the whole city.

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<sup>1</sup> The 150 features in this research are selected from the result of the questionnaire (120 features) and the author's experience of the City (30 features).

In this part, discussion turns from projective exercises concerned with specific spatial properties to actual map drawing in order to illuminate additional designative characteristics of the image. Although the previous section, i.e. Cognitive Image, concerned the results of map drawing exercises, in this section the term 'mental map' is equally applicable to results derived by verbal means and subsequently processed to appear in table form. In either case, the term refers to the spatial or skeletal framework rather than to the more rounded phenomenon of the image, and is based on the underlying assumption that the environment as an entity only properly or fully makes sense when the separate parts are mentally structured in some sequential or relational context.

In short, the response is constrained to physical attributes of the environment as they are associated by non-physical issues. The results of such exercises can further aid an understanding of how man mentally organises his environment. Therefore, the basic strategy of this thesis is to put the citizen of the City of Al-Madinah in a relatively free hypothetical arena where they are asked to rank their order of preference for a series of places in terms of residential desirability.

### **7III.1. Compilation and Analysis of the First Image**

Because of the many numbers (150) of the features, the author analysed the respondent's first image in two ways. The first was to gather and categorise similar features together in separate table. These features are then reviewed and analysed in the same table, to avoid protraction and to provide a clear idea to guide the research. The second was to arrange the images in terms of their numbers given to all features in the category, in ascending order.

The 150 features in the questions were collected from all around the City and represent a mix of religious places, monuments, natural features and cultural sites. The intention was to note down the first thought that flashed into the respondent's mind when they heard or read about these places.

In the following tables will review the responses of the first image of 150 features, starting by finding out the first overall image of the city and the city's names, finding out the first

image of the features of the built environment (mosques, battles and religious features, general landmarks and features of the traditional urban fabric), and finally finding out the first image of the features of the natural environment (mountains, wells, valleys and springs, farms and al-Ĥarāt).

Images marked with an asterix (\*) all relate directly to the life of the Prophet (pbuh), to features that he touched, established, taught from and so on.

The First Image	The City's Names		Total
	Al-Madinah	Yathrib	
The Prophet (pbuh)*	5	7	12
The ancient name (Forbidding name), changed by the Prophet*		9	9
The city of the Prophet*	5	3	8
The ancient history		7	7
The first capital of Islam*	4		4
The Prophet's holy mosque (the Ĥaram) and place of Tomb*	4		4
The Prophet's migration place*	3	1	4
God's most loved place*	2	2	4
The city of <i>al-Anṣār</i> (the helpers) ,companions and followers	3		3
Islam	3		3
The city named by the Prophet*	2		2
	31	29	60

Table 7III.1: The first image of the overall city

The First Image	The Prophet's Mosque Features						Total
	1	2	3	4	5	6	
The Prophet*	13	2	14	2	4	5	40
The sacred Rawḍah (Paradise)*	2	15		2			19
Ottomans' architecture (spiritual design)	12						12
The holy tomb* (paramount spot on earth)	8	2		2			12
Historical expansions					10		10
Relic inspiration*						9	9
One thousand prayer*	5	3					8
The peace and mercy				7			7
the main entrance of the Prophet's mosque				7			7
The sacred chamber*	2		3				5
New architecture style					5		5
The Prophet's companions	4						4
The Prophet houses*		1	2				3
The foundation of the Prophet's Mosque*						3	3
The sacred Munbar (pulpit)*		2					2
Islam	2						2
The green dome*			2				2
	48	25	21	20	19	17	150

1- The old construction  
4- Bāb al-Salām  
camel place of sitting)

2- al-Rawḥah al-Sarīfah (the Holy Garden)  
5-The new construction

3- al-Ḥabr al-Sarīf (the Holy Tomb)  
6-Mabrak al-Nāḥah (the Prophet's

Table 7III.2: The first image of the Prophet's Mosque

The First Image	The Mosque's Features									Total
	1	2	3	4	5	6	7	8	9	
The Prophet's prayer spot, speech and rest*	2	5	10	3	2	12	3	2		39
The Prophet*		9	1	6	2	4	5	6	3	36
Changing the direction of qiblah*					25					25
The first mosque in Islam	20									20
Prophet and his companions 'Eid prayer*		5		5			5	4	1	20
The first friday prayer in Islam*			17							17
'Alī's life (the fourth caliph)				10				4	2	16
Events of Ūhud battle*						12				12
The Prophet's Hidjrah*	7		5							12
Prayers		2	2	2			2	2	2	12
Rain prayers		5		2			3	2		12
Memorialising		2		4			3	1	2	12
Renewing mosques building				5		4	2	1		12
The Prophet's prayer responsiveness*		10								10
Abī-Bakr's life (the first caliph)							9			9
'Umar's life (the second caliph)								6		6
The first mosque built by the Prophet*	6									6
The reward prayers as 'Umrah*	5									5
Visiting Ūhud martyrs*						5				5
The Prophet's status in front of Allah*					5					5
Demolish									4	4
The important of Friday prayer			3							3
Responsiveness Allah orders					3					3
'Uthmān's life (the third caliph)									2	2
	40	38	38	37	37	37	32	28	16	303

- 1- Ḳubā' Mosque      2- al-Muṣṣalla Mosque      3- al-Djum'ah Mosque      4- 'Alī Mosque  
5- al-Ḳiblatyn Mosque      6- al-Mustrah Mosque      7- Abī-Bakr Mosque      8- 'Umar Mosque  
9- 'Uthmān Mosque

Table 7III.3: The first image of the city's mosques

The First Image	The Mosque's Features									Total
	1	2	3	4	5	6	7	8	9	
Āl al-Bayt life (the Prophet's family)*	7		3						1	11
The Prophet's prayer spot, sitting and rest*			1	2		5	1	1	1	11
Prayers	4					2	1	1		8
Ottoman's historical landmark		8								8
Renewing mosques building	3	4								7
The Prophet*			3	1				1	2	7
al-Ĥarah battle (in al-Ĥarah al-Sharḳiyah)	6						1	1		6
Demolish			1	3						6
The prayers forbidden on it*					5					5
Model of Ottoman's architecture		4								4
The Prophet's companions (Ṣaḥābah) life			1	3						4
Memorialising	2	1								3
Hypocrites					3					3
The Prophet's miracle*							2			2
The Prophet's Hidjrah*			2							2
Ḥadj							2			2
	22	17	11	9	8	7	7	4	4	89

- 1- al-'Airīd Mosque      2- al-'Anbariyah Mosque      3- Banāt al-Nadjār Mosque      4- 'Utbān Mosque  
5- Ḍirār Mosque      6- al-Baghlah Mosque      7- 'Arfāt Mosque      8- al-Nūr Mosque  
9- al-Mi'aris Mosque

Table 7III.4: The first image of the city's mosques



The First Image	The Mosque's Features									Total
	1	2	3	4	5	6	7	8	9	
The Prophet's prayer responsiveness*		21								21
Ĥadġ and 'Umrah	14									14
Prayers		2		2	3	1	3	2	1	14
The forbidden of alcoholic			13							13
Abi Dhar life (one of the Ṣahābah)				11						11
The Prophet's prayer place*	2	2	2	2					2	10
Miġāt Ahl Al-Madinah (performing Ĥrām)	10									10
The Prophet*		3			2		1	1	1	8
Horse Racing place on the Prophet's Era*						7				7
Historical landmark		3	4							7
Memorialising				2	3		2			7
Peace and blessings upon the Prophets*				7						7
Renewing mosques building			2	3	1			1		7
Jews history			3						3	6
Islam and entertainment						5				5
Ĥamzġ (the Prophet's uncle) life*								5		5
The Prophet's companions life			3				2			5
Responsiveness Allah orders			3							3
Performing Ĥadġ by Prophet and Ṣahābah*	3									3
Āl al-Bayt life (the Prophet's family)*					3					3
Demolish					3					3
Ūhud battle and mountain							2			2
al-'Aġiġ valley	2									2
Bāb al-Maṣr						2				2
	31	31	30	27	15	15	10	9	7	175

- 1- al-Miġāt Mosque      2- al-Edġābah Mosque      3- al-Fadīkh Mosque      4- Abi Dhar Mosque  
5- al- Sabġ Mosque      6- Fāṭimah Mosque      7- Ūhud Mosque      8- Sayid al-Shuhadā' Mosque  
9- Banī Ķurayẓah Mosque

Table 7III.5: The first image of the city's mosques

The First Image	Battle's Features								Total
	1	2	3	4	5	6	7	8	
Grave of Asad-Ullah (lion of Allah)*			11	2	1	6			20
The victory from Allah	2	8			4				14
The Prophet*	6	5					3		14
Memories	1	1				4	3	4	13
The story of al-Khandaq battle*	13								13
The Prophet's prayer responsiveness*	9	3							12
The maryres of Ūhud				11					11
Ūhud battle and mountain*			1	2		2	2		7
Prophets' visit to grave of Asad-Ullah*			5			1			6
Patience and harm for the sake of Allah			2	1	2				5
The importance of obeying the Prophet*				1	3				4
Lessons to learn from the battle					4				4
Ĥamzah's spring								3	3
The historical battle		3							3
The idea of digging the ditch (Salmān)		2							2
	31	22	19	17	14	13	8	7	131

- 1- the Seven Mosques      2- al-Khandaq battle      3- Sayid al-Shuhadā' graveal-Fath mosque  
4- Ūhud martyrs      5- Ūhud battle      6- al-Maṣra' (the spot of the Prophet's uncle death)  
7- al-Dir'a dome      8- Ṣihrīdġ (cistern) Sayidnā Ĥamzah

Table 7III.6: The first image of the battles features



The First Image	The Religious Site's Features										Total
	1	2	3	4	5	6	7	8	9	10	
The Prophet*	5		5	3	7	5		4	5		34
Ten thousand Companions buried	17										17
The Prophet's first accommodation*				9		7					16
Choosing the first caliph (Abī Bakr)		15									15
The blessed journey (Hidjrah route)*				7		3		5			15
Changing the direction of qiblah*					14						14
Gathering of the Ṣahābah		13									13
Demolish			3	3		2	5				13
The buried of the Prophet's family*	12										12
I wish to be buried here	10										10
The birth place of the Prophet's son*			10								10
The democracy in Islam		8									8
The first resurrected on hereafter*	7										7
The love of Prophet for his family*			6								6
Prophet's intercession to those buried	5										5
The grave place of Prophet's father*							5				5
The blessed soil*									4		4
Zuḳāḳ al-Ṭuwāl							4				4
	56	36	24	22	21	17	14	9	5	4	208

- 1- al-Baḳī' cemetery                      2- Bani-Sā'idah shed                      3- Mashrabat Um Ibrāhīm  
4- Dār Kalthūm ibn al-Hadm              5- Babi Salamah cemetery              6- Dār Sa'd ibn Khythamah  
7- The Prophet's father grave              8- Hidjrah road    9- al-Batrā~                      10- Turbat (soil) Ṣu'ayb

Table 7III.7: The first image of the religious site features

The First Image	Public Features								Total
	1	2	3	4	5	6	7	8	
The beauty of Ottomans' architectural style	13	7	11		4			1	36
Ottomans' empire history	6	4	3	5	3		4		25
Historical and civilisational landmark	7	6		6	2		1		22
The protection of Al-Madinah		5	7		8				20
Memorialising	7	2	2	6					17
Still exist	4	2	3	3			2		14
Connect Al-Madinah with Europe	4			4					8
Water's bounties								6	6
The world's communication of Al-Madinah							5		5
Demolished						1		4	5
Ottomans' fortress style		2		1					3
Providing food and medicine for the poor						3			3
The beauty of Egyptian style						3			3
Islamic solidarity and social ties						3			3
The love of the Prophet's neighbours*						3			3
	41	28	26	25	17	13	12	11	173

- 1- Railway station                      2- Ḳubā~ castle                      3- 'Airwah castle                      4- Railway track  
5- al-'Āūn tower                      6- al-Takiyah al-Maṣriyah    7- Communications building                      8- Sabīl 'Ādilāh

Table 7III.8: The first image of the public features

The First Image	The Historical Features							Total
	1	2	3	4	5	6	7	
The ancient history	5	6	5	4				20
The protection's buildings	7	2	2	2				13
Still exist	4	3			2	1		10
The Jews life	4		4					8
The obeying of the Prophet's orders*	7							7
Not exist			4	2				6
al-Anṣār life		3		3				6
The cultural life of the Omayyad Era					2	2	1	5
The Prophet's Era*		2	1	2				5
The palaces of al-'Aḩiḩ valley					2	1	1	4
Landmark						2	1	3
The beauty of Islamic architecture					2		1	3
The Prophet's companions (Ṣahābah)						1	1	2
Memorialising						1	1	2
al-'Airīd Mosque		2						2
	27	18	16	13	8	8	6	96

1- ḩiṣn Ka'b Ibn al-Ashraf  
5- 'Aṣim bin 'Umr palace

2- Aṭam Ṣirār    3- Aṭam al-ḩihayān  
6- 'Airwah bin al-Zubir palace

4- Aṭam Abu Dudjānah  
7- Sa'īd bin al-'As palace

Table 7III.9: The first image of the historical features

The First Image	The Traditional Urban Fabric's Features											Total
	1	2	3	4	5	6	7	8	9	10	11	
Social relation life			9	5	12	6	2		2	6	2	44
Memorialising	4	7		4	2		8	6	3	5	3	42
The traditional quarters	6	2	11	5			5	3	2	2	2	38
al-Aḩwash urban design system	3	3		4	13		1			7	4	35
al-Mashrabiyyat and al-Rawāshn		7	6	5			4	3	4	2	2	33
The beauty of stone buildings	3	13	5				4		3		2	30
The old and traditional markets	8							4	6			18
Close distance to the ḩaram		3		1	2	4	2		2			14
Archaeological value			3			11						14
Sayl Abu Djidah	14											14
Demolish	2	1		1			1	1	1	2	1	10
The caretaker of the ḩaram						9						9
Farms					3			3	2			8
The Prophet's father grave*				8								8
Bani-Sā'idah shed								7				7
	40	36	34	33	32	30	27	27	25	24	16	324

1- al-Saiḩ quarter    2- al-Sāhah quarter    3- al-Āziḩah (alleys)    4- Zuḩāḩ al-Ṭuwāl  
5- al-Aḩwāsh    6- al-Aghawāt quarter    7- Bāb al-Madjiḩi quarter    8- al-Siḩamī quarter  
9- Bāb al-Madjiḩi street    10- Zuḩāḩ al-Ṭayār quarter    11- al-'Anbariyah quarter

Table 7III.10: The first image of the traditional urban fabric's features (quarters, Aḩwāsh, Āziḩah)

The First Image	The Traditional Urban Fabric's Features										Total
	1	2	3	4	5	6	7	8	9	10	
Cultural and educational roles	20	7		6			4	2	3	3	45
Social and historical values	5	5		5			6	3	2	2	28
Demolish		1	2	5	3	3	3	3	2	3	25
The Prophet's third caliph ('Uthmān)			11								11
'Uthmān martyr			10								10
Archaeological buildings					3	6					9
The tenth good omens Ṣahābah*						8					8
Landmark		2		3			2			1	8
The Prophet's first accommodation*					7						7
The valuable and Antiques books		7									7
al-Anṣār (the helpers)					5						5
Humble life	3								2		5
The oldest antedate house								4			4
Distinguish location to the Ḥaram		3					1				4
al-Ḥārah spring									2		2
	28	25	23	19	18	17	16	12	11	9	178

- 1- Rubāṭ Maẓhr                      2- 'Arif Ḥikmat library                      3- Dār 'Uthmān                      4- Dār al-Aytām  
5- Dār Abi Ayūb                      6- Diyār al-Aasharah                      7- al-Rustumiyah school                      8- Rubāṭ Yāqūt  
9- Rubāṭ al-'Ayn                      10- 'Alam al-Dīn school

Table 7III.11: The first image of the traditional urban fabric's features (Dūr, Arbiṭah, schools and libraries)

The First Image	The Traditional Urban Fabric's Features						Total
	1	2	3	4	5	6	
Memorialising	5	7	2	2	1	2	19
Distinguish location to the Ḥaram		11	1	3			15
Demolish	2	2	2	2	2	2	12
Ottoman's architectural landmark			8		1	3	12
Established by the Prophet*	11						11
Public open space	10						10
The great commercial street		10					10
Open market	7						7
Static value		5		1			6
The place of charity					5		5
Events and history	2						2
Farm		2					2
Traditional market				2			2
Compactness design				2			2
	37	37	13	12	9	7	115

- 1- al-Manākhah market                      2- al-'Aniyah market                      3- Ṭaybh bath                      4- Swaiḳah (djuwat al-Madinah)  
5- Sabīl Khisrū Bashah                      6- al-'Anbariyah bath

Table 7III.12: The first image of the traditional urban fabric's features (markets, baths and asbilah)

The First Image	The Traditional Urban Fabric's Features									Total
	1	2	3	4	5	6	7	8	9	
The protection and security		4	8	8	4	4	4	6	2	40
Al-Madinah wall	6	4	2		3		4	7	3	29
The architectural beauty	5	3	4	2	1	2	2	1	2	22
Memorialising	6	2			3	1	3		3	18
Historical landmark	4		4	4		4				16
Demolish	4	1	2	3	1	3			1	15
The traditional city		7	4	2	2					15
The city's gates				5			4	1	3	13
The specialist markets place	9									9
The northern gate		7								7
The Western gate					7					7
The beauty of the past		2		1		2		2		7
Ottomans' empire history					2	3			1	6
The Southern gate							4			4
The Eastern gate			3							3
Sulay' mountain						2				2
	34	30	27	25	23	21	21	17	15	213

- 1- Bāb al-Maṣrī                      2- Bāb al-Shāmī                      3- Bāb al-Djum'ah                      4- Al-Madinah walls  
5- Bāb al-'Anbaryyah              6- Ḳal'at al-Ḳiyadah (the castle)      7- Bāb Ḳubā'                      8- Bāb al-Wasaṭ  
9- Bāb al-Ḥadīd

Table 7III.13: The first image of the traditional urban fabric's features (walls and gates)

The First Image	The Natural Features (Mountains and al-Ḥarāt)									Total
	1	2	3	4	5	6	7	8	9	
The distinguish landmark	3	3	6	3	3	3	2	3		26
The Prophet*	3	4	3	4	4		3	3		24
Memories	2	3		3	3	1		2	5	19
The northern city's border*			18							18
Ūhud battle and mountain	8	6								14
Mountain from paradise*	14									14
The importance of obeying the Prophet*		13								13
Loves us and we love Him*	9									9
The Prophet's companions (Ṣaḥābah)	1	3		2	3					9
al-Rumah (archers)		7								7
Ḳal'at al-Ḳiyadah (the castle)					7					7
al-Khandaḳ battle*				7						7
Bani Ḥarām mosque*				3	1		3			7
Ḥarm Al-Madinah (the secure boundary)*			5							5
The Prophet's flag*						4				4
Vibrant under the Prophet's foots*	4									4
The seven mosques*				4						4
The Prophet's talking to Ūhud mountain*	3									3
The love (between human and a solid)	3									3
Al-Madinah wall					3					3
al-Rāyah mosque*						2				2
Digging the ditch						1				1
	50	39	32	26	24	11	8	8	5	203

- 1- Ūhud mountain                      2- al-Rumāh mountain                      3- Thawr mountain                      4- Sil' mountain  
5- Sulay' mountain                      6- al-Rāyah mountain                      7- Big Bani Ḥarām cave                      8- Small Bani Ḥarām cave  
9- Dakat Djalāl (Djalāl terrace on Sil' mountain)

Table 7III.14: The first image of the natural features (Mountains)



The First Image	The Natural Features (Mountains and al-Ĥarāt)									Total
	1	2	3	4	5	6	7	8	9	
The Prophet*	2	4	5	6		2				19
The hill fire*	16									16
The southern city's boarder*	14									14
The Western city's boarder*				6	3					9
Prophet's valediction and greeting spot*		9								9
The fixed landmarks			2	1	4					7
Ottoman's reconstruction of the Ĥaram							7			7
Demolish		2		3				2		7
The Eastern city's boarder*			7							7
al-Ĥarah battle			7							7
The immortality of the Prophet's glorious*		5		2						7
Hidjrah*						5				5
The blessed Ĥarah*									4	4
The natural park								4		4
The volcano*			2						2	4
The valediction of the Prophet's army*		4								4
Northern Thaniyat al-Wadā' mosque*		3								3
Ĥarm Al-Madinah (the secure boundary)*	2									2
	34	27	23	18	7	7	7	6	6	135

- 1- 'Air mountain                      2- Northern Thaniyat al-Wadā' hill                      3- al-Ĥarah al-Sharḳiyah  
4- al-Ĥarah al-Gharbiyah            5- al-Djmāwāt mountains                                      6- Southern Thaniyat al-Wadā' hill  
7- al-Ĥaram mountain                8- Ĥarat Shūrān    9- al-Mahārīs (natural reservoir on Ūhud mountain)

Table 7III.15: The first image of the natural features (Mountains and al-Ĥarāt)

The First Image	The Natural Features (Valleys and Spring)											Total
	1	2	3	4	5	6	7	8	9	10	11	
The blessed valley*	14	2		3					3			22
Water resources		2	7	2			3	5	1	1	1	22
Memories	1	5		4		2	2	1		2		17
The distinguish landmark	4		2			2	2				2	12
The Prophet*	7								2		2	11
One of al-'Ayn al-Zrḳā~ branch						3	2	2		4		11
Demolish			2		2	1	1	2		1		9
'Umar's life (the second caliph)		1			7							8
Rain full		2			2				1		1	6
became water tunnel		3							2			5
al-'Aḳiḳ palaces (paradise)*	4											4
The cultural life	3											3
al-Zakī grave						3						3
Promenade				2								2
The blessed spring			2									2
	33	15	13	11	11	11	10	10	9	8	6	137

- 1- al-'Aḳiḳ valley                      2- Sayl Abu Djidah                      3- al-'Ayn (spring) al-Zrḳā~                      4- Ḳnāh valley  
5- 'Umar dam                              6- al-Zakī spring                              7- al-Sāḥah spring                              8- al-Ĥarah spring  
9- Baḥḥān valley                              10- al-Manākhah spring                              11- Ranunā~ valley

Table 7III.16: The first image of the natural features (Valleys and Spring)



The First Image	The Natural Features (Wells and Farms)									Total
	1	2	3	4	5	6	7	8	9	
The Prophet*	8	3	6	4	3		4	3	2	33
The Prophet drink from it ( blessed well)*		3	2	3	3		2	2		15
Demolish	3		2	2	2				1	10
Washing Prophet's after his death from it*		5		3	2					10
One of the seven wells of the Prophet*		3		3		2				8
Still exist		4				1	1	2		8
The Prophet's companions	4		2							6
The distinguish landmark	3								2	5
Waḳf (entailment) 'Uthmānm						5				5
The Prophet's ring					4					4
The Prophet's pray to Al-Madinah*			4							4
Memories			1	2					1	4
al-Suḳyā mosque*			3							3
Inside the last expansion of the Ḥaram	2									2
Well from paradise*		2								2
	20	20	20	17	14	8	7	7	6	119

1- Ḥā~ well      2- Ghurs well      3- al-Suḳyā well      4- Buḏā'ah well      5- al-Khātam well  
 6- 'Uthmān well      7- al-'Aihn well      8- Zamzam well      9- al-Buṣah well

Table 7III.17: The first image of the natural features (wells)

The First Image	The Natural Features (Wells and Farms)								Total
	1	2	3	4	5	6	7	8	
Demolish	5	4	2			2		2	15
The Prophet*				4	5	4			13
Relaxing and enjoying the greenery	3	4	4				2		13
The social and cultural life	2	4	5						11
The farms within the Ḥaram area	6	3	2						11
Memories		3		1			1		5
Spell of the Prophet*				5					5
The Prophet and his companions*					3			2	5
Fever treatment*						3	1		4
Palm trees	1		3						4
The Prophet drink from it ( blessed well)*					2			2	4
al-'Aḳiḳ valley							3		3
Ottoman's era	3								3
Omayyed's era							2		2
Northern Thaniyat al-Wadā' hill*	2								2
	22	18	16	10	10	9	9	6	100

1- al-Dawūdiyāh farm      2- al-Māhmudiyāh farm      3- al-Ṣāfiyāh farm      4- Dharawān well  
 5- al-Yahūb well      6- al-Ḥilwah well      7- 'Airwah well      8- Anas well

Table 7III.18: The first image of the natural features (wells and farms)

From the previous tables, the total number of responses to the first image is 2908, almost half of it is connected directly to the Prophet's life. The total responses cover all the physical features of the city. The mental images of the previous tables could be summarised as follows:

- \* the relationship between Al-Madinah and the prophet's life was so strong, that it became more covered than any other in pre-prophetic history.
- \* The prophet's Mosque represents the focal point of the whole city and where most of the mental images of the prophet's life and his companions accumulate. It also provides the whole city and the Islamic world with the spiritual dimension that secures its everlasting existence.
- \* All the Mosques which are associated with the prophet represent a significant spiritual value for the residents and they are preferred over all other Mosques which do not have this association.
- \* The battle sites in the city symbolise valuable messages and a lot of self-sacrificing examples for the sake of the religion.
- \* The huge amount of religious sites, historical features and general landmarks which were included in the responses confirm the significant status of the city.
- \* The first image of the traditional urban fabric of the city illustrates the living example of practising the shari'ah with all of its' values and objectives to achieve balance between material needs and spiritual needs. In addition to that this image is also connected with the historical dimensions which is associated with that fabric.
- \* The individual memories of the original residents have also affected the acquired image of the whole city.
- \* Most of the responses regarding the natural features in the city (mountains, valleys, etc.) give the same image as what the prophet had described them with.

The above citation clearly confirms that the Prophet's life and the first image of the Al-Madinah represent the same thing.

## 7III.2 Correlation (Association)

Scientists basically measure three things: *variables*, *the chances that data about variables are meaningful*, and *relationships between variables*. Each of these measurement tasks has distinctive approaches and statistical devices. As we look at the ideas used in accomplishing these tasks, remember that measurement almost always looks more precise than it really is (Hoover, 1988).

Establishing the degree of association between two or more variables gets at the central objective of the scientific enterprise. Scientists spend most of their time figuring out how one thing relates to another and structuring these relationships into explanatory theories (Hoover, 1988).

For certain applications, statisticians have developed a more sophisticated tool for specifying relationships between variables: correlation analysis (Hoover, 1988). The essential idea of correlation<sup>2</sup> is to describe statistically the association between variables. Assuming all other conditions are equal, a correlation statistic summarizes the movement of two variables in relation to each other (*ibid.*).

The purpose of this general kind of measurement is to characterize the impact of variables on each other. Regression analysis adds a new level of sophistication to these characterizations. With regression, if you know the value of an independent variable, you can begin to predict the value of the dependent variable (Hoover, 1988). Regression analysis allows you to analyze the separate and combined effects of several independent variables.

The first image technique shows a direct association between the given feature and a message

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<sup>2</sup> Correlation analysis is an advance over comparing percentage differences because it allows you to capture in a single statistic both the *direction* and the amount of association. *Direction* refers to whether the association is positive - that is, when variable A changes, variable B changes in the same direction - or negative - that is, if A changes, B changes in the opposite direction. The positive/negative direction is expressed by a+ or a- before the correlation figure. There is a positive correlation between the quantity of helium in a balloon and the rate at which the balloon rises. There is a negative correlation between the rate of rise and the weight of the balloon (Hoover, 1988, p. 104).

or a dimension given by the responses. Again the analysis comes to confirm the notion that the shared first image is highly associated with the Prophet's life.

## Concluding Remarks

Throughout this section, we have explored the first image that people form of places, and we have looked at some of the things that may lie behind them. We have also touched upon the invisible messages and dimensions that seem to play such an important role in forming the overall image of the city - the first image that seem to be shared to such a high degree, and which are so often predictable. Even though we still know very little about them, we would like to explore some of their implications for the future.

How one can change these images, or at the very least make people aware of the implications of their spatial evaluations and perceptions, is a more complicated, but vital matter. To influence and change deeply entrenched images that have been built up since childhood is a most difficult thing, sometimes demanding solutions that initially seem so outrageous, impractical and expensive that they are dismissed outright. Yet, sometimes outrageous solutions of yesterday are tried, and we find tomorrow that they are really not so outrageous at all. Indeed, we often find ourselves accepting as perfectly obvious, rational and necessary a solution to a problem that seemed quite absurd to our more limited visions of the past

In summary, the deduction of, for example, a residential - or any other - preference pattern from behaviour can be a dangerous exercise in that people act not only on the basis of different sets of information (Pred, 1967), but also on different sets of criteria which cover all aspect of life and are not limited to the physical issues. Conversely, it is as well to reflect that behaviour, when reality is confronted, may bear little relation to evaluations or preferences previously expressed by the same individuals about hypothetical, ideal or even context-specific situations. Rather it is the case that people's behaviour reflects spatial and social constraints imposed on their structural process of transformation.

From the experience of doing this research on the first image of the citizen of al-Madinah al-Munawarah, the author would like to suggest that knowledge of the researcher about the

place is adequate for structuring the questions and there is no need for initial enquiries, for example done by questionnaire, as it was for this research.

Finally, the results of this technique show that people expressed themselves emotionally as well as propounding their views about the association with the landmarks. These responses clarify the importance of a comprehensive network of the City which still exists in people's mind (although some of these features do no longer exist in the physical environment), and can be a rich guideline for the built environment professionals. Even though, this innate knowledge has been documented literally to some extent, it is important to note that lack of care and attention towards this knowledge will result in its degradation for the next generations. Consequently, the author would like to suggest that we can hardly imagine the great career of the Prophet Muhammad (pbuh) and his noble companions without a clear image of their place of living.

It is clear from the above analysis that the mental image of the city as a whole, whether it being before or after the Prophets Hidjrah, is strongly connected with the Prophet and his life since his migration to the City until his death.

The Prophet changed numerous aspects of the City including its name, by which he denounced using the City's old name (Yathrib). These changes make it impossible to disconnect the Prophet's own life from the Islamic Message which he brought to the City. Furthermore, the Prophet's life has been reflected in every quarter of the City, similarly Islamic legislation and application is mirrored upon the inhabitants' lifestyles and the traditional built settings. For the above reasons, the first and last mental image of Al-Madinah Al-Munawarah is connected to the Prophet's life and his noble companions. This association shall always survive as long as Islam endures and is followed by the inhabitants, and further confirms the Prophet's saying which announces that Al-Madinah shall be the last ever city to deteriorate.



## **Introduction**

This section will examine the responses received in the survey in more detail. There are approximately 3617 separate responses resulting from the open-ended questionnaire providing all the information related to respondents interpretation of the city. The information in this form is not very manageable and therefore a method of classification is required.

Two sets of classification have been used, based on the Ujam Model (see F. Witworth, 1992), the first set is called 'categories', which is by dividing the responses into three categories: objects, adjectives or aspects, and activities. These divisions related to the meaning of the environment, as seen by the residences. The second set is finding-out the reasoning behind these responses (there are 4770 separated reasons), which has been called 'dimensions'. These dimensions are the actual forces of creating the city image. By doing so, the potential and attitudes of the residents towards their city will become quite clear.

### **7IV.1 Categories: (Objects - Adjectives - Activities)**

People perceive their natural and built environment in different ways, producing different images. To achieve a holistic image of the city a person must be able to perceive the whole of the image and its development.

People's relationship with their environment whether physical aspects or socio/cultural values built the visible image of a place. In fact all these aspects and variables are one component (Neisser U., 1976). Nevertheless, a city is not only a numbers of objects, i.e. buildings, streets or utilities, a city is a complex series of relationships, between people and their surroundings, integrated in a holistic physical, social and cultural form (ibid.).

The stimulus is the object and the interpretation is what the observer feels on encountering the object, and this is expressed using an adjective. The reaction of the observer to his or her

interpretation to the stimulus; is the activity. In this way all aspects of our environment are included. The inter-relationship between different elements of categories gives an overall deep understanding of people's structure of interpretation of the natural and built environment.

The responses resulting from the open-ended questionnaire have been classified into three categories: objects, adjectives and activities. The table (7IV.1) shows a number of responses in each category. The frequency of any response is considered to be an indication of its importance. All responses which have frequency of one were eliminated. Later on, a selection of responses from objects category will be described, this is to reveal the reason for their significance.

Objects	Freq	Adjectives	Freq	Activities	Freq
The Prophet's Mosque	286	Preservational	119	Cultural activities	99
Ūhud battle features	140	Islamic history	98	Social activities	90
Ḳubā' Mosque	122	Ancient history	77	Commercial activities	89
Traditional houses	122	Architectural	45	Agricultural activities	70
al-Aḥwāsh	99	Social	43	Palm tree farming	67
Traditional quarter	85	Archaeological	34	'Eid al-Fiṭr celebration	55
al-Khandāḳ battle features	76	Cultural	23	Memorising Ḳurā'n	30
Religious sites & features	74	Local characteristics	22	Visiting the Islamic sites	30
Old farms	70	Surviving Features	21	Playing games	29
Mosques	63	Lost features	20	Visiting Prophet's mosque	29
Old & traditional Markets	61	Landmark	17	Promenade in gardens	28
al-Baḳī' cemetery	59	Social aspects	16	'Aḳīḳah celebration	25
al-Muṣṣalla Mosque	54	Cars parking	13	Wedding celebrations	25
al- Ḳiblatyn Mosque	54	Informations and maps	11	Funerals	25
Ūhud mountain	50	Access road	5	Visit al-Baḳī' cemetery	24
al-Manākhah market	49	General services	5	'Eid al-Adḥā celebration	20
Old walls and Gates	48			Ramadān celebration	19
The Prophet's Wells	45			Sha'bān celebration	13
al-Djum'ah Mosque	43			Radjb celebration	11
al-Āziḳah (alleys)	42			al-Mawlid al-Nabawi	9
the Prophet's features	40			New year	7
al-'Aḳīḳ valley	40			Performing Ḥadj	5
Valleys and Springs	40				
Historical features	39				
Dūr of the companions	32				
al-Ḥidjāz railway station	31				
Battle Sites features	27				
'Arif Ḥikmat library	24				
Traditional buildings	22				
Castles and Towers	22				
Dār Abi Ayūb	22				
al-Miḳāt Mosque	21				
al-Aghawāt quarter	21				
Sil' mountain	21				
Traditional schools	21				
Historical libraries	20				

Hidjrah route	20			
the Seven Mosques	19			
Communications building	19			
al-Takiyah al-Maşriyah	18			
al-Ĥuṣun (Fortresses)	18			
Abī-Bakr Mosque	17			
'Alī Mosque	17			
'Umar Mosque	16			
al-Edjābah Mosque	16			
Ḳubā' area	16			
al-Mustrāḥ Mosque	14			
Baḥān valley	14			
Ūṭum	14			
al-Sabḳ Mosque	14			
al-Faḍīkh Mosque	13			
'Iyrwah area	13			
Ḳubā' castle	13			
'Uthmān (Rumah) well	13			
Old Arbiḡah	12			
The central area features	12			
al-Rumāḥ mountain	11			
Bani-Sā'idah shed	10			
al-'Anbariyah Mosque	10			
al-'Āliyah (al-'Awālī) area	10			
al-'Anbariyah quarter	10			
al-Ĥarah al-Sharḳiyah	10			
Ḳnāḥ valley	10			
Abī Dhar Mosque	9			
N. Thaniyat al-Wadā' hill	9			
al-'Ayn (spring) al-Zrḳā'	9			
Ṭaybah secondary school	9			
al-'Aniyah market	9			
Mountains and Hills	8			
'Uthmān Mosque	8			
al-'Aḳiḳ palaces	8			
Railway track	7			
Ĥiṣn Ka'b ibn al-Ashraf	7			
Old trade route	7			
Dār 'Uthmān	7			
al-Rustumiyah school	7			
'Air mountain	7			
al-Ĥarah al-Gharbiyah	7			
al-Khātam (Arys) well	7			
parks	7			
al-Sāḥah quarter	6			
Ghurs well	6			
Dār Kalthūm ibn al-Hadm	5			
'Aṣim bin 'Umr palace	5			
Sa'id bin al-'Ās palace	5			
Rubāṭ Yāḳūt	5			
Bāb al-Maşrī	5			
al-Ḳiyadah castle	5			
al-Asbilah	5			
al-Rāyah Mosque	5			
al-Saiḥ quarter	4			
Bāb al-Madjidi quarter	4			
al-Siḥamī quarter	4			
Zuḳāḳ al-Ṭayār quarter	4			
Zuḳāḳ al-Ṭuwāl	4			

Swaiḡah	4			
'Alam al-Dīn school	4			
Sulay' mountain	4			
S. Thaniyat al-Wadā' hill	4			
Hā~ well	4			
Budā'ah well	4			
Sabīl Fāṭimah	4			
Sabīl al-'Aḡiḡ	4			
~Bār 'Alī area	4			
Sayid al-Shuhadā~ Mosque	3			
Banī Ḳurayzah Mosque	3			
Mashrabat Um Ibrāhīm	3			
Dār Sa'd ibn Khythamah	3			
Prophet's father grave	3			
Dār al-Aytām	3			
al-'Anbariyah bath	3			
Bāb al-'Anbariyah	3			
Biyyt (home) al-Khiradjī	3			
The Royal palace	3			
al-'Uyūn area	3			
The wild park (al-Bidāh)	3			
Public baths	3			
'Airwah well	3			
Towers	3			
Ḳubā~ farms	3			
al-Rāyah mountain	3			
Aḡam valley	3			
al-Buṣah well	3			
al-Ĥarm library	3			
Bāb al-Madǧidī	3			
al-Ĥarāt (low hilly areas)	3			
Aṡam Ṣirār	3			
Aṡam al-Dīhayān	3			
Aṡam Abu Dudǧānah	3			
al-Djurf area	3			
Banī Ḳynuḡā' Market	3			
Rubāṡ Maẓhr	3			
Bāb Ḳubā~	3			
al-Djmāwāt mountains	3			
Thawr mountain	3			
Aṡam al-Shiykhiyy	3			
Ṣaybh bath	3			
The holy Ḳurā~n complex	3			
Biyyūt (homes) Hashim	3			
Biyyūt al-Madanī	3			
Biyyūt abu 'Azah	3			
The Canonical Court	2			
al-'Aulūm al-Shar'aiyah	2			
Ḳurbān area	2			
Salmān al-Fārisī farm	2			
Banī-Sa'idah Fortress	2			
Sulṡānah area	2			
Total	2827		569	799

Table 7IV.1: The classifying categories, objects, adjectives and activities, with the numbers of responses



### **7IV.1.1 Objects:**

Objects, in this context, are the physical elements of the natural and built (man-made) environment. Natural environment refers to places and geographical features, whether they are constant such as valleys, mountains and hills, or variable such as the environmental conditions, trees and all forms of life. The built environment consists of physical and non-physical variables. The physical variable consist of different elements, material and the spaces between them as a result of people's transformations of the environment to achieve their physical functional needs. Whereas the non-physical environment includes the different activities, memories, values and the spiritual meanings within the geometric space. For instance, places cannot be created through the physical attributes alone, but through the activities which take place there, related to society's socio-cultural values.

### **The Mosques Buildings:**

The history of the construction of mosques in Al-Madinah dates back to the early days of Islam, even before the Holy Prophet's arrival at Al-Madinah. There were few small mosques used by the groups of believers who gave their oath of allegiance to the Prophet (pbuh) for their prayers, when the Prophet (pbuh) arrived at Al-Madinah the first year of the Hidjrah (622 AD), he built his first mosque as he laid its foundations and built up its walls, that is *Ḳubā~ Mosque*.

As the Prophet (pbuh) stayed in Al-Madinah and moved from part of it to another, mosques were built at the positions of the Prophet's movement or settlement or where certain events took place. These mosques have been taken care in respect of their construction and renewal throughout the historical ages and up till now (see figures 7IV.1-25).

### **Ūhud Incursion Area:**

Ūhud Incursion is considered one of the most terrific and decisive battles in the Islamic history. In this battle, the Muslim learned a useful lesson as a result of their disobedience of the orders given by their great leader, the Prophet Mohammed (pbuh). The battle took place in the third Hidjrah year, when *Ḳurayish* decided to fight seeking revenge for its losses in





Figure 7IV.1: General view from the Minaret

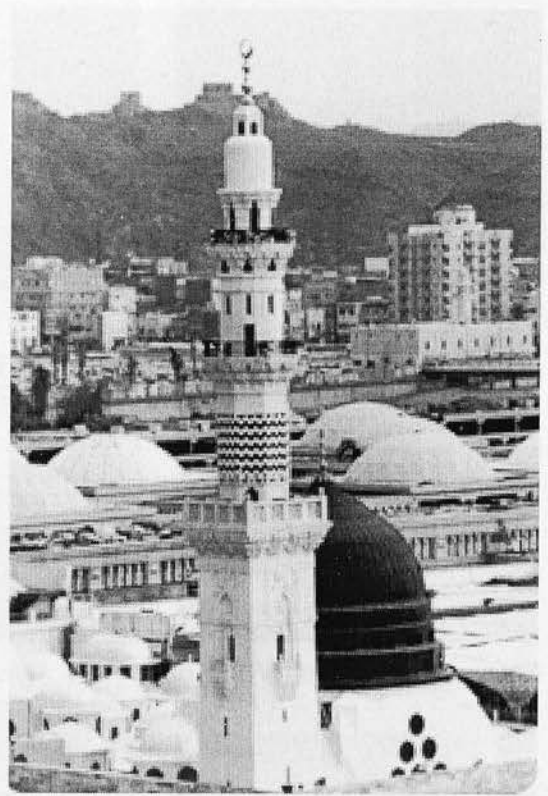


Figure 7IV.3: The Green Dome



Figure 7IV.2: The Prophet's Mosque (old construction)

1. The point that faces The Face of the the Prophet (blessings and peace be upon him).
2. A position in front of Abu-Bakr (may Allah be pleased with him).
3. A position in front of Omar Bin Al-Khattab (may Allah be pleased with him).
4. Al-Mihrah Al-Nabawy Al-Sharief (The Prayer Niche).
5. The door of Al-Sayyidah Fatimah (may Allah be pleased with her).
6. Bab Al-Tawbah.
7. Al-Minbar Al-Nabawy (The Pulpit).
8. The Perfumed Column.
9. Al-Sayyidah Al-Shah Column.
10. Ostuwamat Al-Fawbah.
11. Ostuwamat Al-Sarraf.
12. Ostuwamat Al-Harar.
13. Ostuwamat Al-Wafod.
14. Ostuwamat Murrabba'at Al-Kabre.
15. Ostuwamat Al-Tahajjud.
16. Uthman's Niche.
17. Tabajjud Niche.
18. Al-Maqbarah.
19. Dukkan Al-A'gawat.
20. Al-Manarah Al-ra'yysiah.

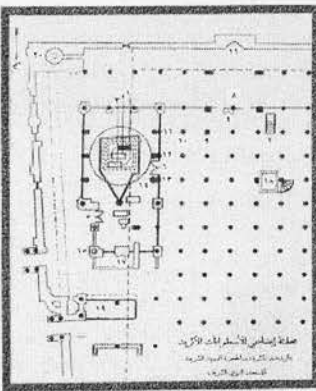


Figure 7IV.4: The Significant Features of the Prophet's Mosque

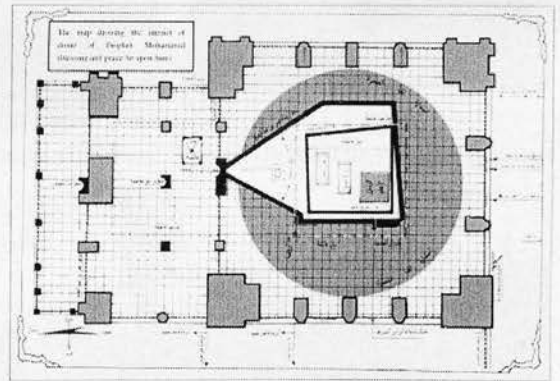


Figure 7IV.5: The Sacred Chamber Plan shows the three graves of the Prophet (pbuh), Abu Bakr and Umar

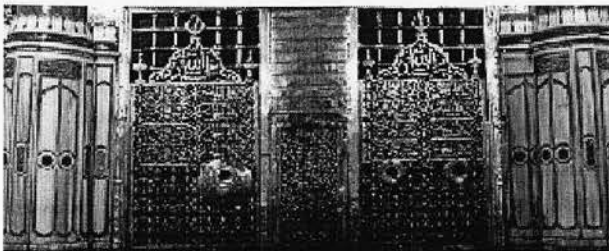


Figure 7IV.6: al-Muwadjah al-Sharifah (the visiting place of the Prophet<sup>1</sup>)

<sup>1</sup> Al-Heraki, op. cit.

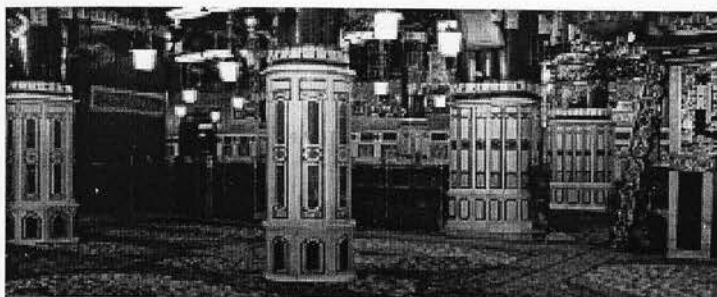


Figure 7IV.7: al-Rawdah al-Sharifah (The old colour)

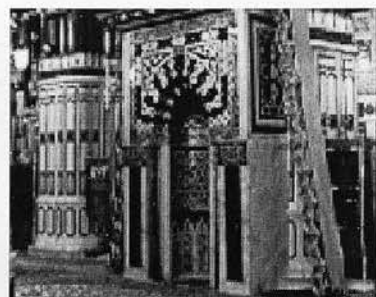


Figure 7IV.8: the Prophet's Mihrab



Figure 7IV.9: al-Rawdah al-Sharifah (the Garden)



Figure 7IV.10: al-Minbar (the Pulpit)



Figure 7IV.11: The Prophet's Mosque (new construction)



Figure 7IV.12: The Prophet's Mosque

Figure 7IV.13: The Prophet's Mosque  
(the court yard)

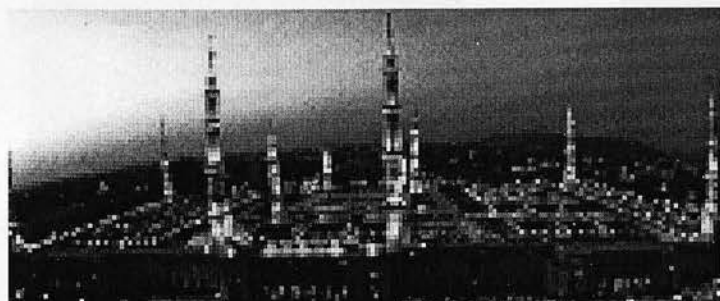


Figure 7IV.14: The Prophet's Mosque<sup>2</sup> (night view)

<sup>2</sup> Al-Heraki, op. cit.

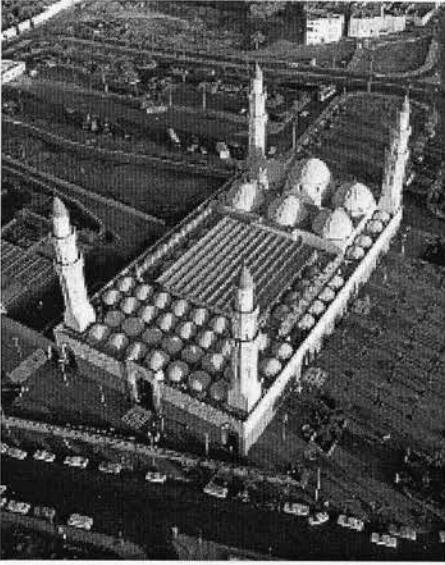


Figure 7IV.15: *Ḳubā'* Mosque (general view)



Figure 7IV.16: *Ḳubā'* Mosque (inside view)



Figure 7IV.20: al-Muṣalla Mosque



Figure 7IV. 17: al-Djum'ah Mosque



Figure 7IV.18: al-Ḳiblatyn Mosque (general view)

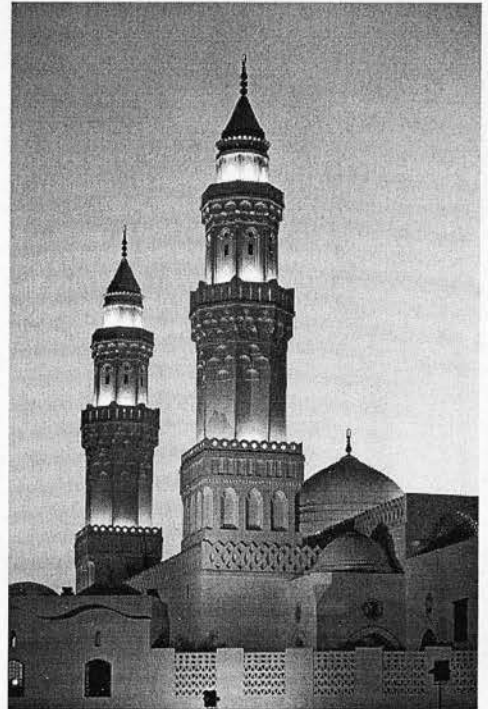


Figure 7IV.19: al-Ḳiblatyn Mosque<sup>3</sup>

<sup>3</sup> Photographs: Nomachi, Ali K., 1997, *Al Madinah Al Munawwarah*, Produced by Al Seyyed Mostafa M. Al Mehdar, Tharaa International, Madinah, Saudi Arabia, p. 134,135,138,139 and 154.



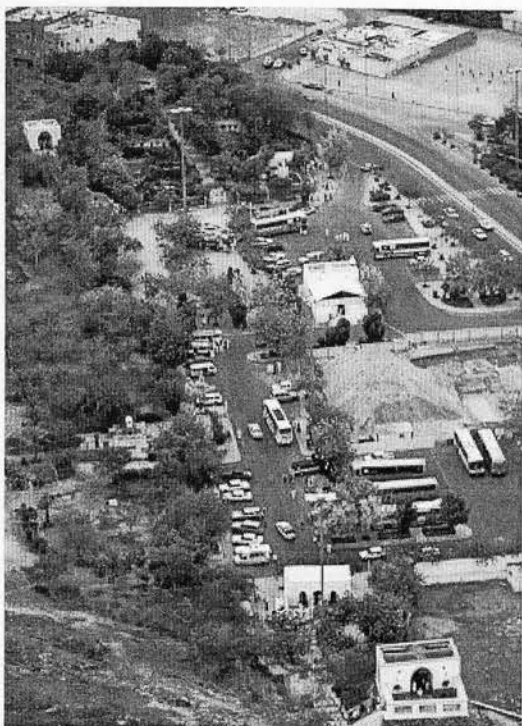


Figure 7IV.20: The Seven Mosques



Figure 7IV.21: al-Miḳāt Mosque



Figure 7IV.22: al-Mustarāh Mosque<sup>4</sup>



Figure 7IV.23: Banī Ḳurayzah Mosque



Figure 7IV.24: al-Faḍīkh Mosque

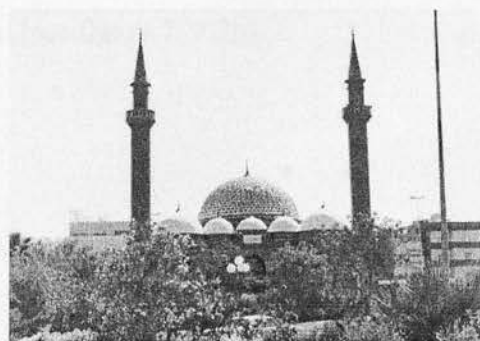


Figure 7IV.25: al-'Anbaryyah Mosque

<sup>4</sup> Photographs: Nomachi, Ali K., op. cit., p. 141,154 and 155.

Badr Incursion. So, Qurayish and its allied tribes marched towards Al-Madinah with a huge army of three thousands soldiers, 3000 camels, 700 shields and 200 mounted horsemen. They settled south of Ūhud mountain and west of the Archers' Mountain. The Muslims could prepare an army of only 700 fighters, a hundred shields and two horses. The Muslim army was led by the prophet (pbuh) who put 50 archers on that mountain and ordered them not to leave their positions at all so that they could protect the back of the Muslim army who faced Al-Madinah with Ūhud on the other side. When the archers saw the Muslims' victory and the disbelievers retreat leaving their arms and properties behind them, they forgot the leader's orders and left their position giving a chance for the disbelievers' army led by khālid Ibn al-Walīd to attack the Muslims again and kill some of the archers. Seventy Muslims became martyrs and many were wounded; on the other side only 22 were killed. But the Muslims soon restored their power and defended themselves until they drove the disbelievers away from Al-Madinah going after them to Ḥamrā al-Aasad (see figures 7IV.26-28).

#### **Sayid al-Shuhada~ Area:**

Sayid al-Shuhada~ Area is considered one of the most important urban areas in Al-Madinah. It is located north of Al-Madinah in Ūhud Area. The place in which the Prophet led the Muslims in Ūhud Battle. In this battle Sayidnā Ḥamzah, Uncle of the Prophet, fell a martyr together with seventy of the honoured companions. The Prophet (pbuh) ordered the burial of their bodies in the battle field. That was why the area was called Sayid al-Shuhada~ Area. The tomb of Sayid al-Shuhada~ and the rest of the companions remained for a long time without a wall, till the advent of the Saudi State which built a stone wall around the tomb. Then, another wall was built with bricks and cement (see figure 7IV.26).

#### **al-khandaḡ Incursion Area:**

this incursion took place in the fifth Hidjrah year between Qurayish and its allies on one hand and Muslims on the other hand. The Jews of Bani Qurayzah plugged to stand by Qurayish and support them to stamp out the Muslims. Qurayish came to Al-Madinah with about 10,000 well equipped soldiers. When the news came to the Prophet (pbuh) he consulted his companions about what to do. Salmān al-Fārisi advised the Prophet to dig a ditch that would prevent the disbelievers from entering Al-Madinah. The Prophet admired the idea and the



Muslims began to dig the ditch. The Prophet himself took part in the digging till dust covered his honoured body. The number of the Muslim army was 3000 or fewer. The disbelievers and their allies camped in the area between al-Djurf and Zaghābah (the site of the bond today). The two armies met using arrows and stones. The disbelievers found a gap point in the ditch and tries and tries to penetrate it but the Muslims stand to them and fought them fiercely with swords. The disbelievers besieged the Muslims who suffered a lot from the severe cold, hunger, and horror but the Muslim never lost faith and never weakened. The situation became ever worse when Bani Qurayzah broke their pledge with the Prophet. The Muslims had to fight on five fronts but they restored the patience till Allah's victory came with the strong storm that destroyed the tents of the disbelievers and put out their fires and left them nothing intact. The disbelievers could not stand this horrible situation and disagreed among themselves. They finally quit the site of the battle leaving behind them their arms and properties to be taken by the Muslims who enjoyed the victory and the removal of the siege.

### **Baḳī' al-Gharḳad (Al-Madinah cemetery)**

al-Baḳī' is the main burial place of the people of Al-Madinah. It was so ever the Prophet's time. It was one of the nearest historic places to the Prophet's holy Mosque. Its total area after King Fahd expansion is about 180,000 squared meters. Many of the Prophet's companions were buried there. All the Prophet's wives except for al-Saydah Khadījah were buried there. Assyadiyah Fatimah al-Zahraa, daughter of the Prophet, his son Ibrahim and his aunt Safiia, his nephew al-Hasan, Saidna Uthman were buried there. the Prophet (pbuh) said many Hadiths about the virtue of al-Baḳī' (see figure 7IV.29).

### **Bani Sā'idah shad**

This shed was originally owned by Bani Sā'idah, a branch of al-Khazraj Tribe. It was reported that the Prophet (pbuh) visited this area and prayed in the mosque there. It was also in this place that people chose Abu Bakr to be their caliph after the Prophet's death. Our government has kept and enhanced this historic site by setting up a garden called Bani Sā'idah Garden on the site. The garden still stands up till now.

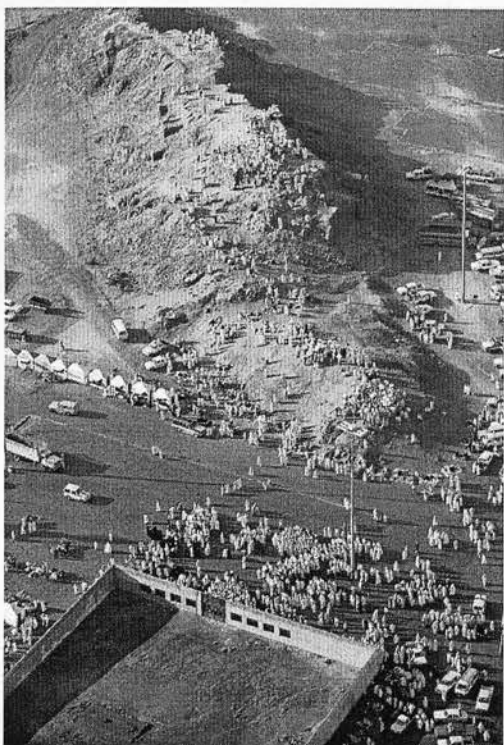


Figure 7IV.27: al- Rumāh mountain<sup>1</sup>

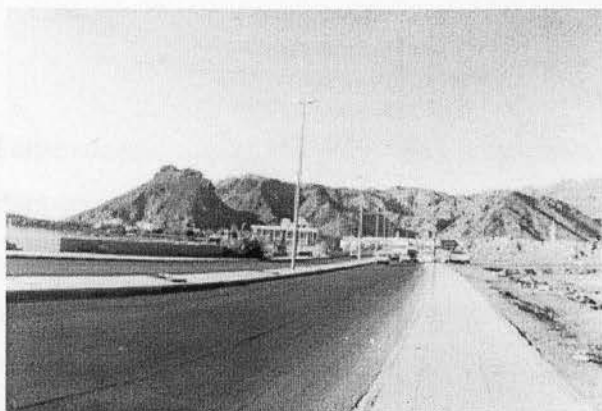


Figure 7IV.26: Ūhud mountain



Figure 7IV.28: The palm trees farms around Ūhud mountain



Figure 7IV.29: al-Baḳī' cemetery

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<sup>1</sup> Photograph: Nomachi, Ali K., op. cit., p.172.

## The Architecture and Urban Section

Al-Madinah is considered as one of the old cities deeply rooted in history. Its geographical position helped activate its role as an important centre in the old world's trade route. So Al-Madinah became the target dwelling place for the tribes as well as the caravan people. Its strategic position was more distinct because of the great number of valleys and torrent streams and springs that made it an agricultural shire town where date palm trees and many other fruits were grown in its farms and orchards. Al-Madinah's buildings included cottages, houses, "Ūṭum" and fortresses that spread inside the farms.

The Prophet's era (1-11 H/ 622-632 AD) was the real beginning of the Islamic construction style . the Prophet (pbuh) led the building of his mosque that became the centre and the core of Al-Madinah Al-Munawarah. he drew construction limits of the market and the housing area near round the holy Prophet's Mosque. The positions of soldiers' coming, guest housing and treating sick people were also known clearly from the direction of the Prophet (pbuh). The construction block of Al-Madinah was affected with the political and social throughout the Islamic history. When there were conflicts like those at the beginning of the Ommyyed Era (41-132 H/ 661-749 AD) and the Abased Era (132-656 H/ 749-1258 AD), the number of inhabitants settling in Al-Madinah decreased. the number of inhabitant increased when there were safety and security. the rich people then moved to Al-Madinah, bought farms and orchards and built houses an palaces in it.

At the beginning of the Ottoman Era (923-1336 H/ 1517-1918 AD), the number of Al-Madinah's inhabitants increased a lot, especially after the establishment of the Hidjaz Railway Project (1901-1908 AD). Consequently, the construction block grew so much that it extended beyond the walls of Al-Madinah. Schools and hospices were built. Libraries were set up. Watering places and public bathes were founded. the Holy Prophet Mosque renovated and expanded during that era.

With the advent of the Saudi Era, Al-Madinah witnessed an unprecedented renaissance as a result of the people's great feeling of safety and security which led to the growth of both the population and the construction block.

the Holy Prophet's Mosque has been expanded and renovated several times. The largest Expansion Project is that of the King Fahd (see figures 7IV.30-47).

## **Markets**

The appearance of markets was so early in the history of Al-Madinah due to its position on the old world's Trade Route and the caravan routes. Some of the famous old markets were Zubālah, al-Djisir and al-Şafāşif Markets. The Prophet (pbuh) showed the Muslims their market place (al-Manākhah market) of Hidjrah to Al-Madinah. Al-Manākhah was the market place of Al-Madinah since then until it extended so much that several markets appeared like the fruit and vegetable markets, the meat market, the household market..etc. Now, Al-Madinah markets have developed to be similar to the large markets all over the world.

### **al-Manākhah (Al-Madinah Market)**

al-Manākhah was Al-Madinah Market Place. It is located west of the prophet Mosque. The Prophet (pbuh) chose the site of al-Manākhah for the market place of Al-Madinah. It remind spacious until some buildings appeared at its ends and some shops were built in it during the reign of Caliph Marwan Ibn al-Hakam. This area was reorganized and redivided during the project of developing Al-Madinah's Central Area (see figure 7IV.48).

### **al-Aziqah (Alleys)**

The "alleys" or internal passages are considered the second gradation of the street and road network in the traditional city of AL-Madinah Al-Munawarah. The alleys of Al-Madinah were well graded in a pyramid-shaped gradation that made these alley lead to lanes that lead to main streets or roads. The buildings on both sides of each side of the alley or lanes overlook it through small vents or windows covered with beautiful scuttles and oriels. Those alleys are mostly bending, that adds to the beauty and privacy they provide to the inhabitants. The bending of these alleys also helps activate the air movement that makes the temperatures go lower and the weather nicer. The gradation of these alleys also helped the people walking to view the beautiful aspects of the buildings. That also helped to interrupt the monotony that people walking might feel in our modern streets (see figures 7IV.49-52).





Figure 7IV.30: The traditional urban fabric



Figure 7IV.31: The appearance of Sil' mountain behind the Prophet's Mosque



Figure 7IV.32: The urban fabric of al-Ghawāt quarter<sup>2</sup>



Figure 7IV.33: The modern architectural style

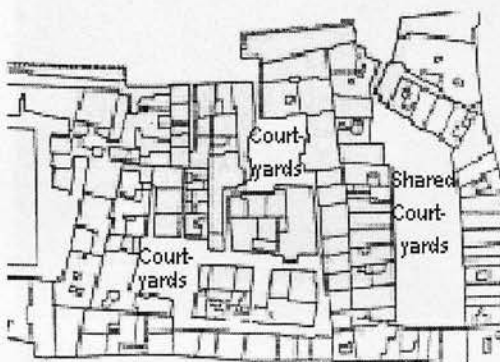


Figure 7IV.34: al-Ahwash (shared courtyards)



Figure 7IV.35: The urban design of al-Ahwash

<sup>2</sup> al-Hathlul, op. cit., p.97.





Figure 7IV.37: The traditional stone house



Figure 7IV.36: The traditional houses



Figure 7IV.38: al-Sahah street



Figure 7IV.39: Traditional house in Bab al-Madjidi



Figure 7IV.40: Bab al-Madjidi street

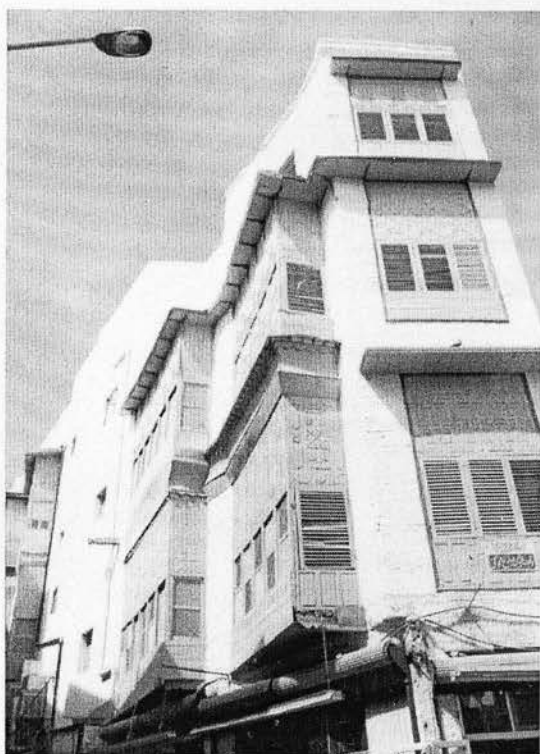


Figure 7IV.41: Stone house covered with rwāshīn

Figure 7IV.42: Bab al-Madjidi street



Figure 7IV.43: A picture of marble sign above the door of the rebat of Yaqout (706 H)



Figure 7IV.44: al-Takiyah al-Masriyah



Figure 7IV.45: 'Airwah castle

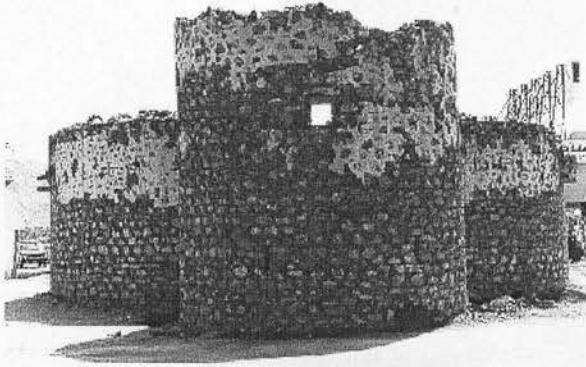


Figure 7IV.46: al-'Uun tower

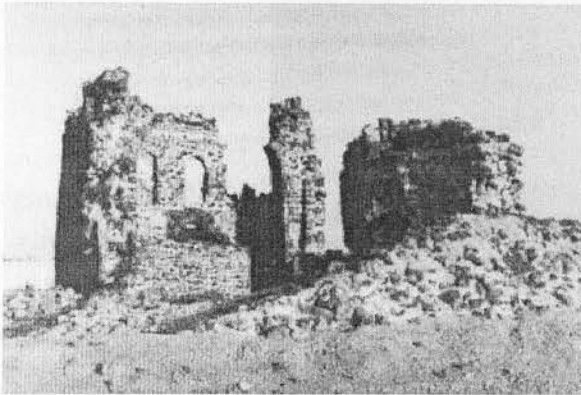


Figure 7IV.47: Sa'ad ibn al-'Asse's palace



Figure 7IV.48: al-Manakhah street





Figure 7IV.49: Alley in Bab al-Madjidi



Figure 7IV.50: Alley in al-Sihami





Figure 7IV.51: Alley in al-Sahah

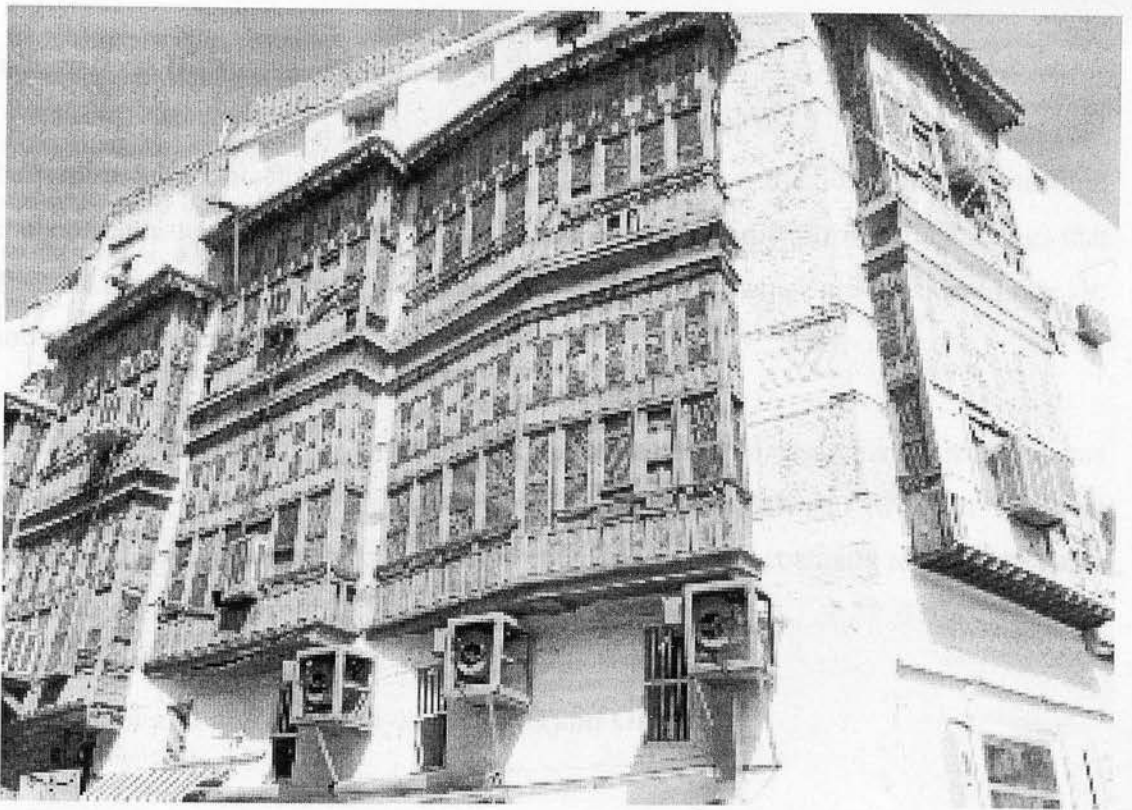


Figure 7IV.52: Details of rwashin in Bab al-Madjidi

## **Al-Madinah Walls and Gates**

The idea of constructing military defence buildings in Al-Madinah was so old that it was started before Islam. Many fortresses and "Ottomans" were built to defend the inhabitants of Al-Madinah against dangers and enemies. The number of these fortresses and Ottomans reached 72. After Islam, there were so many attempts for defending Al-Madinah by digging ditches. The first of these ditches was at the time of the Prophet (pbuh) during al-Khandaq (the Ditch Incursion). Several attempts to protect Al-Madinah by ditches were repeated throughout Islamic history. Al-Madinah walls were also built around Al-Madinah for defence and protection by many Muslim leaders. These walls were connected with the fortresses and defence towers. Al-Madinah sometimes had two or three walls called the inner and the outer walls. Each of these walls had gates. The construction of walls and gates went on until the Saudi reign when Al-Madinah expanded and roads were opened around it. the last wall was removed in (1370H-1950 AD) with the expansion of Al-Madinah and the people's feeling of safety and security.

## **Architectural Details**

The traditional architecture of Al-Madinah is rich in its constructional and architectural details of both the constructional creation and the detailed artistic frills and carvings that reflect the perfection of the crafts work and the building skills which are considered fine art, knowledge and creation.

The traditional architecture in Al-Madinah considering human measurements, requirements and privacy in addition to the strong social relationship between Muslims is a real architectural school from which every civil engineer or architect should learn (see figures 7IV.36-42).

## **al- Rawāshīn and al- Mashrabiyyāt (Scuttles and Oriels)**

The external fronts of buildings are considered an appearance of the similarity, harmony and beauty of traditional houses of Al-Madinah. The scuttles and oriels that cover parts of those

fonts reflect the skill, the art and perfection of the work done for making, forming and shaping them. They are not only for beautifying the buildings, but also for facing the environmental and social requirements of Al-Madinah, such as the high temperature and sun light that they reduce. They also achieve the privacy needed by the Muslim families living in these houses.

The design of the scuttles and oriels takes in consideration of the traditional factor as well as the visual enjoyment of anyone who sees the sight of those perfected pieces of art and elements of architecture that combine both practical and traditional purposes. They are considered as creation and artistic works. The scuttles and oriels have unlimited uses and benefits that include achieving the privacy, preventing or decreasing the high temperature and light by providing the shade while letting air in and making it possible for the inhabitants to see what is outside the building (see figure 7IV.52).

### **The Railway Station**

Al-Hidjāz Railway Station Project was one of the biggest achievement of the Ottomans State and Sultan Abdul Madjid II particularly. The construction of this project was accompanied with the building of many houses and the setting up of various establishments to serve it. Work in this project started in September 1900 and lasted for seven year. The first train arrived in Al-Madinah in August 1908. the total cost of this project reached 3 million sterling pounds. The donated money for this project amounted to one million pounds. The length of the line from Damascus to Al-Madinah was about 1320 Kilometres. there were many stations on the line. The distance between each was only 20 kilometres. Al-Madinah witnessed great development with the arrival of the first train. The idea of building this line arose long before the accession of Sultan Abdul Madjid II but the Ottoman State to implement it because of its very high cost and the difficulty of protecting it. but when Sultan Abdul Madjid assumed ascend the throne, he rushed to execute it to provide a modern comfortable way of travelling for pilgrims which is safe and helps to strengthen the ties between the Muslim States besides other civilisation, strategic objectives that this line helped to achieve. But this line was destroyed because of the differences between Fakery Bash and al-Ashrāf (see figures 7IV.53-57).

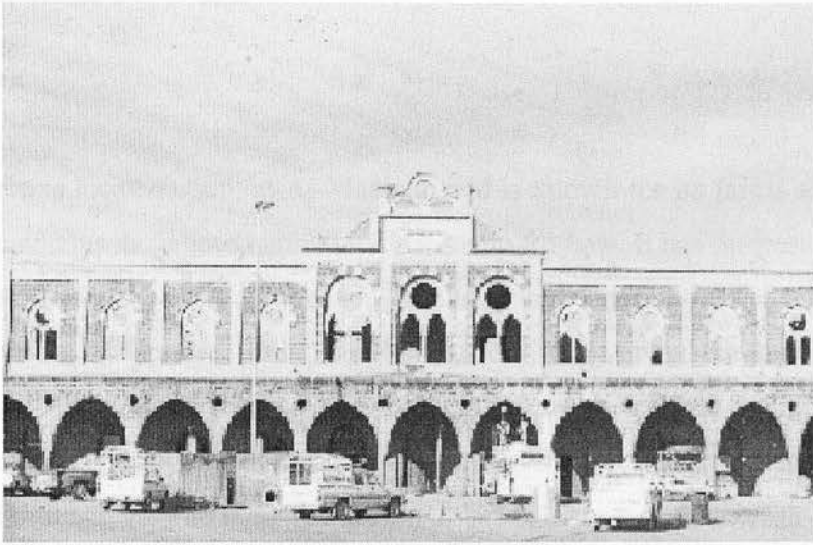


Figure 7IV.53: al-Hidjaz railway station

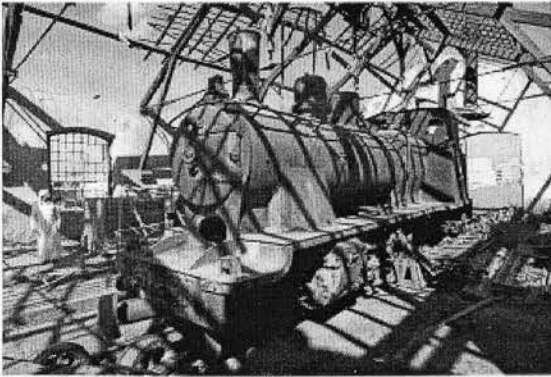


Figure 7IV.54: The old train laying in the station<sup>3</sup>



Figure 7IV.55: Railway stores building



Figure 7IV.56: Railway trak

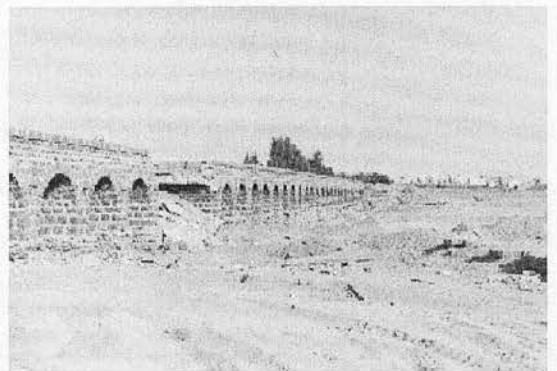


Figure 7IV.57: Railway bridge

<sup>3</sup> Photograph: Nomachi, Ali K., op. cit., p.172.



### **al-'Awāli Area**

al-'Aawāli Area is located south at Al-Madinah and is known for its farms and orchards. Always still maintains its famous agricultural nature up till now. It has the best date, grapes and vegetables. The area is also famous for the purity and cleanliness of its air. In the past many tribes came to this area because of the abundance of its water and the fertility of its soil. The area was called al-'Aāliyah because it was higher than the other areas. Today this area has been developed. It has many high buildings and well paved streets to link the farming areas with the residential areas. The main features in al-'Aawāli are Bani Qurayzah Mosque and Mashrabat Um Ibrāhīm.

### **Ḳubā~ Area**

Ḳubā~ Area is one of the biggest areas in Al-Madinah. it is located south of Al-Madinah and one of the oldest districts in Al-Madinah. Ḳubā~ Mosque is the pulsing heart of the area. Ḳubā~ Area was well know for its orchards and farms. These farms surrounded Ḳubā~ Mosque from all directions. Later, the area was planned and many buildings were built there thus making Ḳubā~ Area one of the biggest residential areas in Al-Madinah. Ḳubā~ Area has a lot of features such as Ḳubā~ Mosque, Arīss Well, al-Djum'ah Mosque. It also has the Prophet's Hidjrah Way.

### **7IV.1.2 Adjectives:**

Adjectives are among other factors that reflect the qualities through people's associated ideas with there built environment. Adjectives consist of the properties perceived in the activities or objects. They are descriptions, not so much of the real objects, but of the observer's image or perception of the objects by which an individual recognises physical form by its meaning. The image of a place is a compound of physical attributes and meaning. An individual's knowledge of the city is a function of its imageability (Lynch, 1960). "... that quality in a physical object which gives it a high probability of evoking a strong image in any given observer. It is that shape, colour or arrangement which facilitates the making of vividly identified, powerfully structured, highly useful mental images of the environment" (ibid.)



Although, physical attributes are an obvious reason why structures are known, neither publicity nor architectural detail guarantee imageability of a place in the perceiver's mental model. It is the attribute of significance which gives meaning to neutral environmental happening (Ittelson, 1990). That to say, for space to become place, senses other than the visual and meanings other than the concrete may have to be invoked.

Individual's perception and attitudes are influenced by the society and the place to which the person belongs. In other word, there is another dimension to the place perception and image; it is the social, cultural and symbolic values which are embedded in that place. Although all the adjectives are relevant to different items, by being considered disconnectedly of their targets, the prevalent feelings or emotions of the whole city could be understood (see chapter 7I the analysis of the open-ended questionnaire).

#### **7IV.1.3 Activities:**

The activity is the response of the observer to the object and his or her adjective reaction. Activities could be seen as one of the main aspects of environmental behaviour which contribute to the place. The appearance of a place is only part of the identity. As the physical image develops as a result of the environment, so do the activities.

Human activities reflect many essential factors such as historical, social, cultural, religious and spiritual values within the environment. With their specific demands on the built environment humans make our cities function and provide enjoyment satisfaction. If they do so, this constitutes, in itself, a highly valued quality.

The traditional urban fabric of the city of Al-Madinah offered a good example of urban imagery in the form of public open spaces and during the King Fahad expansion process which started in 19.1.1406 H/1986 AD, all the areas surrounding the Prophet's Holy Mosque were demolished (see chapter 7I the analysis of the open-ended questionnaire).

## 7IV.2 Dimensions:

Dimensions can be defined as the motivating forces behind any occurrence in the environment, whether the occurrence is physical or emotional, visible or invisible, permanent or transitory. These motives are also divided into two types, external and internal. External motives consist of various elements such as climate, construction materials, site topography etc. whereas the internal includes the social needs of interaction and participation, the inherited traits of living, etc. Every building, every emotion, every action will be a result of a number of these underlying requirements. All together these forces or dimensions make up what we consider to be the culture of a place and such will affect its spatial or architectural properties.

The table 7IV.2 show the identify dimensions used by people to evaluate their built environment. As the result from the table the emergency need for preservations all other dimensions.

Dimensions	frequency
Preservational	419
Islamic Spiritual	417
Islamic History	370
Architectural	310
Social	210
Religious	188
Cultura	174
Archaeological	97
Political	68
Ancient history	67
Total	2320

Table 7IV.2: Dimensions of interpretation of the responses

### 7IV.2.1 Preserving the Islamic Heritage Buildings and Cities

The study aimed at reaching a common definition of heritage as well as the basis and criteria

of classifying the types of heritage. It also aimed at stressing the importance of the types of Islamic heritage, i.e. the architectural and building types, manifesting their distinctive style as well as spreading the awareness with regard to the significance of preserving them.

### **Definition of Heritage:**

Heritage represents the memory of nations along with all the events which took place throughout history and were influenced by the economic, cultural, local and architectural circumstances which make up the human civilisation and the changes surrounding it. The Islamic heritage is the product of an historic period of time which constituted the sentiment of the Muslim nation. The ancient monuments are the product of this heritage. When we talk about heritage, we have to distinguish between heritage, historic landmark and ancient monument as follows:

**Heritage:** is a distinctive cultural form which reflects the deep rooted human characteristics and is handed down from one generation to another. It endures throughout different periods of time in a distinct environment. The inherent or internal cultural changes are reflected on heritage, however, heritage always preserves a basic unit. It is divided into two types, material heritage and spiritual heritage.

**The Historic Landmark:** is everything that has a characteristic of natural value which links it in certain ways to society and thus represents part of the ancient and modern culture of that society.

**The Ancient Remnant or Monument:** represent the remnant of everything left by civilisations or previous generations. It is usually discovered or found in the fields of arts, science, literature, ethics, daily life, general events, etc. Its history usually goes back to a hundred years whenever it has an artistic historical value.

### **Heritage can be divided into different aspects:**

**Linguistically:** it can be defined as everything that is being inherited. In other words, everything that becomes the property of the inheritor. It represents that have original value

and features inherited from the ancestors. Furthermore, it represents a group of views, patterns and civilisation customs that are handed down from one generation to another.

**Culturally:** it is everything of value that is being inherited and somehow becomes an effective part which affects the present life of the inheritor. It also represents any rich and stored asset that includes the contributions of the successive generations. This means that it extends indefinitely and its continuity depends on the distinctive contributions (generation after generation). In other words, heritage represents the spiritual dimension of civilisation, the unity of its methods and its human and intellectual features throughout the periods of history, long or short.

**Historically:** heritage is considered the image of the past and the past history which records the originality of nations in being related to a certain time and space. The dimensions of time and space are very important in defining heritage, However, the relation between heritage and cultural development is a mutual one, i.e. each one affects and is affected by the other. The objective of both is to create the civilisation of nations. Culture is characterised by continuity and heritage means every aspect of human history that is related to its past experience, the establishment of its present and the preparation for its future.

**Materially:** heritage is 'a manual or reference' and something which materially exists to testify to the special status of culture as well as support its evolution and survival. It can be defined as a material existence of an intellectual attitude. It can also be classified into an effective heritage which constitutes the background for artistic work and a forgotten, but stored heritage. Furthermore, heritage can be treated as 'an objective material existence' in its capacity as a collection of tangible things.

**Economically:** a building or an area can be branded as one which has heritage value if it achieved or contributed in achieving a significant economic revenue for the surrounding environment, whether it is a focal point of commerce, tourism, employment or other activities.

**Uniqueness:** a building or an area can be branded as heritage if it is unique or specially endowed with a feature that is unrivalled at or before its era.

## **The Preservation of Islamic Heritage, Architecture and Design:**

The main objective behind the preservation and restoration of ancient monuments is to protect them as works of art and historic landmarks. The preservation and restoration of the Islamic heritage is meant to protect Islamic monuments and cultural sites. This preservation should be subject to the rules and criteria set by the UNESCO whether by means of restoration or making them function within the surrounding architectural framework. The preservation of architectural heritage entails the preservation of the components of Islamic cities within the framework of the development of civilisation. This process of preservation leads to the survival of Islamic heritage and emanates from the revival of the components of the Islamic civilisation in the economic, social and civil domains.

The means of preserving the Islamic heritage can be classified as follows:

### **A- Rehabilitation:**

The rehabilitation of an ancient building is considered one of the most extreme operations available for the preservation of such buildings. It represents the only available means of restoration in the event of the collapse of parts of a building which allows for no other option.

### **B- Restoration:**

Restoration is resorted to in historic areas to maintain and restore buildings, public amenities, roads and services upon which the renovation process depends. This restoration process can give an impression contrary to the nature of the ancient building, which leads to the loss of its ancient meaning. Therefore, this process should be conducted with great care and attention, otherwise it may well lead to the disfigurement of the ancient building rather than restoring it along with its historic value.

### **C- Preservation:**

The preservation process is characterised as a revival policy which aims at preserving the architectural en masse. However, it is superior to the restoration process in that it pays



attention to the development of the social and economic aspects of the population in order to make the architectural process a success. Therefore, it is considered a policy of comprehensive social, economic, and architectural development.

The methods of preserving buildings and historic areas range from the prohibition of any changes upon the fabric to a comprehensive renovation and modernisation. The choice of the appropriate methods depends on the following factors:

- the historic and artistic value.
- the importance of the ancient building and the elements which make it ancient.
- the status of the building and the extent of the destruction.

#### **D- Re-adaptation:**

The objective behind the policy of re-using a historic building is to preserve it and guarantee its maintenance as well as improving the surrounding architectural environment. This policy is one of the most appropriate economic methods since it also avoids the economic, cultural and material expense of constructing new buildings. The re-use of a building should achieve the following:

- visual harmony
- functional harmony
- spatial harmony
- structural harmony.

#### **E- Reconstruction:**

Reconstruction is a process of formation and replacement which underlines the total or partial form of the historic building. It is considered one of the means of renovating the historic landmarks where the missing parts are restored. The replacement process is either total or partial and is divided into:

- 1- accurate or pinpoint restoration
- 2- restoration by means of similarity
- 3- restoration by means of presumption

**F- Conservation:**

Conservation is a process which limits the damage to a building or avoids that damage. It requires regular maintenance and pays attention to maintaining the interior of the monument. This process is considered the basic factor which gives a new lease of life to a building.

The architectural and design heritage in the Islamic cities should be considered as an inseparable part of human civilisation. On this basis, countries of the Muslim world should co-operate with the international organisations and agencies in the preservation and revival of the Islamic monuments in their possession, each country becoming responsible for the implementation of a global agenda to conserve, but within the framework of its culture and traditions.

**Concluding Remarks**

No city has ever gained the historical or religious significance as that of Al-Madinah. Therefore, it is a must to define its urban and architectural virtues that reflect the historical and spiritual dimensions which have evolved since the Prophet immigrated and built his mosque at this sacred spot, 1420 years ago.

The responses of the respondents varied according to the type of the places or features inquired about. Those that were recently tiered down stimulated and reflected the bitter and pity feelings in the respondents' answers. While, the neutral responses were given to the places that had already been lost long time ago. This may reflect the link between the respondents (Al-Madinah's citizens) and the major features recently demolished, which confirm the spiritual dimension of these places.

# PART THREE

RESEARCH FINDINGS

AND CONCLUSION



*Al-Madinah Al-Munawarah*

### Introduction

Despite having a lot of literature about Al-Madinah's historical events and the beginning of Islam, few were written about its urban and architectural evolution and transformations. Moreover, there is no detailed and integrated study about Al-Madinah that trace its evolution and transformation from the pre-Islamic period and up to the present time. The main aim of the present chapter, thus, is to explore the people's interaction with Al-Madinah's built and natural environment and their associated spiritual connotations and meanings.

The city image is based on two elements, i.e., the built environment and the natural environment. The latter includes the natural geographical landmarks of the city, such as mountains, valleys, wells and springs, al-Ĥarāt (low hilly area), cultivated and reclaimable lands. The images of these landmarks are correlated as natural elements. However they might be perceived in different ways, according to the various events or activities (experiences) associated with them. This gives another dimension to the place or landmark, whose image, consequently, becomes more integrated mentally with its perceiver. This gives richness to the place's images, distinguishing it from an absolute, prototypic natural environment image.

The image of the built environment, on the other hand, is driven from one's perception of how one's experience of it is linked with, affected by and integrated with the built environment, which draw out the main characteristics of this image. One's image about the built environment is always renewable, embodying one's ongoing experience and admitting modifications and additions that have occurred within the built environment and that change one's original image about it. However this image-evolution process can probably be damaged if dramatic changes occurs, such as great fires, earthquakes or human destruction of much of the built environment, happen. It is only then when we see a double image that reflects an ambiguous picture of the severely altered environment especially if it occurs in a short time. Therefore one's image is confronted by conflicts of the impacts and the influences of what the individual has experienced in the recently lost environment and what is actually substituting it and its ruins. Consequently, the gap between one's original cognitive image and the current image is widened, generating an antagonising emotional and

cognitive conflict.

## 8.1 The Natural Environment

To be able to dwell between heaven and earth, man has to "understand" these two elements, as well as their interaction. The word "understand" here denotes the experience of *meanings*. When the environment is meaningful man feels "at home" (Norberg-Schulz, 1984). The places where we have grown up are such "homes"; we know exactly how it feels to walk on that particular ground, to be under that particular sky, or between those particular trees; we know the warm, all-embracing sunshine of the winter or the mysterious nights of the summer. In general we know "realities" which carry our existence. But "understanding" goes beyond such immediate sensations. From the beginning of time man has recognised that nature consists of interrelated elements which express fundamental aspects of being. The environment where he lives is not a mere flux of phenomena, it has structure and embodies meanings.

In general, any understanding of the natural environment grows out of a primeval experience of nature as a multitude of living "forces". The world is experienced as a "Thou" rather than an "it" (Norberg-Schulz, 1975, p. 428; and Frankfort et al., 1949, p.12). Man was thus imbedded in nature and dependent upon the natural forces. The growth of man's mental faculties proceeds from the grasping of such diffuse qualities and into more articulate experiences where the parts and the interrelationships within the totality are understood. This process may happen in different ways according to the local environment, and it does not mean that the world loses its concrete, live character. Such a loss implies pure quantification, and is thus linked with the modern scientific attitude (Norberg-Schulz, 1984). Norberg-Schulz, in the same source, has distinguished between five basic modes of mythical understanding, which have different weight in different cultures:

1. "The first mode of natural understanding takes the forces as its point of departure and relates them to concrete natural elements or 'things'". Such forces could be psychological and creative give dimensions and rich meanings to the environment physical entities, e.g., as Ūhud mountain was described by the Prophet (pbuh) as a



mountain that loves us and we love it. Most ancient cosmogonies concentrate on this aspect and explain how 'everything' has come into being. Usually, creation is understood as a 'marriage' of *heaven* and earth. This forms the point of departure for the further differentiation of 'things'. The *mountain*, thus, belongs to the earth, but it rises towards the sky. It is 'high', it is close to heaven, it is a meeting place where the two basic elements come together. This might help us to understand the idea of the 'sacred network' as introduced in the following chapter. Mountains were therefore considered 'centres'. In other words, mountains are *places* within the comprehensive landscape, places which make the structure of Being manifest. As such they 'gather' various properties. To the general properties already mentioned, we must add the hardness and permanence of *stone* as a material. In general, however, mountains remain 'distant' and somewhat frightening, and do not constitute 'insides' where man can dwell.

But there are other kinds of natural 'things' which reveal meanings. In the tree heaven and earth are also united, not only in a spatial sense because the tree rises up from the ground, but because it grows and is 'alive'. In general *vegetation* is the manifestation of living reality. But, vegetation has also forms which are less friendly or even frightening. The *forest*, thus, is primarily a 'wilderness' full of strange and menacing forces. Only when the wood is of limited extension and becomes a *grove*, does it remain intelligible and positively meaningful. Paradise has in fact been imagined as a delimited or enclosed grove or garden.

In the images of Paradise we encounter another basic element of ancient cosmogonies: *water*. The very particular nature of water has always been recognised. The presence of water gives identity to the land, and the legend of the Deluge presents the 'loss of place' as a great flood. Although it is the opposite of place, water belongs intimately to living reality. As a fertilizer it even became a symbol of life, and in the images of Paradise four rivers flow from a spring in the very centre.

As water gives the place its character (Genius Loci) we can claim that in Al-Madinah wells and springs have been always the water presence needed for the strength of the city character and image.

Being the primary natural 'things', rocks, vegetation and water make a place meaningful or 'sacred', to use the term of Eliade (1963). He points out that "such places are never chosen by man, they are merely discovered by him; in other words the sacred place in some way or another reveals itself to him" (ibid., p. 369). In the environment the sacred places function as 'centres'; they serve as objects of man's orientation and identification, and institute a spatial structure as the Prophet's Mosque and Tomb. In man's understanding of nature we thus recognise the origin of the concept of space as a system of places or even a system of forces, which is the sacred network (each place is emphasizing its element).

2. The second mode of natural understanding consists in abstracting a systematic *cosmic order* from the flux of occurrences. Such an order is usually based on the course of the sun, as the most invariant and grandiose natural phenomenon, and the central points. In some places, it may also be related to the local geographical structure (Frankfort, 1945). For example, the clearly defined boundaries of Al-Madinah marked by al-Ĥaratyin and two mountains of Thawr and 'Air cumulated the parameter within which the sacred city of Al-Madinah can be defined. An order of this kind implies that the world is understood as a structured 'space', where the main directions represent different 'qualities' or meanings.
3. The third mode of natural understanding consists in the definition of the *character of natural places*, relating them to basic human traits. Each landscape is a clearly delimited, easily imageable 'personality'. Intense sunlight and clear air give the forms an unusual presence. In some places the surroundings appear to offer protection, in others they menace, and in others again we feel at the centre of a well-defined *cosmos*. In some places there are natural elements of a very particular shape or function, such as horned rocks, caves or wells. There are places where the environment is experienced as an ordered whole, such as mountains with an all-round view and groves close to water or swampy land.
4. Nature also comprises a fourth category of phenomena which are less palpable. *Light* has of course always been experienced as a basic part of reality although, as Norberg-Schulz (1984) says, ancient man concentrated his attention on the sun as a 'thing',

rather than the more general concept of 'light'. In Greek civilisation, however, light was understood as a symbol of knowledge, artistic as well as intellectual, and was connected with Apollo, who absorbed the old sun-god Helios. In Christianity light became an 'element' of prime importance, a symbol of conjunction and unity which was connected with the concept of love. God was considered *pater luminis*, and 'Divine Light' a manifestation of the spirit. In Byzantine painting Divine Light was concretised as a golden ground which "surrounds the main figures as with a halo of sanctity" (Demus, 1948, p.35), stressing the iconographic foci. A sacred place, thus, was distinguished by the presence of light and accordingly Dante wrote: "The Divine Light, penetrates the universe according to its dignity".

5. The phenomena which distinguish a natural place cannot be separated from these rhythms [the interactions among the elements of these natural phenomena] (Hellpach, 1911). The seasons, thus, change the appearance of places; more in some regions, in others less. In the northern countries green summers and white winters alternate, and both seasons are characterised by very different conditions of light. The temporal rhythms obviously do not change the basic elements which constitute a natural place, but in many cases they contribute decisively to its character and are therefore often reflected in local myths and folklore. Man's participation in the natural totality is concretised in rituals, in which 'cosmic events', such as creation, death and resurrection are re-enacted. As such, rituals do not however belong to the natural environment.

**Thing, order, character, light and time** are the basic categories of concrete natural understanding. These categories have been propounded to answer the questions, "What", "Where", "How", and "When". Whereas thing and order, are spatial (in a concrete qualitative sense), character and light refer to the general atmosphere of a place. The author also would like to point out that 'thing' and 'character', in the sense that Norberg-Schulz (1984) employed, are dimensions of the earth, whereas 'order' and 'light' are determined by the sky. Time, finally, is the dimension of constancy and change, and makes space and character parts of a living reality which, at any moment, is given as a particular place, as a *genius loci*. In general the categories designate the *meanings* man has abstracted from the flux of phenomena ('forces'), and are entirely applicable in the case study i.e. the holy and sacred

City of Al-Madinah. In his classical work on the relationship between nature and the 'human soul', the same source quotes from Hellpach (1965, p. 192) who calls such meanings 'existential contents'.

### 8.1.1 The Structure of Natural Environment

The term 'natural place' denotes a series of environmental levels, from continents and countries down to the shaded area under an individual tree. All these 'places' are determined by the concrete properties of earth and sky. The ground is obviously the most stable element, although some of its properties change with the seasons, but the more variable and less concrete sky also plays a 'characterizing' role of decisive importance.

It is important to distinguish between the structure and the scale of the relief. The structure may be described in terms of nodes; paths and domains, that is, elements which 'centralise' space such as isolated hills and mountains or circumscribed basins, elements which direct space such as valleys (*wadis*) and rivers, and elements which define an extended spatial pattern, such as a relatively uniform cluster of fields or hills. Evidently, the effect of such elements is very different according to their dimensions. It is practical to address Norberg-Schulz's (1984) suggestion which distinguishes between three levels: micro, medium and macro. The micro elements define spaces which are too small to serve human purposes, while the macro elements are analogously too large. Spaces which are directly suited for or dimensionally related to human dwelling have a medium or 'human' scale.

### 8.1.2 The Spirit of Natural Environment

The discussion about the phenomena of natural place has uncovered several basic types of natural factors which in general are related to the earth or the sky, or express an interaction of the two basic 'elements'. Although some kind of interaction between the two elements exists everywhere, there are places where sky and earth seem to have realized a particularly happy 'marriage'. In these places the environment becomes manifest as a harmonious whole of medium scale which allows for relatively easy and complete identification (Norberg-Schulz, 1984). The same source indicates that among the landscapes where the sky dominates we may distinguish between those where the 'cosmic order' is of primary importance and



those where the changing atmospheric conditions contribute decisively to the environmental character. Where the earth is dominant, a classification must be based on the presence of archetypal 'things' as well as variations in scale ( micro to macro).

### 8.1.2.1 Cosmic Landscape

In the desert the complexities of our concrete life-world are reduced to a few, simple phenomena: the infinite extension of the barren ground; the immense, embracing vault of the cloudless sky (which is rarely experienced as a sector between rocks and trees); the burning sun which gives an almost shadowless light; and the dry, warm air, which tells us how important breathing is for the experience of place (Norberg-Schulz, 1984).

As a whole, the environment seems to make an absolute and eternal order manifest, a world which is distinguished by permanence and structure.

In Islam, however, the desert has found its supreme expression. For the Muslim the conception of the One God is the only dogma, and five times a day he turns towards Mecca to say: "*la ilaha ill allah*", "there is no God but Allah" (Nasr, 1972, p. 51). By this proclaiming the unity of God, the Muslim confirms the unity of his world, a world which has the *genius loci* of the desert as its natural model (Norberg-Schulz, 1984). For the desert-dweller the *genius loci* is a manifestation of the Absolute (Nasr, 1972, p. 88.). Islam therefore confirms that the Arab has become a friend of the desert. It is understood as a basis for life (Norberg-Schulz, 1984).

### 8.1.3 The Quality of the Natural Environment

Many of the natural features became salient landmarks. Both the Prophet and the inhabitants have attached symbolic significance and social and ethical meaning to these elements. This would remind Muslims of the Islamic concepts and social teachings.

#### 8.1.3.1 al-Ĥarāt (the Protected Zone of Al-Madinah)

Many studies have tackled the issue of the relationship between man and land in the



eighteenth and nineteenth centuries. The call for protected areas was renewed at the beginning of the twentieth century with the advent of the Conservation Movement.

The potentially disastrous impact man is having on nature has become widely accepted; and the negative effects of his actions have made it necessary to take certain measures in this respect.<sup>1</sup> The first national protectorate of a natural landscape to be established was Yellowstone in 1872. It represented a great step towards the development of the concept of National Parks in the world. Prior to that, the Washington state government declared the Yosemite Valley as a state protectorate in 1864 (Mackinnon and Child, 1986, p. 3). Since that time, the majority of governments in both the old and modern worlds have started to appreciate the value of protecting part of their wilderness territory for the sake of their nations. At present, the number of the national protectorates in the world has reached over 2600 which lie in more than 24 countries and cover an area of 4 million square kilometres.

The 1970s witnessed a great increase with regard to environmental awareness. As a result, the number of protectorates increased by about 46% and the area they covered by about 80%. Among the most ancient protected areas *ḥimā*<sup>2</sup> are the two Holy Places of Makkah and Al-Madinah. Prophet Ibrahim (Abraham) (peace be on him) protected the Holy Place of Makkah as Prophet Muhammad (peace be on him) has revealed. As for the Holy Place of Al-Madinah, Prophet Muhammad declared both the Holy places of Makkah and Al-Madinah as protected areas in which any aggression against living things is prohibited except by those who are exempted. This is made clear in some Prophetic *ahādiths*.

Thus the areas of the two holy cities of Makkah and Al-Madinah were two protectorates which preceded the International System of Protected Areas which started with the first national protectorate of which started with the first national protectorate of Yellowstone in 1872 as we previously mentioned.

The Prophet said, "The Prophet Abraham made Mecca a sanctuary, and asked for Allah's blessing in it. I made Medina a sanctuary as Abraham made Mecca a sanctuary and I asked

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<sup>1</sup> See William L. Thomas jr. (ed. 1956), Nash, Roderick (ed. 1976), Goudie, Andrew (1981) and James. Preston and Martin, Geoffrey (1981).

<sup>2</sup> *ḥimā* means a area or a piece of land which is protected against pasture and logging.

for Allah's Blessing in its measures the Mudd and the Sa as Abraham did for Mecca (Khan, 1986, Vol.3, hadith no.339).

I said to Anas, "Did Allah's Apostle make Medina a sanctuary?" He replied, "Yes, (Medina is a sanctuary from such-and-such place to such-and-such place. It is forbidden to cut its trees, and whoever innovates an heresy in it or commits a sin therein, will incur the curse of Allah, the angels, and all the people." Then Musa bin Anas told me that Anas added, "..... or gives refuge to such an heretic or a sinner..." (Khan, 1986, Vol.9, hadith no.409)

### 8.1.3.2 The Mountains

Al-Madinah has a distinct geographical location in addition to the fertility of its land and abundance of its water. It is surrounded by a chain of mountains, plâteaus and valleys that gave it a secure position. The viewer of its location from the air finds that it is in fact surrounded by hundreds of mountains ending at the Western Shield. Most of these mountains are formed of hard, solid rock.

The Prophet said, "I have made Medina a sanctuary between its two (Harrat) mountains." The Prophet went to the tribe of Bani Haritha and said (to them), "I see that you have gone out of the sanctuary," but looking around, he added, "No, you are inside the sanctuary" (Khan, 1986, Vol.3, hadith no.93).

We have nothing except the Book of Allah and this written paper from the Prophet (where-in is written:) Medina is a sanctuary from the 'Air Mountain to such and such a place, and whoever innovates in it an heresy or commits a sin, or gives shelter to such an innovator in it will incur the curse of Allah, the angels, and all the people, none of his compulsory or optional good deeds of worship will be accepted. And the asylum (of protection) granted by any Muslim is to be secured (respected) by all the other Muslims; and whoever betrays a Muslim in this respect incurs the curse of Allah, the angels, and all the people, and none of his compulsory or optional good deeds of worship will be accepted, and whoever (freed slave) befriends (take as masters) other than his manumitters without their permission incurs the curse of Allah, the angels, and all the people, and none of his compulsory or optional good deeds of worship will be accepted (Khan, 1986, Vol.3, hadith no.94).

## **Ūhud Mountain**

Ūhud is a luminous mountain that Allah has chosen as a mountain from Paradise. That is why the Prophet (pbuh) loved it and was pleased when he visited or looked at it. The Prophet said in the Hadith "Ūhud is the mountain that loves us and is loved by us". Ūhud is the mountain at which one of his greatest battles took place, the Ūhud battle.

I went along with the Prophet to Khaibar so as to serve him. (Later on) when the Prophet returned he, on seeing the Uhud mountain, said, "This is a mountain that loves us and is loved by us." Then he pointed to Medina with his hand saying, "O Allah! I make the area which is in between Medina's two mountains a sanctuary, as Abraham made Mecca a sanctuary. O Allah! Bless us in our Sa and Mudd (i.e. units of measuring)" (Khan, 1986, Vol.4, hadith no.139).

The Prophet once climbed the mountain of Uhud with Abu Bakr, 'Umar and 'Uthman. The mountain shook with them. The Prophet said (to the mountain), "Be firm, O Uhud! For on you there are no more than a Prophet, a Siddiq and two martyrs (Khan, 1986, Vol.5, hadith no.24)

## **The Archers' Mountain ('Aynayn Mountain)**

The Archers' mountain is located in the North of Al-Madinah, South of the mountain of Ūhud. It is the small mountain a round which the battle of Ūhud took place in the third year of Hidjrah. The Prophet (pbuh) put 50 archers on that mount to protect the back of the Muslim fighters, according to his military plan.

## **The Mountain of Thawr**

The Mountain of Thawr is one of the important features near Al-Madinah. It is about 8 km away to the North from the Prophet's Holy Mosque. It is considered to be the secret northern border of Al-Madinah a referred to in the Prophet's Hadith "Al-Madinah is Ĥarām [forbidden] from 'Aīr to Thawr".

### **Al-Rāyah Mountain (Mount Dhubāb)**

Al-Rāyah Mountain is a hill that is located about one and a half km to the North of the Prophet's Holy Mosque. According to the Prophet's Hadith the Prophet (pbuh) prayed and camped on that Mountain at the time of the invasion of al-Khandaḳ (the ditch).

### **Thaniyat al-Wadā' Mountain**

This is a small hill located inside the inhabited area. It over looks the area and al-Manākhah market from the southern side. This mountain is in the north of Al-Madinah, about 1100 metres away from the Prophet's Holy Mosque. Al-Bukhārī narrated that al-Sā`b bin Yazīd had gone there with other youngsters to meet The Prophet (pbuh) at his return from Tabūk.

#### **8.1.3.3 The Valleys and Springs**

Valleys and torrents drains are considered to be important features of Al-Madinah. These valleys and the mountains surrounding them formed prevailing quality of the natural formation of the site of Al-Madinah which has a number of valleys inside and outside it. Those valleys made the land better and provided rich soil and irrigation water. So, farms and orchards spread so that Al-Madinah became one of the most famous agricultural cities so far.

Those valleys attracted many immigrant tribes to settle in them and benefit from their resources for their farms and orchards for which water comes down from mountain gaps. Most of the valleys of Al-Madinah are blessed ones such as Alaqeeq valley where the Prophet (pbuh) urged Muslims to pray. Other valleys are Arananaa, Muhthour, Batehan and Muthouneb.

### **al-'Aḳīḳ Valley (the Blessed Valley)**

It is one of the greatest and most important valleys of Medinah. it is the most beautiful and Allah blessed it and ordered his Prophet (pbuh) to pray in it. That valley was mentioned in several texts in the Prophet's Hadith. Prophet Muhammad (pbuh) liked to pray in that valley and to go out there to enjoy its fresh air. He also said that he was ordered to say, Omrah in



Hajjah when he prayed there.

In the valley of Al-'Aqiq I heard Allah's Apostle saying, "Tonight a messenger came to me from my Lord and asked me to pray in this blessed valley and to assume Ihram for Hajj and 'Umra together" (Khan, 1986, Vol.2,ĥadith no.609).

Salim bin 'Abdullah's father said, "The Prophet said that while resting in the bottom of the valley at Mu'arras in Dhul-Hulaifa, he had been addressed in a dream: 'You are verily in a blessed valley.' " Salim made us to dismount from our camels at the place where 'Abdullah used to dismount, aiming at the place where Allah's Apostle had rested and it was below the Mosque situated in the middle of the valley in between them (the residence) and the road (Khan, 1986, Vol.2,ĥadith no.610).

### **Baĥĥān Valley (abu Djīdah Torrent)**

Baĥĥān Valley, known as Abu Djīdah Torrent is one of Al-Madinah's popular valley's The inhabitants of Al-Madinah are so happy when that valley is flooded with water that runs with good and welfare to them. It runs through the southern suburb of Al-Madinah and slopes to the middle until it reaches al-'Aĥĥīĥ Valley in the north where they gather in one stream that ends at the forest. It was called (A Canal from the Paradise in the Prophet hadith).

### **Muthaynib Valley**

One of Almadina's valleys known to be a branch of Bethan Valley for they get their water from the same sources. They meet al-'Aĥĥīĥ Valley in the north west at the area of Zeghabah from which the forest and the torrents gather and meet. Muthaynib is one of the blessed valleys for it runs through Harat Shuran.. The Prophet (pbuh) prayed for this valley and Harra to be blessed. Many old tribes settled there to benefit from its farms and orchards.

### **Mahזור Valley**

Mahזור is one of the valleys southern Harrah. It has many other names. tribes settled in it and led a civilized life which was part of Yathreb's civilization before Islam. History books



mentioned many stories about the food of this valley. One of these stories says that water flooded Al-Madinah so that it was about to go through the Holy Prophet's Room but Allah kept it safe. This valley runs through the blessed Shuran Harrat and its water was distributed to the farms due to the Holy Hadith.

### **al-Ranonaa Valley**

it is one of the famous valleys in Al-Madinah, where Arabian tribes settled to found a developing civilization. Tribes' houses and farms had increased in this valley up to the time of the holy Prophet (pbuh). al-Djum'ah Mosque where the first Friday prayer was performed and led by the Prophet (pbuh) had been built in that valley. That is why it was known as the mosque of the Valley. A dam known as sayedna Omar Dam was built across the valley which gets its water from the mountains near and around it.

### **Ḳanāh Valley (The Torrent of Sayedna Hamzah)**

This valley is one of the most important but the most dangerous because of its several water sources. Alamaliq (the Giants) settled in it long time ago, planted palm trees and built castles and forts. when the Holy Prophet (pbuh) prayed seeking rain, that valley was flooded with rain water. The martyrs of Ūhud stood by that mountain. Ūhud battle was near it. Now it has got so much care from the Saudi government that built dams and fixed its streams.

#### **8.1.3.4 Cultivated Land (Palm Trees) and Wells**

Agriculture is one of the most important material occupations which characterised Al-Madinah (Yathrib) (on account of its oasis) which is closely linked to the social, cultural and commercial life of its inhabitants. Different tribes settled (since the ancient time) close to the fertile areas, springs and streams in the form of separate residential groups that were governed by different social and cultural traditions as well as common interests.

Since Al-Madinah was an agricultural land, this made it the more productive and thus taking the lead in this aspect. For instance a great range of agricultural products such as wheat, barley, grapes and vegetables were grown there. However, the inhabitants of Al-Madinah

mainly concentrated on the cultivation of palm trees. Therefore, Al-Madinah used to be described as the land of palm trees. The palm tree is also described in one of Prophet's Ḥadith as a believer. The Prophet said, "I saw in a dream that I was migrating from Mecca to a land where there were date palm trees. I thought that it might be the land of Al-Yamama or Hajar, but behold, it turned out to be Yathrib (i.e. Medina). And I saw cows (being slaughtered) there, but the reward given by Allah is better (than worldly benefits). Behold, those cows proved to symbolize the believers (who were killed) on the Day (of the battle) of Uhud, and the good (which I saw in the dream) was the good and the reward and the truth which Allah bestowed upon us after the Badr battle. (or the Battle of Uhud) and that was the victory bestowed by Allah in the Battle of Khaibar and the conquest of Mecca) (Khan, 1986, Vol.9, ḥadith no.159).

The Prophet said, "Medina is a sanctuary from that place to that. Its trees should not be cut and no heresy should be innovated nor any sin should be committed in it, and whoever innovates in it an heresy or commits sins (bad deeds), then he will incur the curse of Allah, the angels, and all the people" (Khan, 1986, Vol.3, ḥadith no.91).

The Prophet also supplicated for the fruits of Al-Madinah to be blessed and in particularly for its dates to be a cure against poison and magic spells. This added another dimension to Al-Madinah's natural environment, which is the spiritual dimension.

Allah's Apostle said, "He who eats seven 'Ajwa dates every morning, will not be affected by poison or magic on the day he eats them" (Khan, 1986, Vol.7, ḥadith no.356).

The Prophet said, "There is a tree among the trees which is similar to a Muslim (in goodness), and that is the date palm tree" (Khan, 1986, Vol.7, ḥadith no.359).

Allah's Apostle used to read in his Ruqya, "In the Name of Allah" The earth of our land and the saliva of some of us cure our patient with the permission of our Lord." with a slight shower of saliva) while treating with a Ruqya (Khan, 1986, Vol.7, ḥadith no.642).

Since the Amelek were the first to cultivate palm trees in Yathrib, this gave it its ancient historic dimension. The process of maintaining the agricultural area and preserving the palm

trees orchards in particular was an urgent and important demand by the inhabitants. this is particularly the case after building projects devoured much of the agricultural land that was full of palm trees and instead those lands were replaced by buildings and the highways that one congested by motor vehicles (figure 8.1).

### **al-Khatam well**

Allah's Apostle had a silver ring made for himself and it was worn by him on his hand. Afterwards it was worn by Abu Bakr, and then by 'Umar, and then by 'Uthman till it fell in the Aris well. (On that ring) was engraved: 'Muhammad, the Apostle of Allah" (Khan, 1986, Vol.7,ḥadith no.762).

that when Abu Bakr became the Caliph, he wrote a letter to him (and stamped it with the Prophet's ring) and the engraving of the ring was in three lines: Muhammad in one line, 'Apostle' in another line, and 'Allah' in a third line. Anas added: 'the ring of the Prophet was in his hand, and after him, in Abu Bakr's hand, and then in 'Umar's hand after Abu Bakr. When Uthman was the Caliph, once he was sitting at the well of Aris. He removed the ring from his hand and while he was trifling with it, dropped into the well. We kept on going to the well with Uthman for three days looking for the ring, and finally the well was drained, but the ring was not found (Khan, 1986, Vol.7,ḥadith no.767) (figures 8.2-8.4).

### **Ĥā~ well**

Abu Talha had the greatest wealth of date-palms amongst the Ansar in Medina, and he prized above all his wealth (his garden) Bairuha', which was situated opposite the Mosque (of the Prophet ). The Prophet used to enter It and drink from its fresh water. When the following Divine Verse came: "By no means shall you attain piety until you spend of what you love," (surah, 3.92). Abu Talha got up saying. "O Allah's Apostle! Allah says, 'You will not attain piety until you spend of what you love,' and I prize above al I my wealth, Bairuha' which I want to give in charity for Allah's Sake, hoping for its reward from Allah. So you can use it as Allah directs you." On that the Prophet said, "Bravo! It is a profitable (or perishable) property. (Ibn Maslama is not sure as to which word is right, i.e. profitable or perishable.) I have heard what you have said, and I recommend that you distribute this amongst your



Figure 8.1: Al-Madinah's the land of palm trees<sup>1</sup>



Figure 8.2: Ghurs well

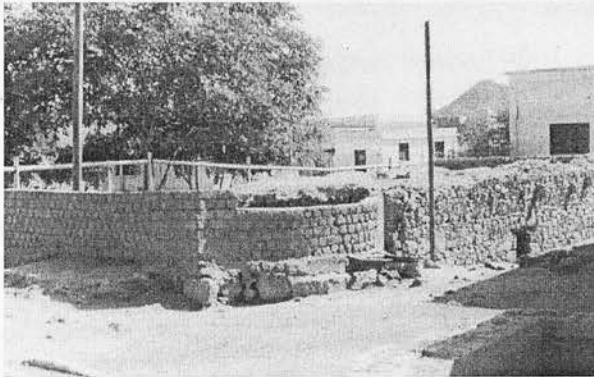


Figure 8.3: 'Uthmān well



Figure 8.4: al-Buṣah well

<sup>1</sup> Photographs: Nomachi, Ali K., op. cit., p.74.



relatives." On that Abu Talha said, "O Allah's Apostle! I will do (as you have suggested)." So, Abu Talha distributed that garden amongst his relatives and cousins (Khan, 1986, Vol.4, hadith no.30) (figures 8.2-8.4).

## 8.2 Built (Man-made) Environment

The term 'Built Environment' denotes a series of environmental levels, from villages and towns down to houses and their interiors. Norberg-Schulz (1984) suggests that all these 'places' begin their 'presenting' (being) from the boundaries. The 'presenting' in principle implies particular relationships to the ground and to the sky.

### 8.2.1 The Structure of Built Environment

A general introduction to the structure of Built Environments has to investigate the relationships with regard to the different environmental levels. *How* does a building stand and rise? *How* is a settlement related to its environment, and *how* is its silhouette? Questions of this kind put the matter of structure in concrete terms, and give the phenomenology of architecture a real basis.

The main urban elements are centres and paths. A square obviously functions as a centre and a street as a path. As such they depend on enclosures; their spatial identity in fact depends upon the presence of relatively continuous lateral boundaries. In addition to centre and path, the word *domain* has been discussed in the previous sections to denote a basic type of enclosure. An urban district is such a domain, and again we find that the presence of a boundary is of decisive importance. A district, thus, is either defined by conspicuous edges of some kind, or at least by a change in urban texture which implies a boundary. In combination, centres, paths and domains may form complex totalities which serve man's need for orientation. Of particular interest are the cases when a centre generates a domain, or 'field'. The properties of a 'field' are hence determined by the centre, or by a regular repetition of structural properties. When several fields interact, a complex spatial structure results, of varying density, tension and dynamism (Norberg-Schulz, 1984).



Centre, path and domain are general and abstracts concepts, which translate the Gestalt principles into architectural terms. The basic longitudinal forms stem from an organization of space around a curved or straight line, and are equally important in buildings and towns. We may, finally, consider all kinds of clusters and groups of spaces or buildings as built domains whereas the cluster is based on simple proximity of the elements, and shows relatively indeterminate spatial relationships, the word 'group' is mostly used to denote a regular, possibly geometrical, two- or three-dimensional spatial organization. The importance of the archetypal configurations is confirmed by the fact that towns and villages in any part of the world either belong to the centralised, the longitudinal or the clustered type. Two spatial patterns of particular interest are the *grid* and the *labyrinth*. The grid is an 'open', orthogonal infrastructure of paths, which may be filled in with buildings in different ways. The labyrinth instead, is characterised by a lack of straight and continuous paths, and a high density. It is the traditional Arabic settlement pattern (see Bianca, 1975).

### 8.2.2 The Spirit of Built Environment

Our discussion of the phenomena of Built Environment uncovers basic types of man-made factors which help our understanding of the structure of Built Environment, as well as its relationship to natural place. Any concrete situation is distinguished by a particular combination of these factors which constitute the *genius loci* as an integrated totality. There are man-made places where the variety and mystery of the natural forces are strongly felt, there are places where the manifestation of an abstract general order has been the main intention, and there are places where force and order have found a comprehensible equilibrium. It seems that the last category is quite suitable to explain the case study of this thesis, i.e. the city of Al-Madinah. Thus for better understanding, the author would like to refer to Norberg-Schulz's (1984) categories of 'romantic', 'cosmic' and 'classical'. Although these categories are abstractions which are hardly concretised in 'pure' form, they express concrete tendencies, and therefore serve a general understanding of the spirit of place. Any concrete situation may in fact be understood as a synthesis of these basic categories. Using the word 'architecture' to denote the concretisation of man-made places in general, we may hence talk briefly about 'romantic architecture', 'cosmic architecture', and 'classical architecture'.

### 8.2.2.1 Romantic Architecture

Romantic cannot easily be understood in logical terms, it is, by definition, irrational and 'subjective'. Romantic architecture is characterised by a strong 'atmosphere', and may appear 'phantasmic' and 'mysterious', but also 'intimate' and 'idyllic' (Norberg-Schulz, 1984). In general, it is distinguished by a live and dynamic character, and aims at 'expression'. Its forms seem to be a result of 'growth' rather than organisation, and resemble the forms of living nature. Romantic space is topological rather than geometrical. On the urban level this means that the basic configurations are the dense and indeterminate cluster; and the 'free' and varied row. The urban spaces are distinguished by irregular enclosure, and contain functions in a general way, without aiming at regular, defined distribution. 'Strong' romantic spaces and configurations demand a continuous but geometrically indeterminate boundary. In relation to the surroundings, the romantic settlement is identified by the proximity of its elements, or by general enclosure (ibid.).

The 'atmosphere' and expressive character of romantic architecture is obtained by means of formal complexity and contradiction. Simple, intelligible volumes are avoided and transformed into transparent, skeletal structures, where the *line* becomes a symbol of force and dynamism. Although the construction as such may be logical, it usually appears irrational due to the multiplication of members, variation in detailing, and introduction of 'free' ornament. The outside-inside relationship is usually complex, and 'wild' silhouette. Light is used to emphasize variety and atmosphere rather than comprehensible elements. Usually, it has a strong local quality, which may be stressed through the application of particular colours or artifact (details), etc. (Norberg-Schulz, 1984).

### 8.2.2.2 Cosmic Architecture

'Cosmic' architecture is distinguished by uniformity and 'absolute' order. It can be understood as an integrated logical system, and seems rational and 'abstract', in the sense of transcending the individual concrete situation. Cosmic architecture is known by a certain lack of 'atmosphere', and by a very limited number of basic characters. Its forms are static rather than dynamic, and seems to be the revelation of a 'hidden' order, rather than the result of concrete composition. It aims at 'necessity' rather than expression (Norberg-Schulz, 1984).

Cosmic space is strictly geometrical and is usually concretised as a regular grid. It is uniform and isotropic, although its directions are qualitatively different. That is, the qualitative differences are not expressed as such, but are absorbed by the system. Cosmic space, however, also knows an 'inversion' which we may call 'labyrinthine space'. The labyrinth does not possess any defined or goal-oriented direction, it rests in itself without beginning and end (Romantic space, on the contrary, always leads somewhere). Therefore it is basically 'cosmic', although it seems to belong to another spatial family than the grid. 'Strong' cosmic spaces demand a clear visualization of the system. In relation to the surroundings it may remain 'open', as it does not take the local microstructure into consideration (Norberg-Schulz, 1984).

The character of cosmic architecture is also distinguished by 'abstraction'. Thus, it shuns sculptural presence, and tends to dematerialise volumes and surfaces by means of 'carpet-like' decoration (mosaic, glazed tiles etc.), or by the introduction of intricate geometrical webs. Horizontals and verticals do not represent active forces, but are put in a simple juxtaposition as manifestations of the general order.

In Islamic architecture the cosmic approach finds its major manifestation. The Islamic city, thus, consists of a combination of geometrical and labyrinthine space. Whereas, the main public buildings are based on an orthogonal grid (Mosque, madrasah, etc.), the residential quarters are labyrinthine, a fact which expresses the desert origin of Islamic culture as well as the social structure of the Arabic settlement, which, after all, are two aspects of the same totality. The 'abstract' presence of horizontals and verticals (the minaret), concretises the general order, and gives a first suggestion of the cosmic character. In interior space this character becomes the manifestation of an ideal world, a paradise of white, green, and blue, that is, the colours of pure light, vegetation and water, which represents the goal of man's desert voyage.

In modern times, the image of a cosmic order has degenerated into spatial systems which concretise political, social or economic structures. The grid-iron plans of American cities, for instance, do not express any cosmological concept, but make an 'open' world of opportunities manifest. This world is open horizontally as well as vertically. Whereas the community expands horizontally, the success of the individual is indicated by the height of person

building erected on the standard lot. Norberg-Schulz (1984) states that beside the 'freedom' possessed by the grid-iron, it hardly allows for the concretisation of a distinct *genius loci*. Spatial systems of the cosmic type therefore ought to form part of more complex totalities.

### 8.2.2.3 Classical Architecture

As 'classical' we designate an architecture distinguished by imageability and articulate order. Its organization can be understood in logical terms, whereas its 'substance' asks for empathy. It therefore appears 'objective', in the double sense of the word. Classical architecture is characterised by concrete presence, and each element has a distinct 'personality'. Its forms are neither static nor dynamic, but pregnant with 'organic life'. They seem the result of a conscious composition of individual elements, and give man simultaneously a sense of belonging and freedom (Norberg-Schulz, 1984).

Romantic, cosmic and classical architecture are archetypes of man-made place. As they are related to the basic categories of natural understanding, they help us to interpret the *genius loci* of any particular settlement. Being types, however, they seldom appear in their pure form, but participate in various kinds of syntheses.

### 8.2.3 The Quality of the Built Environment(the Traditional Urban Fabric)

Within the built environment, the various religious and historical events, development which set up the cultural tradition (life style, traditions and habits and human relations within the society) and identity of the city.

In the built up area, the issue of urbanisation and the city in general is one of the most significant issues in modern times. Rapid development has the action of decision makers such as the politicians, planners and others as well as changes in all the aspects of the social, economic, technological and political life have directly affected the values of Al-Madinah. There is no doubt that the industrial nations have taken the initiative in the field of the technological (material) development and thus they have founded their own distinct values and criteria in all aspects including architectural development. Thus they have produced architectural environments that are basically governed by the criteria that suit their



environment and essentially derive their roots from the material philosophy of these notions. There is also no doubt that some material innovation such as heating, and related areas such as natural ventilation in buildings, are important, as are basic services such as water, electricity in addition to the advantages brought by using modern building materials. However, these inventions have clearly affected urban culture. For instance, lifts have allowed cities to grow vertically while vehicles have encouraged horizontal growth. In order to benefit from the advantages of the modern development and reject its disadvantages, it is necessary to cast a look at our traditional environments and at the modern life, then come to accept the benefits from both models to suit modern life as well as benefiting future generations.

Muslim people all believe that Islam is a comprehensive way of life and that the Islamic Sharī'ah determines the broad lines of all the basic elements which safeguard the welfare and happiness of human beings. Furthermore, the Sharī'ah, in addition to regulating the relationship between the human being and his Creator, regulates the relations among the members of the Muslim community as well as the relations between this community and other communities in general (see Chapter 4).

The questions which are posed are: are there in the Islamic Sharī'ah, elements or principles that govern the urban fabric. Has the urban fabric been affected by these principles? Is it possible to benefit from these principles in modern planning whether at the level of the city or residential quarters or is it the case that the whole subject is not for discussion and that our cities need to follow the criteria set up by modern development in its planning, design and materialist philosophy, life style and technology?

In answer to these questions (see Chapter 5), we, in the first place, have to understand the objectives of the Islamic Sharī'ah. In general terms, these are to preserve religion, life, mind, posterity and property (the natural resources) of the society at all levels. It is reasonable to say that it is impossible to preserve a society without preserving the environment in which that society lives. Such a society lacks the physical resources which embodies its human dimension let alone the spiritual dimension. Thus there is no doubt that there are in the Islamic Sharī'ah, general principles which govern urban fabric and reflect upon it.



Here we briefly focus on the factors which influenced the development of the Islamic urban fabric. These factors that influenced the growing traditional urban fabric of Al-Madinah include: the Islamic Shari'ah Law, the climate, local building materials, the social, economic and political status as well as the prevailing or available technology (Muṣṭafā 1986).

### 8.2.3.1 The Islamic Shari'ah Law

The implementation of the Islamic Shari'ah Law is not just restricted to worship, it transcends this to cover the entire lives of Muslims, their personal and social relationships (see Chapter 4) as well as the architecture of their cities (see Chapter 5). The Islamic Shari'ah Law is directed towards asserting general principles which concern the society in addition to specific principles which are made incumbent or derived by Muslims and related to buildings in particular and the concept of urban in general.

The general principles include the attention paid to the family with regard to both the spiritual and physical aspects. The family is considered the basic unit in the formation of the Muslim society. Therefore, providing a private and secure residence for a family is one of the Muslim male's most important material tasks. The relationship outside marriage between the two sexes is prohibited by Islam except within very restricted domains dictated by necessity such as buying, selling, education etc. Therefore, the urban environment must respond to these basic requirements with emphasis on the privacy and sanctity of houses by using methods such as the reduction of outside openings, the use of oriels, restricting the heights of building to a certain limit to prevent one seeing into others from a high vantage point, the use of internal courtyards, etc. Furthermore, Islam also takes care of children who are considered the generations of the future by educating them, securing their needs and teaching them Islamic values. Thus the door will be wide open for the young people to strive and persevere in life and learn all sorts of arts. This has been reflected on the urban environment starting from building secure family accommodation as previously mentioned, allocating the places of worship and education as well as the other necessities of life that require buildings of various functions, in addition to the green public squares that connect such buildings and enrich the general urban environment.

General health and hygiene are required by the principles of cleanliness in Islam. The Muslim

performs ablution five times a day in order to perform prayer. He also performs the ritual bath at least once a week. He is commanded by Islam to regularly clean his bed as well as his residence. Furthermore, he is ordered to clean the street in front of his house or residential quarter and to remove all harmful objects from the streets he walks on. These duties have later developed to become the official duty or job of al-Muhtasib and originate from the Islamic principle of enjoining good and forbidding evil. The Muhtasib also undertakes the duty of supervising the market and the cleanliness of its foodstuffs as well as the general hygiene of people.

Allah created the earth with all its treasures and resources and made it subservient to mankind in order to benefit and enjoy themselves in this life and use such bounties as a means by which help them to worship their Creator. Islam confirms this fact when it urges people to work in all legal kinds of work and considers that as part of worshipping Allah. This can be carried out through the population of earth and work in fields such as agriculture, commerce, industry as well as various other activities. This aspect is reflected in the traditional environment which has become full of functional buildings which serve the purpose or the objective for which they were built whether these building are religious such as mosques or public buildings which are characterised by their elegance and simple style.

As Islam urges its followers to enjoy the good things in this life, at the same time it urges them to economise and to avoid being excessive and wasteful. This is clearly reflected in the traditional architectural framework along with the climatic factors which in turn reflected in the smallness of the piece of land allocated for each family, the closeness of houses and modest heights of buildings, the narrowness of alleys, shared courtyards and dead end streets which lead the inhabitants to their residences. The small size of these alleys and of other streets has provided shade and privacy for the people who walk on them as well as making it an easier task to maintain them. Thus, by nature, they provide daily meeting places for the inhabitants which, in turn, was reflected in the strong relationship which connects them in response to the status of neighbours in Islam which urged that their rights have to be preserved.

To these details one can add countless other features of the traditional architecture which led to the existence of a specific urban fabric. This concept is also reflected the built environment

and the use of natural resources.

### **8.2.3.2 Special Principles of Buildings and Urban systems**

On the basis of the general principles of Shari'ah, Muslims have deduced special guidelines which are directly reflected in their built-up architectural environment.

#### **Privacy in the Built up Environment**

Privacy is an instinctive human need which is part of the requirements for the security and comfort of the person and the family. In this connection we find that privacy was accounted for in the traditional architectural framework of Al-Madinah and all its applications were fully implemented. For instance, total privacy was available inside the house through an open space similar to the courtyard or garden which all the rooms overlook. This open space gives the family members a share of fresh air and sun light.

This open space in turn enables all the family members, men women and children, to enjoy total privacy without violating the privacy of their neighbours. This communal residence of all family members strengthens the ties among them and prevents the disintegration of the family hence preserves it for future generations.

It possible that each residence can have more than one courtyard or garden. For instance there may be an internal courtyard adjacent to the men's section, an internal courtyard adjacent to the women's section as well as a back garden for servants, laundry and cooking. This arrangement used to characterise the design of residences in Al-Madinah. In other words, the residences are inward-looking or introvert in their design. The front of the residence which overlooks the street is covered by elegant wooden oriels which provide privacy for the members of the household and prevent outsiders from looking in. They also provide natural ventilation as well as reducing the scorching heat of the sun. There are many magnificent examples of such residences which combine privacy, natural ventilation, health as well as marvellous design.

All the attention of the designer or architect is focused on the courtyards, open spaces and

internal gardens. Planting trees was essential in the gardens, internal courtyards and behind gates which in turn provide shade, enjoyment and elegance for the residences and reflect on the external shape of streets, lanes and the surrounding public squares. Furthermore, preserving privacy and climatic factors have contributed to the closeness of buildings to one another which achieved the continuity of the traditional urban fabric or architectural framework which characterised the general image of Al-Madinah.

### **The City's Open Spaces**

The external open spaces in the traditional architectural fabric of Al-Madinah were limited, controlled and existed for certain purposes such as a private or public footpaths or routes for carrier animals and later vehicles. The Islamic Sharī'ah has stipulated the rights and conditions for using public roads such as the restriction of eyesight from unlawful looking, removal of harmful objects and keeping the road open at all times for other users. There are public squares (open spaces) that used to surround the Prophet's Mosque such as Bāb al-Salām square and the central market of al-Manākhah which was linked to the Mosque via al-'Aniyah street which used to be packed with shops on both sides and its surface was covered by stones for easy cleaning and to resist movement. This is in addition to the Suwayḡah a narrow alley for pedestrians with specialised shops on both sides such as for the haberdashery. This market used to be linked via Bāb al-Salām to al-Manākhah market and also used to traverse the traditional urban fabric of the city until it reached Bāb al-Maṣrī which was surrounded by a spacious square. This square used to form part of al-Manākhah market which was into a number of markets specialised in selling dates, seeds and other commodities. These markets were later developed to become one of the richest architectural experiences which were recently copied by the west in its open and closed markets (Muṣṭafā 1986).

The human scale in the traditional urban fabric is represented in the buildings and external open spaces that compose a pedestrian-centred city. For instance, many streets and alleys were dead end (cul de sac) or zigzagged which provide quietness, privacy and comfort for the residents. Furthermore, they enabled the residents to enjoy the rich quality of both the internal and external open spaces. All these values presented human characteristics which are not so apparent in modern architecture.



## **The Unity of the Urban Fabric**

The unity of the urban fabric emerged from the first moment when the Islamic city was established in the era of Prophet Muḥammad (peace be on him). The Prophet's Mosque, which is the centre of the city, was linked to the surrounding residences since it plays a vital role in the service of both religion and society because there is no distinction in Islam between religion and life.

In the long run, buildings were developed to suit new requirements such as libraries, schools, hospitals, public baths and markets which were connected to both the Prophet's Mosque and the city in one fabric was characterised by its various functions and usage. It produced a informal architecture manifested in the elegant fronts of the residences which reveal creativity, innovation and originality. Yet this architecture has, to a large extent, been demolished and the eventually disappeared when the Prophet's Holy Mosque was expanded.

## **Social Customs and Traditions**

Social customs and traditions form an overwhelming part that characterises human societies and distinguishes us from other creatures. They are also considered the connecting link between the individuals of a society on the one hand, and between the individuals and the inherited values which govern that society on the other hand. Thus the differences and variations among human societies in customs and traditions are a result of the different and varied heritages. Since Islam is the main heritage in Muslim societies, we find that most customs and traditions which characterise the inhabitants of Al-Madinah are basically Islamic in their content. Furthermore, Islam is the main criterion which evaluates alien traditions originating from individual behaviour as a result of intermingling among different societies. As Islam does not differentiate between religion and life, it is implemented in people's lives, their behaviour as well as their built environment.

When we look at the traditional urban fabric of Al-Madinah we find that it was established since the era of Prophet Muḥammad, around the Prophet's Mosque which formed the centre of the development of that urban fabric in the long run of time. This urban fabric contained residential quarters, alleys, courtyards, open spaces and architectural elements which bore



the human scale in mind and realised it in all the aspects of that fabric. The continuity of the traditional urban fabric resulting from the closeness of residences has greatly strengthened the social relations or the principle of face to face relationships which generate social unity.

This social entity formed the nucleus of the of the new residential buildings which neighbour on to one another and which the modern planning of the city has tried to establish. In the first place, this entity in its essence, is a social unity which we urgently need in our modern societies, rather than a materialistic unity in which social values were lost and where the materialistic view became the dominant feature of this planning.

### **Climatic Effects (and the use of Local Building Materials)**

The local climate was taken into account with regard to the traditional architectural fabric of Al-Madinah. This is mainly due to the tremendous pressure of the hot and dry weather on buildings in Al-Madinah which led to the closeness of buildings.

The most distinctive features of the traditional architectural fabric (see chapter 5) is the compact and limited open spaces produced by this closeness which provide for its users for most of the day. The internal open spaces (courtyards) in residences which are surrounded by rooms of specific measures, and the use of fountains inside these courtyards, have helped to create a pleasant atmosphere as well as a sense of place.

In addition to that, the external open space represented in streets and alleys provides shade for the users' enjoyment.

The local building materials were used in construction because they are suitable for both the environmental and climatic circumstances. Furthermore, thick walls of stones and mud which form a good buffer were used in order to preserve temperature inside the residences during harsh summer and winter.

### **8.2.3.3 Al-Madinah al-Munawarah in the 20th Century AD**

Al-Madinah Al-Munawarah, throughout the various stages of its history, has witnessed a

number of urbanising factors and architectural aspects which have had an impact upon the shape of the City in general and its centre in particular. The most significant among those factors were the developments to the Prophet's Holy Mosque. This Holy Mosque is considered the nucleus of the City since its establishment at the time of the Prophet (peace be upon him) up to the present Sa'udi dynasty. In the light of those developments, the city grew, buildings spread in all directions and the modern means of transport were introduced. All these factors reflect a tremendous increase of the *Hadj* movement.

The prophet's Mosque has always been the core and the main landmark in Al-Madinah. It has been thus exposed always to various modifications and expansions along the different Islamic periods. All these transformations always affected the surrounding urban tissue, engulfing some important landmarks that used to be outside the Mosque premises in every expansion. However, each expansion of the Prophet's Mosque complemented its previous one, aiming the preservation of the original structure and the spiritual meanings associated with its elements<sup>3</sup>. The major landmarks were always preserved for their high symbolism and the meanings they revealed. That was through commemorating them, e.g., building above a sacred spot to give it a three-dimensional emphasis, or even by documenting its location with a foundation stone or few inscriptions when architectural interventions are not possible. This conservative approach should be applied in the most recent expansion, for the Mosque, together with its surrounding *saḥāt* (open areas), occupy almost the whole City during the prophet's time, which accommodated the most important events and major urban spots along the whole history of Al-Madinah. Having not considered this approach we will confront the termination of the physical representations of various symbols and qualities initiated by the Prophet and his companions. Consequently we will be confronting a blurring of the strong spiritual image of the City that has always been stressed by a combination of its history and physical historical stimulus (landmarks and its spots associated with various important events in the early decades of Islam).

Thus, we can say that the archaeological landmarks from which we take our examples, and the distinguished Arabic and Islamic architecture in the old city was lost. At the same time, modern buildings were established in the city centre that copied American and European

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3 See the expansion of the Prophet Mosque along the different Islamic periods, (chapter 7I).

building styles and had no harmony with the general urban fabric of the city. Motifs from traditional Muslim architecture were only used on the front of the modern buildings devoid of their Islamic functions such as the use of the modern *mashrabiya* (wooden window screens).

### **The Modern Architectural Development**

It is difficult to count all the circumstances which have contributed to the establishment of the modern architecture in Al-Madinah. However, there are basic factors which helped bring about this development (physical form) such as:

1- The economic development which covered all the cities in the Kingdom and affected all the activities of the inhabitants following the discovery of oil (petroleum) which largely and rapidly contributed in the development of the city.

2- The modern invention especially cars (and roads) have had a great effect in the horizontal development of the City in all directions. The invention of lifts encouraged people to make extensive use of one unit of land through the vertical growth of buildings.

3- Migration of people from villages into the city. The intensive economic activities and the increase of different services in the city compared to the decrease of such services in the surrounding villages in addition to the lack of control over migration have led to an increase in Al-Madinah population, henceforth, the vast expansion of the city.

In view of the limited time factor allocated for finding quick solution to the above mentioned problems, the lack of the cultural, social, historic and spiritual awareness about the civilised heritage of Al-Madinah, the openness in all domains on the advanced countries as well as the importation of modern technology, most new quarters of Al-Madinah were developed along the systems that are copied from the western planning systems. The majority of these developments have resulted in:

1- A high number of accidents from the mixed movement of vehicles and pedestrians.

2- Social disintegration where there are no common domains of movement, walking and meeting, and people depend on cars.

3- Some quarters are not economically viable with regard to the high cost of public services, streets, pavements as well as the cost of maintenance afterwards.

4- The extensive drain of electric power in operating the air conditioning of all the buildings to counteract the use of large windows, the thermal capacity of many new materials and the effect of the sunlight hitting exposed, high flanks of buildings.

In addition to all that, the local council have adopted the laws pertaining to the current buildings. What resulted from that is an irregular forms of buildings that are extrovert, totally expose or reveal one another and do not pay attention to any traditions or Islamic and human values.

## **Concluding Remarks**

Finally the city of Al-Madinah, as a whole, was designated by the Prophet to be sacred territory. For example, Abū Hurayrah (one of the Prophet's companions) said: If I saw deers grazing in Medina, I would not chase them, for Allah's Apostle said, "(Medina) is a sanctuary between its two mountains" (Khan, 1986, Vol.3, ḥadith no.97).

In addition the Prophet is reported to have said: "Al-Madinah is a sanctuary from that place to that. Its trees should not be cut and no heresy should be innovated, nor any sin should be committed in it..."(ibid.).

The people's image of the place relates to the traditional urban fabric, even if this is in conflict with the existing situation.

There is no doubt that the social, economic and political situations which accompanied the establishment of the traditional architectural fabric of Al-Madinah have left their marks on that fabric. Such fabric has took into account the development of the human being in all the



aspects of his life, both spiritual and material.

As a matter of consequences, such circumstances have produced a distinguished Islamic architecture on a sound material and social basis. The traditional architectural fabric of Al-Madinah is considered a pioneer example because of the moral values and the human, spiritual, material, social, cultural, and historic dimensions it contained. Some features which characterised this architecture can be summarised as follows:

1- It is a low rise architecture with high density population.

2- It is an introverted architecture whether on the level a building or architectural complexes. This traditional fabric has achieved the following results: it provided privacy, the positive architectural open spaces and consideration for climatic features.

3- The high ground is covered with buildings.

4- It is a continuous architectural fabric which is characterised by originality, innovation and creativity, and it is directed towards the benefit of the human being as well as for the use and comfort of pedestrians.

From this we can sum up by saying that the customs, traditions and social values were realised in the traditional architectural fabric where they were preserved, continued to be practised and overcame any problems in the environment. As we have previously mentioned, these customs, traditions and social values were derived from the teachings Islam which is suitable at all time and everywhere. Thus, we can say that the traditional urban fabric was formed on the basis of the customs, traditions and social values which originated from Islam. In other words, Islam is the major motivation behind the creation and shaping of the traditional built environment in Al-Madinah. When a society, an authority or individual adopts a specific belief or ideology or changes their original belief, this will be reflected in their social pattern and then in their built environment or vice versa.

This confirms that the most customs, traditions and social and cultural values were lost or disappeared as a result of the removal of the traditional urban fabric which was replaced by



modern planning and contemporary environment that are based on western belief and ideology. Those customs, traditions and social values were not only lost but there was also a feeling that their historic and religious continuity was severed as well which generated another feeling of alienation inside the contemporary environment. In addition to that, western customs and traditions were introduced into the society and generated some sort of conflict whether on the level of the individual or the society as general. This conflict was between the values held by the society and its inability to realise them in an environment which is by no means planned or built on the basis of these values. Such conflict, frustration and loss of direction have cost our societies and our cities a lot with regard to the loss of their morals, customs, traditions, and values in general, let alone the financial resources. This confirms the strong effect of the environment on the society as general and the built environment in particular. Had not Islam been the religion of Allah, who dictated that it should be everlasting; and guaranteed prevalence for those who genuinely adopted it, we could say that our Islamic values will be totally annihilated if we continued planning and architectural development in the present manner (Muştafā 1986).

Today's designers have tended to eliminate all concerns with the associational world and have restricted themselves to the perceptual world (Rapoport, 1982). This issue is one of the reasons for the crisis in the identity of modern cities in general, and in particular in the city of Al-Madinah, where the modern areas of the City have failed to meet the cognitive needs of its people.

If there is any need to redress problems caused by recent demolition/expansion of projects, the people of Al-Madinah have a complete knowledge of their city intact within their 'heads': they know how to return to this as a natural system returns to its equilibrium.

The Prophet (pbuh) did not just build a Mosque for Al-Madinah, but provided the whole city with many different meanings, each meaning came from a significant site or a particular event. This can be seen when he fought at Ūhud Mountain, where he built a trench in order to protect the whole town and its people. In this case the trench acquires significant symbolic association with the city's inhabitants. This symbolic association further adheres to both the secular and spiritual aspects of Islam. The following aḥādith (the Prophet's traditions) conform this notion in all the aspects of environmental quality (see figure 8.5).

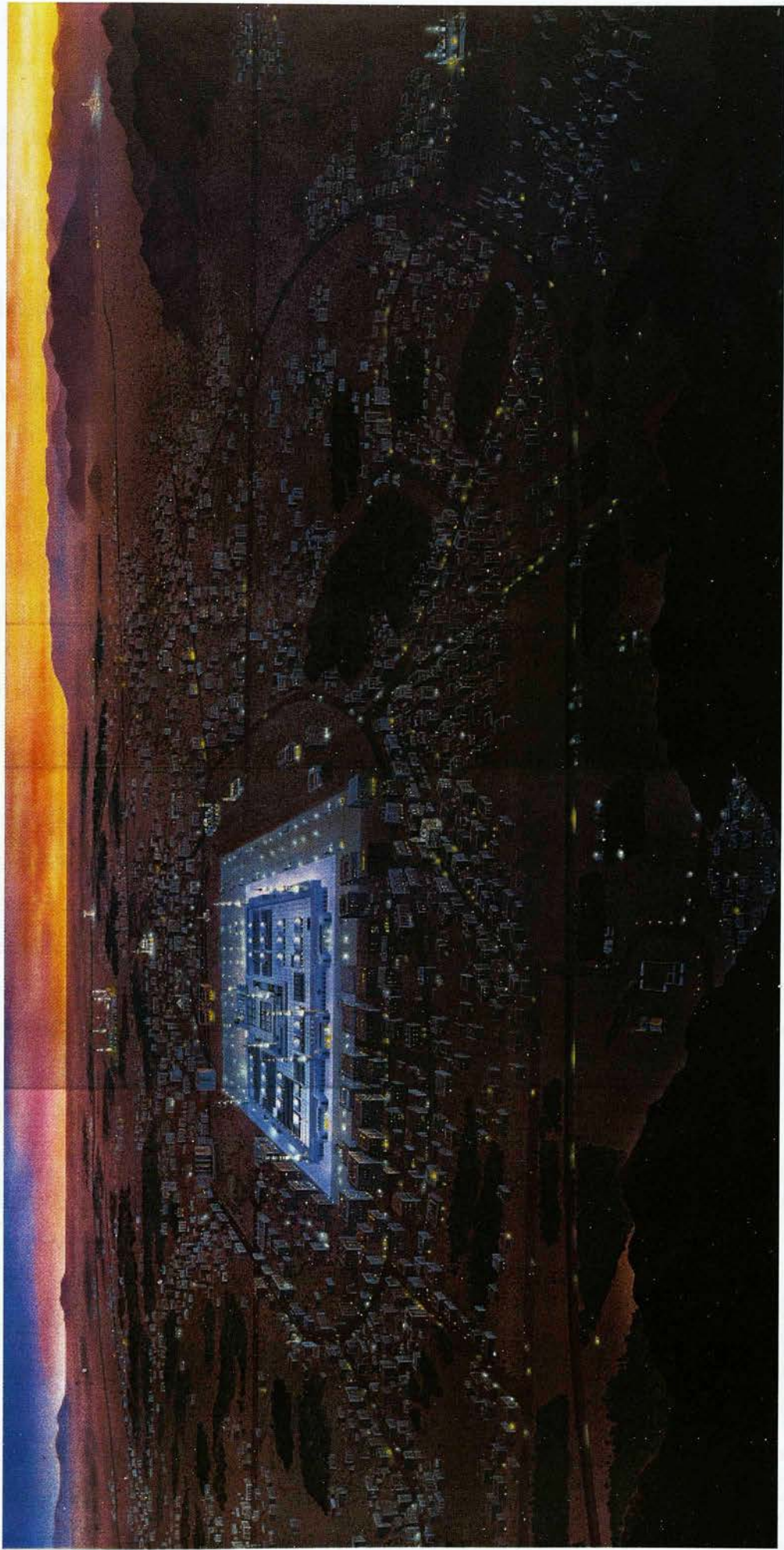


Figure 8.5: Hand drawing of Al-Madinah in 1997 by Shurtchiro Masuda



Ibn 'Umar said, "The Prophet used to go to the Mosque of Quba every Saturday (sometimes) walking and (sometimes) riding." 'Abdullah (Ibn 'Umar) used to do the same (Khan, 1986, Vol.2,ḥadith no.284).

'Abdullah bin 'Umar said, "Allah's Apostle said, 'The people of Medina should assume Ihram from Dhul-Hulaifa; the people of Sham from Al-Juhfa; and the people of Najd from Qarn.'" And 'Abdullah added, "I was informed that Allah's Apostle had said, 'The people of Yemen should assume Ihram from Yalamlam'" (Khan, 1986, Vol.2,ḥadith no.600).

Allah's Apostle said, "I was ordered to migrate to a town which will swallow (conquer) other towns and is called Yathrib and that is Medina, and it turns out (bad) persons as a furnace removes the impurities of iron (Khan, 1986, Vol.3,ḥadith no.95).

We came with the Prophet from Tabuk, and when we reached near Medina, the Prophet said, "This is Tabah" (Khan, 1986, Vol.3,ḥadith no.96).

I heard Allah's Apostle saying, "Yemen will be conquered and some people will migrate (from Medina) and will urge their families, and those who will obey them to migrate (to Yemen) although Medina will be better for them; if they but knew. Sham will also be conquered and some people will migrate (from Medina) and will urge their families and those who will obey them, to migrate (to Sham) although Medina will be better for them; if they but knew. 'Iraq will be conquered and some people will migrate (from Medina) and will urge their families and those who will obey them to migrate (to 'Iraq) although Medina will be better for them; if they but knew" (Khan, 1986, Vol.3,ḥadith no.99).

Allah's Apostle said, "Verily, Belief returns and goes back to Medina as a snake returns and goes back to its hole (when in danger)" (Khan, 1986, Vol.3,ḥadith no.100).

I heard the Prophet saying, "None plots against the people of Medina but that he will be dissolved (destroyed) like the salt is dissolved in water" (Khan, 1986, Vol.3,ḥadith no.101).

The Prophet said, "The terror caused by Al-Masih Ad-Dajjal will not enter Medina and at that

time Medina will have seven gates and there will be two angels at each gate guarding them" (Khan, 1986, Vol.3,ḥadith no.103).

Allah's Apostle said, "There are angels guarding the entrances (or roads) of Medina, neither plague nor Ad-Dajjal will be able to enter it" (Khan, 1986, Vol.3,ḥadith no.104).

A bedouin came to the Prophet and gave a pledge of allegiance for embracing Islam. The next day he came with fever and said (to the Prophet ), "Please cancel my pledge (of embracing Islam and of emigrating to Medina)." The Prophet refused (that request) three times and said, "Medina is like a furnace, it expels out the impurities (bad persons) and selects the good ones and makes them perfect" (Khan, 1986, Vol.3,ḥadith no107).

When the Prophet went out for (the battle of) Uhud, some of his companions (hypocrites) returned (home). A party of the believers remarked that they would kill those (hypocrites) who had returned, but another party said that they would not kill them. So, this Divine Inspiration was revealed: "Then what is the matter with you that you are divided into two parties concerning the hypocrites." (4.88) The Prophet said, "Medina expels the bad persons from it, as fire expels the impurities of iron" (Khan, 1986, Vol.3,ḥadith no.108).

The Prophet said, "O Allah! Bestow on Medina twice the blessings You bestowed on Mecca" (Khan, 1986, Vol.3,ḥadith no.109).

Whenever the Prophet returned from a journey and observed the walls of Medina, he would make his Mount go fast, and if he was on an animal (i.e. a horse), he would make it gallop because of his love for Medina (Khan, 1986, Vol.3,ḥadith no.110).

Allah's Apostle then said, "O Allah! Make us love Medina as we love Mecca or even more than that. O Allah! Give blessings in our Sa and our Mudd (measures symbolizing food) and make the climate of Medina suitable for us, and divert its fever towards Aljuhfa." Aisha added: When we reached Medina, it was the most unhealthy of Allah's lands, and the valley of Bathan (the valley of Medina) used to flow with impure colored water (Khan, 1986, Vol.3,ḥadith no.113).

Umar said, "O Allah! Grant me martyrdom in Your cause, and let my death be in the city of Your Apostle" (Khan, 1986, Vol.3, hadith no.114).

Allah's Apostle said, "O Allah bestow your blessings on their measures, bless their Mudd and Sa." The Prophet meant the people of Medina (Khan, 1986, Vol.3, hadith no.340).

The Prophet said, "Do not abuse my companions for if any one of you spent gold equal to Uhud (in Allah's Cause) it would not be equal to a Mud or even a half Mud spent by one of them" (Khan, 1986, Vol.5, hadith no.22).

The first people who came to us (in Medina) were Mus'ab bin 'Umar and Ibn Um Maktum who were teaching Qur'an to the people. Then they came Bilal. Sad and 'Ammar bin Yasir. After that 'Umar bin Al-Khattab came along with twenty other companions of the Prophet. Later on the Prophet himself (to Medina) and I had never seen the people of Medina so joyful as they were on the arrival of Allah's Apostle, for even the slave girls were saying, "Allah's Apostle has arrived!" And before his arrival I had read the Sura starting with:-- "Glorify the Name of your Lord, the Most High" (87.1) together with other Suras of Al-Mufassal (Khan, 1986, Vol.5, hadith no.262).

When Allah's Apostle came to Medina, Abu Bakr and Bilal got fever, and I went to both of them and said, "O my father, how do you feel? O Bilal, how do you feel?" Whenever Abu Bakr's fever got worse, he would say, "Every man will meet his death once in one morning while he will be among his family, for death is really nearer to him than his leather shoe laces (to his feet)." And whenever fever deserted Bilal, he would say aloud, "Would that I know whether I shall spend a night in the valley (of Mecca) with Idhkhir and Jalil (i.e. kinds of grass) around me, and whether I shall drink one day the water of Mijannah, and whether I shall see once again the hills of Shamah and Tafil?" Then I went to Allah's Apostle and told him of that. He said, "O Allah, make us love Medina as much as or more than we used to love Mecca, O Allah, make it healthy and bless its Sa' and Mud (i.e. measures), and take away its fever to Al-Juhfa" (Khan, 1986, Vol.5, hadith no.263).

When the Prophet set out for (the battle of) Uhud, some of those who had gone out with him, returned. The companions of the Prophet were divided into two groups. One group said, "We



will fight them (i.e. the enemy)," and the other group said, "We will not fight them." So there came the Divine Revelation:-- '(O Muslims!) Then what is the matter within you that you are divided. Into two parties about the hypocrites? Allah has cast them back (to disbelief) Because of what they have earned.' (4.88) On that, the Prophet said, "That is Taiba (i.e. the city of Medina) which clears one from one's sins as the fire expels the impurities of silver" (Khan, 1986, Vol.5,ḥadith no.380).

I heard Allah's Apostle saying, "From my followers there will enter Paradise a crowd, seventy thousand in number whose faces will glitter as the moon does when it is full." On hearing that, 'Ukasha bin Mihsan Al-Asdi got up, lifting his covering sheet, and said, "O Allah's Apostle! Invoke Allah that He may make me one of them." The Prophet said, "O Allah, make him one of them." Another man from the Ansar got up and said, "O Allah's Apostle! Invoke Allah to make me one of them." The Prophet said (to him), "'Ukasha has preceded you" (Khan, 1986, Vol.8,ḥadith no.550).

The Prophet said, "Seventy-thousand or seven-hundred thousand of my followers (the narrator is in doubt as to the correct number) will enter Paradise holding each other till the first and the last of them enter Paradise at the same time, and their faces will have a glitter like that of the moon at night when it is full" (Khan, 1986, Vol.8,ḥadith no.551).

I heard Abu Said saying four words. He said, "I heard the Prophet (saying the following narrative)." He had participated in twelve holy battles with the Prophet. Narrated Abu Huraira: The Prophet said, "Do not set out on a journey except for three Mosques i.e. Al-Masjid-Al-Haram, the Mosque of Allah's Apostle, and the Mosque of Al-Aqsa, (Mosque of Jerusalem)" (Khan, 1986, Vol.2,ḥadith no.281)

Allah's Apostle said, "One prayer in my Mosque is better than one thousand prayers in any other mosque excepting Al-Masjid-Al-Haram" (Khan, 1986, Vol.2,ḥadith no.282).

The Prophet said, "Between my house and my pulpit there is a garden of the gardens of Paradise, and my pulpit is on my fountain tank (i.e. Al-Kauthar)" (Khan, 1986, Vol.2,ḥadith no.287).

# CHAPTER 9

## The Thought Process of the Muslim

### CONCLUSION

The thesis examined how the concept of *al-Madinah al-Munawwarah* (the radiant city) can be of value in the city planning process. The study was conducted through a series of thinking exercises. By examining the concept of *al-Madinah al-Munawwarah* and understanding its implications, the researcher was able to identify the crucial aspects of the concept and how it can be applied in the city planning process. The study also identified the key elements of the concept and how they can be used to guide the city planning process. The study also identified the key elements of the concept and how they can be used to guide the city planning process. The study also identified the key elements of the concept and how they can be used to guide the city planning process.

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### Overview of the Study

One of the main characteristics of the *al-Madinah al-Munawwarah* concept is its emphasis on the spiritual aspects of the city. This is reflected in the concept's focus on the development of Islamic culture, knowledge, and spirituality. The concept also emphasizes the importance of the city as a center of learning and research. The study also identified the key elements of the concept and how they can be used to guide the city planning process.



### **The Thought Process of the Thesis**

The thesis examined some of the ways in which studies of Islamic urban and regional images can be of value in the city planning process and in evaluating the nature of their design and planning process. By considering the different environmental images held by people and professionals in the built environment, the reasons for the existence of such differences and the material impacts of resource allocations stemming from these processes, the question of divergent images has been placed more firmly into its social context. A particularly important issue to emerge is that of the ideological nature of such Islamic cities, legitimating itself by asserting to serve the interests of all Muslims, as it is in the City of Al-Madinah, when in fact it can be shown to operate by serving particular sectional or class interests. Thus, the environmental and world images projected by various agencies and people, and the ideological nature and legitimating role of these images, which are supported by the Islamic Legal System in our case, are crucial to an understanding of the design and planning process at its various levels.

The thesis also can be seen as a contribution to the study of the link between the city's elements, both objective and subjective and how these contribute to the city's cognitive image. The city of the Prophet is more than the summations of its physical features. These have for some times been landmarks of the values and traditions that Islam has brought to people. A records of these values can be easily read and profoundly experienced and carried to the new generations of Muslims.

### **Overview of the Study**

One of the main characteristics of this thesis was its cultural and religious approach to the manifold aspects of the Islamic city, which is considered to be in itself a global expression of Islamic culture. Accordingly, communications and debates dealt with history and archaeology, art and architecture, social and economic life, the educational system and religious institutions in general, as well as with a number of specific issues related to the people's perception and images. In addition to its intrinsic value this approach, by

concentrating on one major expression of Islamic civilization from a variety of viewpoints, responds to the spirit and overall conception of the Islamic World, which considered Islamic culture in a comprehensive manner as a global and meaningful reality. This approach fully recognises specific situations related to history and climate; to economic or social circumstances; it also takes into account the unity imprinted on Islamic civilisation, beyond the diversity of nations and groups, by fundamental principles, spiritual, moral, social, cultural, recognised as norms or models.

Another characteristic feature of the discourse was to bring together, on the one hand, the analytical and critical approaches of specialists, mainly in the field of the built environment and, on the other, evidence from within Islamic civilisation that calls on its spiritual, moral and cultural sources to study their applications in social, economic and political institutions and in community life.

The result of the survey at the local level has shown that people still wish to identify the neighbourhood - once the confusion of definition and types had been clarified - to be defined by physical and socio-spatial phenomena, with people building up a territorially and not density-based, mental model or schema of the area in which daily lives are played out. The use of architectural styles that give priorities to commercial attraction therefore loses identity beyond critical thresholds.

Historical and symbolic patterns are also clearly critical in any attempt to create a sense of place. A more fundamental question, however, is whether a variety of meaningful sensory experiences can be implanted when it is the *values* which people come to vest in the area that constitute the intangible ethos or feeling. This is a process which involves the passage of time. From a behavioural point of view, the planner or designer can only provide the equivalent of what Gans (1972) calls a 'potential environment', having regard to the client group and his own position.

## **Islam and Al-Madinah**

Al-Madinah Al-Munawarah is primarily a religious city and is sacred to the Muslims all over

the word. This is because it provided the sanctuary to Islam and to the Prophet (peace be on him) since he first arrived into that place in which he lived and was buried.

Al-Madinah was the first capital of Islam at the time of the Prophet and the rightly guided Caliphs from which Islam spread to the other Arab and Islamic countries, therefore its name was closely associated and connected with Islam. Islam is a complete system of worship and life, thus Al-Madinah was greatly honoured by implementing its teachings on its soil and all the legislations of Islam turned into reality in the daily life of its inhabitants. Such Islamic practices have left their marks on the city in different aspects, to the extent that nearly every site had witnessed a certain event that is related either to religious matters such as the lawful and unlawful things in Islam, or to the worldly matters such as commerce and the regulation of transactions. The legislation in the *Ḳurān* then comes to confirm or negate such practices or elaborate and illustrate a general legislation on similar practices. This is in addition to the tours of the Prophet and his Companions in all the corners of the city both at the time of war and peace and the revelation of the *Ḳurān* which follows that to clarify a certain issue to the Muslims, a certain event which took place as a result of the Prophet's miracles, or as an answer to a prayer which the Prophet has made for the welfare of the Muslim Community, as Allah said in the *Ḳurān*, "Nor does he speak of his own desire. It is only an inspiration that is inspired".

Islamic *Sharī'ah* derives its teachings from a number of sources and the *Ḳurān* was the first and foremost source of legislation. The main objective of the *Ḳurānic* Verses which were revealed in Makkah was to uproot polytheism from the people's hearts and replace it by the Islamic faith of worshipping the One God, whereas the *Ḳurānic* Verses which were revealed in Al-Madinah came to legislate and organise the relations among people in the Islamic state in all the walks of life such as the civil, political, cultural, social and scientific aspects. This is because such verses were revealed after the Islamic faith and the worshipping of the One God had been established in the hearts of Muslims.

The Prophetic tradition (*Sunnah*) which can be defined as every deed or saying of the Prophet, is the second source of legislation in Islam. It acts as a complementary to the *Ḳurān* and interprets many teachings of Islam which have been mentioned in the *Ḳurān* in general terms. The Prophetic tradition is divided into an obligatory *Sunnah* which must be performed



by Muslims where those who perform it will be rewarded and those who do not will be punished, and a commendable Sunnah where those who perform it will be rewarded and those who do not will not be punished.

Since the Prophet was the first best example for Muslims in all the aspects of their life, we arrive at the result that the performance by Muslims of all his deeds both private and general is considered as a good deed for the person who performs them. Such performance is a clear sign of affection and sincere following of the Prophet, as the Prophet said, "Whoever loves a group of people will be in their company on the Day of Judgement".

From that point the image of the city came to confirm this fact in the hearts of its inhabitants since they demand that all the monumental and historic sites of the city should be preserved and be brought to the surface as clear landmarks. This indicates that they have great affection and a sense of belonging to the city which represents and illustrates an ideal era when the teachings of Islam were implemented in real life. From that era we draw a number of lessons from which we learn and greatly benefit in our daily life in the modern world. This is in addition to the rich and good example, high esteem and special status the image of the city should represent for its inhabitants in particular and for the Muslims as general. **It can be concluded that the image of Al-Madinah is the image of Islam.**

## **The Core Idea of the Study**

Since we live in the world of the mind, it follows that raised concerns such as that of cultural and architectural conservation, development and both physical and spiritual identity mentioned in both parts and are discussed throughout the thesis, can be seen as a battle for the mind. In this realm of persuasion and stimulation, it is the image which assumes the key role and, in consequence, it is the image makers - the authors, controllers, disseminators of information, artists, built environment professionals - who hold a special responsibility. And it is the reasons and processes underlying the formation of particular interests and images that take on an especial significance. This will be critical if one tries to solve the problems of the formation and development of the symbolic patterns in a historical city such as the city of Al-Madinah in particular.

The house, domestic neighbourhood or townscape, although perhaps not built as symbol, acquires meaning and thus becomes symbol. Their creation is an extension of the residents' identity; their continued existence provides a symbol of security and stability in a changing world. Yet rapid and ceaseless change and a reduction of a person's ability to participate actively in forming their house, neighbourhood or townscape weakens the connection between personal identity and physical environment. With the passage of time elements are raised beyond any intrinsic merit through their association with life's events, such that they provide a "contextual environment" able to reactivate memories for the individual or group. The concepts of 'mythicised' place introduced by Raban (1974) or of 'associative power' of place suggested by Lenz-Romeiss (1973) incorporate identical reasoning. As the scene for particular social activity, the environment becomes associated in the mind with, and therefore symbolic of, that activity. Thus, in time, although the physical structure is seen, the response is to its social meaning. The response is therefore symbolic - not to what *is*, but to what it *represents* - that is, to the sense of any place particularly the sense of the holy place of Al-Madinah known as the City of Prophet Muhammad (pbuh).

The meaning of the city of Al-Madinah is not only what its physical structure resembles, but also the Islamic and the shared symbols. One of the main challenges of designers is to try to study and to use these symbols in their future design of the city. Any attempt to design for associations at levels above the personal are thus difficult and this is one reason for the importance of personalisation (either by government or by the other agencies). The translation of symbols into form has certain common features in all levels of design - high style, vernacular and popular. What seems to vary is the nature of the criteria used in making choices among alternatives that, used systematically, result in recognisable style.

Designers at the popular level think that the symbolic approach works well, an effectiveness reinforced by one of the ways in which it is consistent with Experiential models (understanding human behaviour/reactions through participating within a place), particularly in chain operations. Given that people's mobility and the need for appropriate behaviour can be communicated, chain operations indicate very clearly, explicitly, and almost automatically what to expect from the participants. Seeing the relevant symbols within places, people know without thinking which behaviour is expected of them, who is invited, the accepted dressing code and what food and services are available at what prices. The cues are as clear,

consistent, and comprehensible as in a cultural society and in this way at least, popular design is extremely successful and sophisticated. The question, then, is why such design is so strongly disliked by many designers and professional groups must be reiterated. The answer is that the ideals incorporated in these images and schemata are found unacceptable. The result of the survey analysis also indicates that the main problem is that these symbolic value schema may be quite ignorant of the symbols, images, and meanings held by the people in different developmental projects within the City.

## **The Questionnaire**

The author fully recognises the necessity of applying the rigid methods in the analysis of specific aspects of Islamic history, as related to the City. Similarly, attention is repeatedly drawn to the dangers of hasty generalisation or the extrapolation of data, and their interpretation, from one region or one period of history to another. A city like Fez, Şan'a~, Isfahan, or Al-Madinah had a distinct personality which constituted the richness of Islamic civilisation. It was proved necessary also to avoid the transposition of concepts appropriate to non-Islamic civilisation and to consider the Islamic city on its own merits and according to its proper terms of reference, within its own civilisation.

It is felt equally indispensable to approach Islamic civilisation, not as a mere object of investigation, and the Islamic city not as a museum of historical heritage, but both these contexts as one living reality, a faith and an inspiration to billions of people in the world of Islam who do not separate their ethical values and their cultural identity from their demands for social welfare, justice and a humane quality of life.

The cities of Islam cannot be considered solely as architectural systems or religious monuments from the past. They stand as witness to a set of values and remain on the one hand a powerful factor of cultural identity, and on the other a strong stimulus for shaping the Muslims' images as a main source of their meaning and their structural transformation. Therefore, the problems related to the safeguarding and rehabilitation of Islamic cities, as living communities, cannot be disassociated from the human, social and cultural concerns. These concerns should constantly remain essential when promoting such prospects.

Today, there are huge and radical changes taking place in the development of almost all cities of the Muslim World among them the City of Al-Madinah. Changes in ways of life, urban structure and styles of architecture have permeated and transformed the very social and physical fabric of the cities, and which are threatening the quality of the urban environment and Muslim way of life. The Muslim city is in danger of becoming a city characterised by ugliness, noise, air pollution and a frenetic way of life with all the associated social problems.

These changes are taking place so rapidly that the Muslim peoples are unaware of the destructive effect on their way of life, traditions, customs and religious teachings and practices. Those peoples possess, however, their own civilization and traditions upon which to base the urban planning of their cities, towns and villages. These values have been respected in most Islamic cities such as Fez, Isfahan and Fatimid Cairo (Serjeant, 1980, p.208). Since Mecca is the prime and most important Islamic city (*Umm al-Qura*) and Al-Madinah is the city of the Prophet Muhammad (pbuh), it is most appropriate that all plans and practical measures taken for their conservation and development be exemplary, especially as regards the respect of the environment at the Holy Places.

The Government of the Kingdom of Saudi Arabia, being the Guardian of the Holy Cities (*al-Haramayn*), gives the promise that the Holy City of Makkah will continue its important role in the Muslim world. This could be achieved by encouraging and supporting studies and research carried out by Muslim specialists in *Shar'ah*, with the objective of finding and developing ways and means to integrate the historical and cultural significance of the Islamic city both with present and future demands.

The preceding area of study is by no means exhaustive and is purely indicative of some projects already undertaken, or planned for a near future. In particular it is recognised that, besides the great cities and centres of Islamic civilisation, there exists a multitude of smaller communities, quite often of great historical, architectural and cultural interest, which still convey many lessons for the understanding and preserving of genuine Islamic values. This is the case, among others, of the fortified villages and dwellings located in the pre-Saharan regions and oases of north Africa, as in the plains, valleys, and mountainous regions all over the Islamic world. Apart from the effort required to include these so-called vernacular architectures into the general surveys, they should be the object of active measures of



protection, linked with the development programmes undertaken by the national authorities.

The overall outcome of the people's responses we can clearly emphasise another spiritual scale of Al-Madinah (Al-Madinah Spiritual Network Dimension) that reflects the high awareness, clear of any nostalgia, of Al-Madinah's citizens. The people do not pity the loss of their physical environmental heritage only. This is better explained when linking the research outcomes and the people's responses, together with their sensitive selections and preferences, which reflects how people feel towards the extensive loss of so many landmarks in their City. Given that these landmarks are not only representatives of a certain environmental significance, they are actually in a more sophisticated overall framework of what might be described as Al-Madinah spiritual network. This spiritual network had evolved along various centuries since the Prophet had established it. This has been physically presented through various sites associated with the Prophet's *Sīrah* (biography), such as mosques, the battle sites, mountains, wells, valleys, , al-Baḳī' Cemetery, shrines, etc. Each of them acts as an icon reminiscent of a certain event in the Islamic history in its infancy and long after, which is always, for the great religious character of the City, associated with the spiritual virtues of Al-Madinah.

Nevertheless, the severe elimination of these icons has affected, not only the physical environment of Al-Madinah, but also the Islamic messages and teachings associated with them, i.e., the spiritual network that has used to weave the people's emotions, stressing their faith and religious belonging, with these icons. It is this immeasurable valuable quality, i.e., the spirituality of the coming generations that is jeopardised.

## **The Dimensions of the Problem**

Al-Madinah has a special religious status in the conscious of the Muslims, who regard it as Allah's best spot on earth for it accommodates the Prophet's (pbuh) Mosque and Tomb. Nevertheless, having not benefited from Al-Madinah's history and traditional urban and planning principles, as well as neglected its Islamic monuments and landmarks in Al-Madinah's comprehensive master plan, has changed the original location of some of them and the demolishing of others. That is because no studies have been done to consider Al-



Madinah's historical style and conserve its distinctive character. It is likely, therefore, that many of Al-Madinah's historical events will be defaced by losing their associated landmarks and their historical representatives.

However, the dimensions of the problem can be seen through different categories. These categories are the awareness, the interpretations and the applications, which involves the citizen, the decision makers and professionals.

- 1- Lack of awareness with regard to the preservation of Islamic monuments.
  
- 2- The absence of an official body that undertakes the task of documenting and maintaining the monuments and the setting up of sound plans for their protection.
  
- 3- The misunderstanding by some people of some religious teachings related to the preservation of the Islamic and Prophetic monuments. This is the result of the conduct of some ignorant people who rub their bodies against these monuments in search of blessing. Thus many Islamic monuments have been demolished as a result. However, this bad conduct do not give the state the right to demolish a certain monument because our religion is a religion of knowledge. The Muslim society should therefore be an enlightened one because Islam is a system of life which is practice daily. In other words, if the Muslim was ignorant of the teachings of Islam how can we expect him to behave towards these teachings which he should be aware of, let alone his conduct in life as general.
  
- 4- The increase of the demographic density of Al-Madinah because of the excessive immigrations to it from all its suburbs and other cities has created a great urban gap between Al-Madinah's natural expansion and the actual needs of its dramatically growing population. Consequently many spontaneous quarters have grown in various scattered spots in Al-Madinah without any disciplinating planning criteria. Moreover, the planners have not used the fertile cultivated lands to found recreational areas; instead domestic areas have replaced them. As a result, the cultivated lands were narrowed, changing the main character of the city. In addition, having neglected the main dry watercourses of the city, many buildings were built on them. Thus the dry watercourses of the city have vanished which endangers the buildings on them and the city as whole.

5- Lacking a long-run comprehensive master plan of Al-Madinah, many temporarily unplanned projects have existed. Moreover, lacking the municipal systems and legislation on the scale of districts or even of the city as a whole, the city has gained an inappropriate appearance; it has neither preserved its traditional architectural style nor reached to the level of the modern planned cities.

6- Many foreign planners of different nationalities and planning schools have participated in the replanning of Al-Madinah, overlooking its unique religious quality, which was not considered when designing its contemporary planning legislation that has caused an alienated architecture. As a result, Al-Madinah has suffered the loss and termination of many of its archaeological spots and landmarks, which has caused the loss of its architectural style and planning character. Moreover, the base maps of those planners have not considered any of Al-Madinah's religious dimensions in their proposed future urban expansions.

Consequently, the citizens, the pilgrims and the visitors of the city are not any more able to be sufficiently aware or receive truthfully the spiritual transcended messages of the city and its various holy spots.

## **Recommendations and Solutions**

The built environment carries symbolic meaning in delicate ways. The correspondence between a building pattern or set of patterns and cultural knowledge extended in time has to be learned. Sometimes this is done consciously, but often it is unconscious. Architects, among others, often attempt to establish new symbolic systems derived from and expressing particular personal or theoretical notions. To get them accepted, they have to educate others about the set of associations within the new patterns, i.e. the symbol. Within any field, elite groups are likely to control some of this process, but other meanings are largely unconsciously and intuitively developed by people themselves.

Supporting the finding in Part Two of this thesis, two other psychological processes explain some of the confusion over the interpretation of the symbolic meaning of specific patterns of built form. These are the processes of stimulus and response generalisation. It is known

that one architectural variable (e.g. the façade of a building) may evoke different meanings to different people. Different forms may also communicate the same meanings. The associations that people have with specific patterns may also change over time in a manner that it is difficult to predict.

The ability to predict the ways people will interpret the symbolism of an environment is limited by the designer's lack of a positive theory of architectural symbolism. This is particularly true in dealing with groups whose values are different from those of the designer. In such situations, the designer cannot rely on his intuitive knowledge because that is drawn entirely from his or her own experience. Instead to understand the importance of symbolism in people's lives, one has to understand the purpose served by symbols. This understanding needs certain aspects, which will enhance our attention to the people's image of the City and as a result signifies the importance of considering their participation in shaping their own environment.

As an official frame is a pre-requisite for any conservation and rehabilitation programme of the cultural heritage, comparative studies should be undertaken, taking into account the legislative measures already adopted by different countries, notably in the Islamic world. A special effort should be made to elaborate a legislation that would prove applicable to all Islamic countries allowing the necessary adaptations to local conditions.

Bibliographical indexes listing articles, books and other documents dealing with the research and preservation work carried out in the Islamic world should be prepared, published and widely distributed. Such work would be greatly facilitated by use of the techniques of computerised documentation. The publications listed in the bibliography might be made available to interested persons and institutions under various forms, including microfiches. Lists of research and operational projects currently undertaken by various institutions could also be prepared and distributed.

An 'Atlas of Islamic Cities' should be established which would complement the 'Atlas of European Cities' undertaken by the International Commission for the History of Cities. Such a work of reference, alongside monographs on individual cities, would contribute to a more precise and comparative knowledge of cities as witnesses of Islamic civilisation.

Since all countries have to face the necessity of establishing a general survey of their historical monuments and sites, it would be highly desirable that a common system of records should be adopted and applied throughout the Islamic world. This would facilitate the exchange and publication of data on Islamic architecture and be a useful basis for comparative studies. The experiences gained by Islamic countries might in the future become shared by other countries having similar Islamic heritage.

The eminent role played by craftsmen in the construction and maintenance of the Islamic city has been amply illustrated from different viewpoints, economic, social and ethical. It has also been stressed that the rehabilitation programmes now envisaged would require the participation of a wide range of handicrafts, from the more utilitarian trades to the more refined artistic skills. It is therefore recommended that:

- a) surveys be made on the living handicrafts to record their local techniques, aesthetic principles, professional organisations (guilds), standards and terminology, so as to give a comprehensive picture of existing resources in qualified crafts throughout the Islamic world; and
- b) active measures be taken to protect and/or rehabilitate handicrafts in the various Islamic countries. Such measures might include the creation of schools of traditional arts associating acquisition of skilled craftsmanship with a fair level of general and technical education, the rehabilitation of handicraft quarters inside the old cities and the creation of new centres in places of historical interest (see also Serjeant, 1980, p. 205).

It is important to study the technical and material aspects of Islamic culture. The nature and status of work and crafts, the modes of production and the ways and means of commercial exchange are topics, in addition to many others, which would indicate the vitality of Islamic civilisation. This justifies a series of monographs, both diachronical and synchronical, on the various aspects of Islamic economic life in the classical period. Islamic civilization, which evolved some original concepts and practices in the economic and social fields, often relating ethical norms with productivity and trade, might thereby contribute in the present quest for a truly international and inter-cultural economic order. Historical research could provide a



basis for the evaluation of the present economic and social problems.

Research should be conducted on the impact of change on Islamic cultures. Such notions as progress, contemporaneity and aesthetics should be subjected to critical evaluation, subject to the values of Islamic culture and the real needs of Muslim peoples in the present. Information about such studies and their results should be widely disseminated among practising architects and planners and the general public.

A programme of research should be established on how to integrate the use of traditional principles and methods of construction into the present planning needs of Islamic cities. Studies should be led by architects who have proven their deep and sound knowledge of Islamic culture in order to develop models and working tools adapted to the preservation and the development of Islamic cities. Thus a link would be provided for the establishment of a body of renewed Islamic architectural tradition. This would entail the inclusion of the teaching of Islamic architecture in the curriculum of faculties of architecture and engineering all over the Islamic world as well as centres of practical training in the field.

To conclude, there are some possible forms of the big cities in the future and the reasons for preferring any one to another. A maximum flexibility of choice, ease of circulation and minimum cost were judged the most important criteria; others were the relative capacity for growth and the minimal burden on the transport and control mechanisms.

Planning and dreaming are old bedfellows. When applied to cities, plans and dreams have usually been aimed at solving problems of the present or at inducing a return to some image of the past: express ways were devised to escape the traffic jam, slum clearance to solve the housing problem while neighbourhood development looks back to the small rural communities. Only rarely do we find a contemporary plan that acknowledges the past and its values together with present and future demands. People are attracted to the cities by real values - choice, freedom, privacy, opportunity, culture, entertainment. How can we ensure the realisation of these ends? More importantly, what are the possibilities for big cities that are as yet undreamed of? And what kind of power, knowledge, or guidance must be applied to achieve them? The spirit of hopeful intervention should prove at least as effective as the desire to escape present discomfort.



Finally, the time of the Prophet (pbuh) and his companions should always be raised for its significance and its high contributions to the Islamic history and religion, during which and just few decades after, Islam dominated vast spots of the Old World. In this time Al-Madinah was the fertile adaptive land of, as well as being the first capital of Islam. There, the teachings and principles of Islam were evolved and crystallised. Al-Madinah should then be regarded from a different perspective, beside its traditional religious one. It is the first station, out of which the Islamic influx started reaching the furthest spots known by then, as far as China to the East and as far as the Iberian Peninsula to the West, where Islam has produced a sumptuous civilisations. It is in Al-Madinah where the first Muslims experienced the perfect qualities of Islam and tasted the sweetness of faith and became totally devoted. Such a city has certainly witnessed and experienced much that should be studied thoroughly, along its different periods starting before Islam and until today, to define its essence as the first capital of Islam and one of the two holiest spots for Muslims. Testing the people interaction with the physical representations of these meanings, Al-Madinah's landmarks, and their effects on them, will help apply and benefit from the indigenous qualities, revealed through the course of the present research, in the present time.

## **Further Research**

Those various aspects justified a widely interdisciplinary and cooperative approach of all scholars concerned with the Islamic city, whatever their starting-point and their individual specialisation, and it is hoped that the perspectives opened for structuralist approach in research on the subject will be followed up with international cooperation.

Finally, it would be misleading to suggest that this research does not have problems and limitations of its own. Its very recent origins mean that a lot more development work needs to be done, and a great deal is also likely to emerge from its general application. However, the author proposes that this research can take its place alongside others as an evaluative tool to be employed to explain the unity between Islamic principles, history and architecture in the unique case of Al-Madinah.

As far as Al-Madinah is concerned, it hoped that this study, if put into practice, will

contribute towards recovering the coherent and inspiring character of the Holy City. In broader terms, it is hoped that the research may contribute to a better understanding of the sensitive nature of historical cities, particularly those of religious and spiritual significance, and the way they should be dealt with.

## Final Message

From the above discussion, it is evident that the image has a utility, not only as an indispensable part of an individual's survival kit, but potentially as the crucial intervening variable when attempting to understand spatial behaviour and also in environmental design exercises. Thus, if the present urban environment does reflect largely untested assumptions about human preferences and behaviour by professional planners and designers and reflecting the political climate of the time, then perception and image studies involve an approach which may close the gap between the planner, the designer, the policy maker and the public. Observing use or determining evaluation and preferences through various projective techniques may offer meaningful 'participation' in an era when the role of urban planning has been increasingly questioned from within and attacked from without. Certainly, questions of orientation, mental structuring and optimal perceptual interaction with the environment become increasingly important as urban man sees his habitat, itself a recent phenomenon, undergoing rapid change. The concepts of **legibility** and **imageability** come to hold considerable relevance.

The quality in human nature on which we must pin our hopes is its proven adaptability. This has been demonstrated impressively under the test of the solutions that mankind has brought on itself within the lifetime of people, now still alive. Human adaptability was also revealed in all earlier technological, economic, social, cultural, and spiritual revolution which our ancestors did succeed in surviving, though it was an even more radical revolutions than the one by which we, their descendants, have been overtaken in our time. Our experience feels severe, but our knowledge of our ancestors' hardship tells us that it was still more severe than ours is.

Muslim unity, and world unity, implies more than political communities, trade blocks and

common markets. Such unity, in its deepest and best sense, implies a mental unity, a shared image of belonging to a much larger whole, even while retaining affection and respect for one's own home region and those of others. It is in the generation of respect and understanding that the educational and communication systems of the Islamic World can do so much today for tomorrow.

Our images - the maps and models of the world we carry around with us - need larger and much more relevant information inputs. Only then can our visions of a larger world, in which we are all linked together, and all responsible for one another, grow to match the human-created problems we shall all face shortly. For only if our visions meet the problems will the problems themselves be solved in a human, and humane, way.

The changes in Al-Madinah have been generated almost entirely by pressures from outside the city. These have focused not on the City as a living entity which has many functions but on the City as servant to the Prophet's Mosque. This has led to an equation in which it is right to disregard its cultural and social aspects, and even to destroy their physical existence, to allow the Mosque to expand. When many Muslims, speak of Al-Madinah they call it al-Masjid al-Nabawi (the Prophet's Mosque) instead of (al-Ĥaram al-Nabawi), which would mean the city as a recognised unit.

Yet in the minds of the residents, the city exists as a fusion of spiritual, religious, historical, social, cultural, commercial and practical purposes. It is not seen as a Mosque with a collection of less significant buildings in attendance but as a network of mosque, walls, forts, schools, parks, burial grounds etc. of which the Prophet's Mosque is the most highly celebrated, and to the extent that they desire to see many of the lost 'other building's' reinstated.

In his research, the author found that the city image preserves the meaning and symbolic purposes of buildings after they have been destroyed. But to be communicated to following generations the city image must be manifested in the physical evidence of the city. The author therefore notes that the respondents placed an apparent emphasis on the physical objects of the city, in contradiction to the more 'subjective' valuation that much of the theory supports. Some even proposed the dismantling and rebuilding of historic buildings or the

setting up of memorials. This is because in Al-Madinah the 'subjective' image is not a largely phenomenological interpretation of the physical into the mental for it is inseparable from the model of Al-Madinah. This model is the existence and life of the Prophet his kin, his community and his actions. This model is the origin of Islam and the source from which it flowed across the world.

There is a further level to this image, for the Prophet was just the Messenger of Allah: all of his doings and words were as instructed by Allah and through the angels. In Al-Madinah, *Paradise* came to touch the earth and where it touched, the City grew. But when the Prophet died the communication between *Heaven* and earth was cut and this was preserved as a memory in the City of the Prophet ordained.

### **The Spiritual Qualities**

Yet, no city has ever gained the historical and religious significance as that of Al-Madinah, the first capital in Islam, the accommodation of the first Muslim community. It is there where the first Muslims applied the Islamic teachings in all their aspects of life. And since Islam is regarded as a way of life, Al-Madinah was a reflection of the main constituents of any Islamic city, having Al-Madinah acting as the Model for any Muslim community.

Each Islamic city with a religious and spiritual character was established by one of the prophet's companion, who served as the religious pole of this spot of the world. It is around his mosque, or a spot of a crucial event he witnessed, the first Muslim community of this early Islamic settlement would have agglomerated, stimulating and developing the religious quality of the city. For instance, the City of Al-Kufah was founded by 'Ali b. Abī Ṭālib, the City of Al-Fuṣṭāṭ was founded by 'Amr b. al-Āṣ, the City of Tunis was founded by 'Uḡbah b. Nāfi', the City of Al-Nadjaḡ the martyrdom spot of Al-Hussayn b. 'Ali and many others. Having considering this, we can then understand the very especial, and certainly unique, religious and spiritual quality of Al-Madinah which was initiated by the Prophet (pbuh) himself and honoured by accommodating his grave, the only known tomb of any prophet and the holiest spot on earth. In addition, a constellation of 'Al al-Bayt (prophet's family members) and his companions had lived and buried there, in al-Baḡī', or in Ūhud, the martyrs

of the Battle of Ūhud, e.g., Hamzah the prophet's uncle. It is the prophet's family members, his companions and their followers that were described by the Prophets in his say "my companions are like stars; if you take any of them as an idol you will be guided." This great constellation of the unique and numerous Muslim poles, i.e., ~Al-al-Bayt and the Prophet's companions, adds very much to the spiritual dimension of the City.

**My Claim:** The City of Al-Madinah has a prolonged history of establishment and is structured by the Islamic rules. This may be called the genotypical effect of Islam in establishing the structure of the City. Accordingly, one could claim that people's image of the City is a phenotypical phenomenon. The hypothesis has two points: first, people are carrying genes of the structure of their habitat and have a genotypic role in sustaining its identity. Meanwhile, they also have a phenotypic role in unfolding the messages embodied in the genetic structure of the City, therefore creating the variety of images and preferences of their environment and built environment as an everyday practice.



# BIBLIOGRAPHY

- Abdalla, M. A., 1988, *Environmental Quality of Air in the Sudan: A Study of the Energy Link to Environmental Degradation*, Ph.D. Thesis, Sudanese University, Wad Medani.
- Abdullah, Walid Abd-Allah, 1981, *Urban Environment and Urban Policy in Sudan*, M.Sc. Thesis, Sudan University of Science and Technology.
- Abdul-Hamid, M., 1984, *Al-Madinah Al-Munawwarah*, Ph.D. Thesis, Sudan University of Science and Technology.
- Abur, Jemal, 1988, *Urban Policy and Urban Environment: The Case of the Sudan*, Ph.D. Thesis, Sudan University of Science and Technology.
- Al-Bayati, B., 1964, *The City and the Mosque*, IADP, Cairo.
- Al-Bukhari, *Essentials of Urban Planning*, translated by Kamil Al-Masoudi, Ph.D. Thesis, Sudan University of Science and Technology, Khartoum, 1983.
- Al-Jawhary, 1976, *Development in Islam*, Muhammad Ali Jinnah Centre for Islamic Studies, English, 2nd ed., New Cavalier, Ankara, N.Y., 1976.
- Alexander, C., 1969, *The Timeless Way of Building*, Oxford University Press, London.
- Al-Hajjoud, 1988 and 1991, *Tradition, Community and Urban Environment in Khartoum*, Ph.D. Thesis, Sudan University of Science and Technology.
- Allan, G. A., 1979, *A Sociology of Friendship and Society*, George Allen and Unwin, London.
- Allen, R. J., 1993, *Climate Change: Dictionary of Climate Change*, Cambridge Press, Oxford, UK.
- Alport, G. W., 1984, *The Structure of Religion*, Beacon, Philadelphia.
- Alshay, William, 1964, "The Historic and the Strategic in Urban Planning: A Case Study Implications for Urban Renewal", *Urban Land Magazine*, 1964, 35.
- Alvares, J. and Clemons, K., 1980, "Cultural Aspects of Friendship: A Cross-Cultural Relationship" in H. Triandis and B. Bontempo, *Handbook of Cultural Studies*, edited by B. S. Altin & Berman, Boston.
- Alvares, J. and Clemons, K., 1984, *Culture and Environment: A Cross-Cultural Study*, Cambridge.
- Alvares, J., 1981, *Social and Cultural Change in the Sudan*, Khartoum.



## BIBLIOGRAPHY

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- Abdalla, M. A., 1998, *Environmental Knowledge and City Perception with a Focus on the Energy Link to Environmental Aesthetics*, PhD Thesis, Edinburgh College of Art, Heriot-Watt University.
- Abdulaal, Waleed Abdullah, 1985, *Land Problems and Land Policy in Madina, Saudi Arabia*, M.Sc. thesis, University of Cardiff, Cardiff.
- Abdul-Hamid, N., 1984, *Al-Figh Al-Islami*, 1st. Ed., al-Risalah Press, Beirut.
- Akbar, Jamel, 1988, *Crisis in the Built Environment: The Case of the Muslim City*, A Mimar Book, Concept Media Pte Ltd. Singapore.
- Al-Bayati, B., 1984, *The City and the Mosque*, AARP, Oxford.
- al-Bukhārī, (without date), (Translated by Khan, Muhammed), *Saḥīḥ Al-Bukhārī*, (Arabic English), Al-Maktabat Al-Salafiat, Al-Medina, V. III.
- al-Bukhārī, 1976, (translated by Khan, Muhammed Muhsin), *Saḥīḥ Al-Bukhārī* (Arabic-English), 2nd ed., Hilal Yayinlari, Ankara, V.V., Chapter 3.
- Alexander, C., 1979, *The Timeless Way of Thinking*, Oxford University Press, New York.
- Al Hathloul, Saleh Ali, 1981, *Tradition, Continuity and Change in the Physical Environment: the Arab Muslim City*, Ph.D. thesis, Department of Architecture, M.I.T., Cambridge.
- Allan, G. A., 1979, *A Sociology of Friendship and Kinship*, George Allen and Unwin, London.
- Allen, R. E., 1990, *Concise Oxford Dictionary of Current English*, Clarendon Press, Oxford, UK.
- Allport, G. W., 1954, *The nature of Prejudice*, Beacon, Boston, mass.
- Alonso, William, 1964, "The Historic and the Structural Theories of Urban Form: Their Implications for Urban Renewal", from *Land Economics*, Vol. XL, No. 2, pp. 227-231.
- Altman, I. and Chemers, M., 1980, "Cultural Aspects of Environment-Behaviour Relationships" In H. Triandis and R. Bislin (eds.), *Handbook of Cross-Cultural Psychology*, Vol. 5, Allyn & Bacon, Boston.
- Altman, I. and Chemers, M., 1984, *Culture and Environment*, Cambridge University Press, Cambridge.
- Ameer Ali, S., 1923, *Spirit of Islam*, revised ed., Christophers, London, p.436.

- Amin, M. K., 1994, *Man, Environment and Place Identity*, unpublished D. Phil dissertation, Edinburgh College of Art, Heriot-Watt University.
- Appleyard, D., 1970a, "Styles and methods of structuring a city" *Envir. Behav.*, 2, pp. 100-17.
- Appleyard, D., 1969b, "Why Buildings are Known", *Environment & Behaviour* 1 (December), pp. 131-156.
- Appleyard, D., 1970b, "Notes on urban perception and knowledge", in J. Archea and c. Eastman (eds.) *E. D. R. A. 2: Proceedings of Second Annual Environmental Design Research Association Conference*, Dowden, Hutchinson, and Ross, Stroudsburg, Penn., pp. 97-101.
- Appleyard, D., 1969a, "City Designers and the Pluralistic City", in L. Rodwin et al. (eds.) *Planning for Urban Growth and Regional Development*, MIT Press, Cambridge, Mass.
- Ardrey, R., 1967, *The Territorial Imperative*, Collins, London.
- Arnheim, Rudolf, 1971, *Entropy and Art: An Essay on Order and Disorder*, University of California Press, Berkeley.
- Arnheim, R., 1969, *Visual Thinking*, University of California Press, USA.
- Arnulf, L., 1981, *Structuralism in Architecture & Urban Planning*, Translated by Peter Green, Karl Kramer.
- Assi, Eman, Shafiq, 1998, *Interpretation of the Built Environment: Users Approach with Referencxe to Nablus as a Case Study*, unpublished PhD thesis in Architecture, Heriot-Watt University, Edinburgh College of Art, Faculty of Environmental Studies, Department of Architecture, Edinburgh.
- Bachelard, G., 1964, *The Poetics of Space*, New York, p. 185.
- Badcock, B., 1984, *Unfairly Structured Cities*, Basil Blackwell, Oxford.
- Balzac, Honore, 1961, *de. Illusions perdues*, ed. A. Adam. Garnier Freres, Paris.
- Barati, N., 1997, *Holistic Reading into the Structure of the Environment, Case Study of Tehran*, PhD Thesis, Edinburgh College of Art, Heriot-Watt University.
- Barrell, J., 1972, *The Idea of Landscape and the Sense of Place, 1730-1840*, Cambridge University Press, Cambridge.
- Barthes, R., 1968, *Element of Semiology*, trans. A. Lavers and C. Smith, Hill& Wang, New York.
- Bartlett, F., 1932, *Remembering: A Study in Experimental and Social Psychology*, Cambridge University Press, Cambridge.

- Baudelaire, Charles, 1961, *Les Fleurs du mal*, in *Oeuvres complètes*, NRF Gallimard, Bibliothèque de la Pléiade, Paris.
- "*Les Misérables par Victor Hugo*". Ibid.
  - *Le Peintre de la vie Moderne*. Ibid.
  - *Salon de 1859*. Ibid.
  - *Le Spleen de Paris*. Ibid.
- Benswessi, A. H., 1987, *A Study of the Concept of Identity, Towards an Architecture as A Harmonious Fabric*, PhD Thesis, University of Pennsylvania, USA.
- Berry, Brian J. L., 1965, "**Internal Structure of the City**", from a symposium, "Urban problems and Prospects," in *Law and Contemporary problems*, Vol. 30, No. 1, Winter 1965, pp. 111-119, published by the Duke University School of Law, Durham.
- Berry, B. J. L., 1978, "**Comparative urbanisation strategies**", in L. S. Bourne, and J. W. Simmons (eds.), *Systems of Cities, Readings on Structure, Growth and Policy*, Oxford University Press, New York, 502-510.
- Newmann,
- Berry, B.J. L., 1973, *The Human Consequences of Urbanisation*, Macmillan, London.
- Berry, B., 1970, "**Geography of the United States in the Year 2000**", in *Transactions of the Institute of British Geographers*, Vol. 51, pp. 1-53.
- Berry, B. J. L. et al., 1963, "**Commercial structure and commercial flight**", Research Paper, University of Chicago, No. 85.
- Best, R.H., 1964, *Land for New Towns*, Town & Country Planning Association, London.
- Bianca, S., 1975, *Architektur und Lebensform im Islamischen Stadtwesen*, Zurich.
- Bisheh, G.I., 1979, *The Mosque of the Prophet at Medinah throuout the First-century A.H. with Special Emphasis on the Umayyed Mosque*, Ph.D. thesis, University of Michigan.
- Bishop, J. and Fousham, J., 1973, "**Children's images of Harwich**", Working Paper, No. 3, Architectural Psychology Research Unit, Kingston Polytechnic.
- Bloomer, C. M., 1979, *Principles of Visual Perception*, The Herbert Press, USA.
- Blowers, A., 1973, "**The neighbourhood: exploration of a concept**", in *The City as a Social System*, The Open University, Social Sciences, block 2, pp. 49-94.
- Blumenfeld, Hans, 1964, "**Criteria for Urban Form**", from "The Urban Pattern" in *The Annals of the American Academy of political and social science*, Vol. 352, March 1964, Philadelphia, Pennsylvania.
- Blumer, M. (ed.) 1975, *Working Class Images of Society*, Routledge & Kegan Paul, London.
- Blumer, H., 1969, *Symbolic Interactionism*, Englewood Cliffs, Prentice Hall, NJ.



- Boal, F., 1969, "Territoriality on the Shankhill - Falls divide", Belfast, *Irish Geography*, 6, pp. 33-4, 41.
- Bogdanovic, 1975, "Symbols in the city and the city as symbol", *Ekistics*, 39.
- Boulding, K. E., 1956, *The Image*, University of Michigan Press, Ann Arbor.
- Boulding, K., 1956, *The Image: Knowledge in Life and Society*, University of Michigan, Ann Arbor.
- Bourne, Larry S., Ed., 1971, *Internal Structure of the City: Reading on Space and Environment*, Oxford University Press, New York.
- Bourne, L. S. (ed.), 1982, *Internal Structure of the City*, Oxford University Press, London.
- Briggs, A., 1970, "The sense of place, in Smithsonian Institute", in *The Fitness of Man's Environment*, Smithsonian Institute Press, Washington, pp. 77-98.
- Briggs, A., 1963, *Victorian Cities*, Odhams, London.
- Broadbent, G., Brunt, R. and Jenks, C., (eds.), 1980, *Sign, Symbols and Architecture*, J Wiley and Sons, New York.
- Broadbent, G., Brunt, R., and Liorens, T. (eds.), 1980, *Meaning and Behaviour in the Built Environment*, John Wiley and Sons, New York.
- Broady, M., 1968, *Planning for People*, National Council of Social Service, London.
- Bruner, J. S., 1957, "On Perceptual Readiness", *Psych. Rev.* 64, pp. 123-152.
- Buhl, Fr, 1936, "Al-Madina", *Encyclopaedia of Islam*, 1st ed. E.J.Brill, leiden, V.III..
- Burchard, J. and Bush-Brown, A., 1966, *The Architecture of America: A Social and Scultural History*, Little Brown, Boston.
- Burckhardt, John lewis, 1968 *Travels in Arabia*, Frank Cass and Company Limited, London,, (reprint of the 1829 edition).
- Burgess, J. A., 1974, "Stereotypes and urban images", *Area*, 6, 167-71.
- Burgess, R. G., 1984, *In the Field: An Introduction to Field Research*, Allen & Unwin, London.
- Burgess, J. and Gold, J., 1982, *Valued Environments*, Allen and Unwin, Sydney, Australia.
- Burton, I., 1963, "The quantitative revolution and theoretical geography", *Can. Geogr.*, 7, pp. 151-62.
- Burton. Richard F., 1964, *Personal Narrative of a Pilgrimage to Al-Medinah and Makkah*,



Dover Publications, Inc., New York (reprint of 1893 edition), V.I..

Buttimer, A. and Seamon, D. (ed.) 1980, *The Human Experience of Space and Place*, Croom Helm, London.

Canter, D., 1977, *The Psychology of Place*, Architectural Press, London.

Canter, D. and Striger, P. (ed.), 1975, *Environmental Interaction: Psychological Approaches to our Physical Surroundings*, Surrey University press, London.

Canter, D. V., 1975, *Distance Estimation in Greater London*, S. S. R. C. Final Report, University of Surrey.

Canter, D. V. (ed.), 1975, *Environmental Interaction*, Surrey University Press.

Carr, S. and schissler, D., 1969, "The city as a trip: perceptual selection and memory in the view from the road", *Envir. Behav.* 1, pp. 7-35.

Castells, M., 1977, *The Urban Question*, Edward Arnold, London.

Chermayeff, S. and Alexander, C., 1966, *Community and Privacy*, Penguin, London.

Chesterton, G. K., 1901, "A defence of detective stories", *Defendant*, pp. 158-9.

Chisholm, M., 1964, "Must we all live in south-east England? The location of new employment", *Geography*, 49, pp. 1-14.

Chisholm, M., 1966, *Geography and Economics*, Bell, London.

Classen, C., 1993, *World of Sense, Exploring the Senses in History and Cross Cultures*, Routledge and Kegan Paul Ltd, London.

**Community Attitudes Survey:** England, 1969, Research Studies, 9, for Royal Commission on Local Government in Scotland, H. M. S. O., London.

Cooper, C., 1974, "The house as symbol of the self", in J. Lang et al., (eds), *Designing for Human Behaviour*, Dowden, Hutchinson & Ross, Stroudsburg, pp. 130-46.

Cooper, C., 1972, "The house as symbol", *Design Envir.*, 3, pp. 30-7.

Craik, K. H., 1970, "Environmental psychology", *New Direct. Psychol.*, 4, pp. 1-121.

Cullen, G., 1961, *Townscape*, Architectural Press, London.

Daghistani, Abdal-Majeed Ismail, 1983, *Kingdom of Saudi Arabia, a Century of Progress*, Ministry of Information, Riyadh.

Dartmouth, R., Lady, 1972, *How do You Want to Live?*, A Report on the Human Habitat, H.M.S.O.

- Demus, O., 1948, "**Byzantine Mosaic Decoration**", London, p. 35.
- Dennis, W., 1951, "**Cultural and developmental factors in perception**", in R. R. Blake and G. V. Ramsey (eds.) *Perception: An Approach to Personality*, Ronald, New York, pp. 148-69.
- Detwyler, T. and Marcus, M.m 1972, *Urbanisation and Environment: The Physical Geography of the Contributors*, Belmont, Calif, Duxbury.
- Dickens, Charles, 1971, *Our Mutual Friend*, ed. Stephen Gill, Penguin Books, Harmondsworth.
- Dickinson, Robert E., 1951, *The West European City*, Routledge and Kegan Paul Ltd., and Humanities Press, Inc.
- Dostoevsky, Fyodor, 1975, *Crime and Punishment*, transl. Jesse Coulson, ed. George Bibian, Rv. ed. W. W. Norton, New York.
- Downs, R., 1970a, "**The Cognitive Structure of an urban Shopping Centre**", *Envir. Behav.*, 2, pp. 13-39.
- Downs, R., 1970b, "**Geographic Space Perception: Past Approaches and Future Prospects**", *Progr. Geogr.*, 2, pp. 65-108.
- Durrell, L., 1969, *Spirit of Place: Letters and Essays on Travel*, Faber and Faber, London.
- Eco, U., 1981, *The Role of the Reader: Explorations in the Semiotics of Text*, Hutchinson, London.
- Edelman, Murray, 1977, *Political Languages: Words That Succeed and Policies That Fail*, Academic Press, New York.
- Editors, 1954, "The Extension of the Prophet's Mosque at Medina", *The Islamic Review*, October.
- Eliade, M., 1963, *Patterns in Comparative Religion*, Cleveland and New York, p. 239.
- Eliade, Mircea, 1959, *Cosmos and History, The Myth of Eternal Return*, transl. Willard R. Trask, Harper and Row, New York.
- Eoin, O. C., 1996, *The Climatic Dwelling*, James & James Ltd., London.
- Esin, Emel, 1974, *Makkah the Blessed Madinah the Radiant*, 2nd. ed. Elek Books, London.
- Eysenck, M. W., 1984, *The Handbook of Cognitive Psychology*, Lawrence Erlbaum Associate Ltd.
- Faruki, K.A. *Islamic Jurisprudence*, Pakistan Publishing House, Karachi.
- Festinger, L., Schachter, S. and Back, K., 1950, *Social Pressures in Informal Groups*,

Stanford University Press, Stanford.

Fisher, Joseph L., 1967, "**Environmental Quality and Urban Living**", from *Planning 1967*, pp. 178-186, the American Society of Planning Officials, Chicago, Illinois.

Flavell, J., 1985, *Cognitive Development*, Prentice Hall, Inc.

Francescato, D. and Mebane, w., 1973, "**How citizens view two great cities: Milan and Rome**", in R. Downs and D. Stea (eds), *Image and Environment*, Aldine, Chicago, pp. 131-47.

Frank, L. K., 1948. *Society as the Patient*, Rutgers, New Brunswick.

Frankfort, H. and H. A., Wilson, J. A., and Jacobsen, T., 1949, *Before Philosophy*, Harmondsworth, p. 12. Also Norberg-Schulz, *Meaning in Western Architecture*, p. 428.

Freud, Sigmund, 1962, *Civilisation and its Discontents*, transl. and ed. James Strachey, W. W. Norton, New York.

Fried, M., 1963, "**Grieving for a lost home: psychological costs of relocation**", in L. J. Duhl(ed.), *The urban Condition*, Basic Books, New York.

GACDAR (Group of Arab Consultants for Development and Reconstruction), 1980, *Project No. 202*, Ministry of Municipal and Rural Affairs, Riyadh, Report No.4, 5, V.III, October.

Gans, H. J., 1972, *People and Plans*, Penguin, Harmondsworth.

Garling, Tommy, 1976, "**The Structural Analysis of Environmental Perception and Cognition**", in *Environment and Behavior*, Vol. 8 No. 3, September 1976. Sage Publications, Inc.

Gibson, E. J., 1969, *Principles of Perceptual Learning and Development*, Appleton-Century-Crofts, New York.

Gibson, J., 1979, *The Ecological Approach to Visual Perception*, Vision Research.

Giedion, S., 1964, *The Eternal present: The Beginnings of Architecture*, London.

Giedion, S., 1967, *Space, Time and Architecture*, Cambridge, Massachusettes, pp. 82ff.

Goethe, *Italienische Reise*, 8. October 1786.

Goodchild, B., 1974, "**Class differences in environmental perception**", in *Urban Stud.*, 11, pp. 157-69.

Goodey, B., 1971, "**Perception of the environment**", Occasional Paper, 17, Centre for urban and Regional Studies, University of Birmingham.

Goodey, B., 1974b, "**Regional and urban images in decision making and planning**", in

- J. Rees and P. Newby (eds), *Behavioural Perspectives in Geography*, Middlesex Polytechnic Monographs in Geography, No. 1, pp. 59-80.
- Goodey, B., 1974a, *Where You're At*, Penguin, Harmondsworth.
- Goodman, P., 1969, *New Reformation*, Random House, New York.
- Goudie, Andrew (1981) *The Human Impact: Man's Role in Environmental Change*. The MIT Press, Cambridge, Mass.
- Gould, Peter, and White, Rodney, 1974, *Mental Maps*, Enguin Books Ltd, Harmondsworth, Middlesex, England.
- Graves, R., 1959, *New Larousse Encyclopedia of Methodology*, Hamlyn, London, New York.
- Greenbie, B., 1988, "The landscape of Social Symbols", in *Environmental Aesthetics*, Cambridge University Press, Cambridge.
- Greetz, C., 1965, "The Impact of the Concept of Culture on the Concept of man", in J. Platt (ed.), *New Views on the nature of Man*, University of Chicago Press, Chicago.
- Groat, L., 1982, "Meaning in Post Modern Architecture: An Examination Using the Multiple Sorting Task", in *Journal of Environmental Psychology*, vol. 2, pp. 2-22.
- Grynberg, G., 1991, "The Theories of Henri Wallon: From Act to Thought", in *Human Development*, vol. 34, pp. 363-379.
- Hafiz, Ali, 1987, *Chapters from the History of Madina*, First Edition, Al Madina Printing and Publication Co., Jeddah.
- Hall, J. M., 1970, "Industry grows where the grass is greener", in *Area*, 3, pp. 40-6.
- Al-Harigi, Fahad, 1989, *The Relationship between the Prophet's Mosque and its Physical Environment*, unpublished D. phil dissertation, Department of Architecture, University of Edinburgh. March, 1989.
- Harman, H. H., 1960, *Modern Factor Analysis*, University of Chicago Press, Chicago.
- Harris, M., 1971, "Theory and synthesis in historical geography", in *Can. Geogr.*
- Harrison, J. A. and Sarre, P., 1975, "Personal construct theory in the measurement of environmental image", in *Envir. Behav.*, 7, pp.3-58.
- Harrison, J. and Howard, W., 1972, "The Role of meaning in the Urban Image", in *Envir. Behav.*, 4, pp.389-411.
- Hart, R. A. and Moore, G. T., 1973, "The development of spatial cognition: a review", in R. Downs and D. Stea (eds.), *Image and Environment*, Aldine, Chicago, pp.246-88.



- Harvey, D., 1975, "**The political economy of housing in advanced capitalist societies: the case of the United States**", in G. Gappert and H. M. Rose (eds.) *The Social Economy of Cities, Urban Affairs Review*, 9, Sage Publications.
- Harvey, D. W., 1973, *Social Justice and the City*, Arnold, London.
- Heathcote, R., 1965, *Back of Bourke: A Study of Land Approval and Settlement in Semi-Arid Australia*, University Press, Melbourne.
- Heidegger, 1969, *Die Kunst und der Raum*, St. Gallen, pp. 9ff.
- Heidegger, M., 1971, *Building Dwelling Thinking, in Poetry, Language and Thought*, Harper and Row, New York.
- Heidegger, 1957, *Hebel der Hansfreund*, Pfullingen, p. 13.
- Hellpach, W., 1965 (1911), *Geopsyche*, Stuttgart.
- Herbert, David T., and Thomas Colin J., 1990, *Cities in Space: City as Place*, David Fulton Publishers, London.
- Hershberger, R. & Cass, R., 1974, "**Predicting user responses to buildings**", in Carson, H. (ed.) *Man-Environment Interactions: proceedings of the Environmental Design Research Association*, University of Wisconsin - Milwaukee, Milwaukee.
- Hochberg, Julian E., 1964, *Perception*, in Lazarus, Richard S., Editor, 1964, *Foundations of Modern Psychology Series*, Prentice-Hall International, INC., London.
- Hodes, Robert, 1968, "**Aims and Methods of Scientific Research**", Occasional Paper No. 9, American Institute of Marxist Studies, New York, pp. 11-14.
- Hoover, Kenneth R., 1988, *The Elements of Social Scientific Thinking*, St. Martin's Press, Inc., New York.
- Hopkinson, R. G., 1973, The Evaluation of Visual Intrusion in Transport Situation, in Wilson, C. B. (ed), **Environmental Quality**, Scottish Academic Press Ltd., Edinburgh, Great Britain.
- Hull, C. L., 1943, *Principles of Behaviour*, Appleton-Century-Crofts, New York.
- Hull, C. L., 1952, *A Behaviour System*, Yale University Press, New Haven.
- Hull, C. L., 1951, *Essentials of Behaviour*, Appleton-Century-Crost, New York.
- Hussaini, S. W., 1980, *Islamic Environmental System Engineering*, The Macmillan Press Ltd., London.
- Ibn Sa'd, quoted by Creswell, C.B.E., 1979, *Early Muslim Architecture*, Hacker Art Books, New York, V.I. part I.



- Ilam, H.M., 1979, *Aspects of the Urban Geography of Mekkah and Al-Medina*, Saudi Arabia, Ph.D. thesis, Faculty of Social Sciences, University of Durham, Durham.
- Islami, S. Gh. Reza, 1998, *Endogenous Development: A Model for the Process of Man-environment Transaction*, unpublished D. Phil dissertation, Heriot-Watt University, Faculty of Environmental Studies, Edinburgh College of Art, Department of Architecture, Edinburgh
- Ittelson, W. H. 1978, (ed.) "**New Directions in Environmental Design**", Proceedings of the Ninth EDRA Conference, Tuscan, Arizona.
- Ittelson, W., Proshansky, H. M., Revlin, L. G., and Winkel, G. H., 1974, *An Introduction to Environmental Psychology*, Holt, Renhart & Winston, New York.
- Ittelson, W. H., (ed.) 1973, *Environment and Cognition*, Seminar Press, New York.
- Ittelson, W. H., 1960, *Visual Space Perception*, Springer, New York.
- Jackson, P. and Smith, S. J., 1984, *Exploring Social Geography*, George Allen and Unwin, London.
- Jakle, J. A., Brunn, s. and Roseman, C. C., 1976, *Human Spatial Behaviour: A Social Geography*, Duxbury, New York.
- James. Preston and Martin, Geoffrey (1981)*All Possible Worlds*. John Wily and Sons, New York.
- Jencks, C. and Baird, G., 1969, *Meaning in Architecture*, Barrie & Rockliff, USA.
- Johany, Ali D., 1982, "The Saudi Economy: Yesterday's Performance and Tomorrow's Prospects". in El Mallakh, Ragaie, and El Mallakh, Dorothea H. (eds), *Saudi Arabia, Energy, Developmental Planning and Industrialization*, Lexington Books, Lexington, Massachusetts and Toronto.
- Johnston, R. J., 1980, *City and Society: an Outline for Urban Geography*, Penguin, Harmondsworth.
- Juhansz, J., 1981, "**Christopher Alexander and the Language of Architecture**", Book Review, Journal of Environmental Psychology, No.1, pp.241-246.
- Kane, J. N. and Alexander, G. L., 1965, *Nicknames of Cities and States of the United States*, Scarecrow, New York.
- Kaplan, S., and Kaplan, R., 1981, **Cognition and Environment: Functioning in an Uncertain World**, Ulrich's, U.S.A.
- Kaplan, R. & Kaplan, S., 1989, *The Experience of Nature: A Psychological Perspective*, University Press, Cambridge.
- Karan, Bradlee, 1973, "**Public Opinion and the New Ohio Criminal Code**", The College

- of Wooster, Symposium on Public Opinion and the New Ohio Criminal Code, July 9-30.
- Katona, G., 1951, *Psychological Analysis of Economic Behaviour*, McGraw-Hill, New York.
- Kelly, G. A., 1955, *The Psychology of Personal Constructs*, Norton, New York.
- Kepes, G., 1966, *Sign Symbol, Image*, New York
- Key, Vladimir Orlando, Jr., 1961, *Public Opinion and American Democracy*, Knopf, New York.
- Khalil, Ahmed, A., 1994, *Muslim Cities As a Patern of Relationship: House-Mosqu Relationship*, unpublished D. Phil dissertation, Department of Architecture, Landscape Architecture, University of Edinburgh. February, 1994.
- Khan, Muhammad Muhsin, 1986, *The Translation of the Meanings of Sahih Al-Bukhari*, 6th Revised Edition, Vols. 1-5, 7-9, Kazi Publications, Lahore (Pakistan)
- Kirk, w., 1951, *Historical geography and the concept of the behavioural environment*, Indian Geogr. J., Silver Jubilee Edition, pp.152-60.
- Kitoni, S., 1988, *Cognition and Environmental Design*, MSc. Thesis in Urban Design, Edinburgh College of Art, Heriot-Watt University.
- Koffka, K., 1935, *Principles of Gestalt Psychology*, Kegan Paul, Tench, Trubner, New York.
- Kohler, W., 1947, *Gestalt Psychology*, Liveright, New York.
- Koing, K., 1964, *Analisi del Linguaggio Archittonico*, Liberia Editrice Fiorentina, Florence.
- Krampen, M., 1979, *Meaning in the Urban Environment*, Pion Limited, London.
- Kroeber & Kluckhohn, 1952, *Culture - A Critical Review of concepts and Definition*, Peabody Museum, Cambridge, Massachusetts.
- L'Orange, H. P., 1965, *Art Forms and Civic Life in the late Roman Empire*, Princeton.
- Lang, J., 1987, "Creating Architectural theory: The Role of the Behavioural Sciences" in *Environmental Design*, Van Nostrand Reinhold company, New York.
- Lang, J., 1988, "Symbolic Aesthetics in Architecture: Towards a Research Agenda", in Nasar, Jack L. (ed.) *Environmental Aesthetics*, Cambridge University press.
- Langer, S. K., 1953, *Feeling and Form*, Routledge & Kegan Paul, London.
- Lawrence, D. H., 1924, *Studies in Classic American Literature*, Martin Secker, London (1933 edition)

- Lazarus, Richard S., Editor, 1964, *Foundations of Modern Psychology Series*, Prentice-Hall International, INC., London.
- Le Corbusier, 1923, *Vers une Architecture*, Paris.
- Le Corbusier, 1927, *Vers une Architecture*, English edition, London, p. 31.
- Leach, E., 1976, *Culture and Communication: the Logic by which Symbols are Connected. An Introduction to the Use of Structuralism analysis in social Anthropology*, Cambridge university Press, Cambridge.
- Lee, T. R., 1957, "On the relation between the school journey and social and emotional adjustment in rural infant children", Br. J. educ. Psychol., 27, 101-114.
- Lee, T., 1963, "Psychology and living Space", Transactions of the Bartlett Society, Vol. 2.
- Lefebvre, Henri, 1971, *Everyday Life in the Modern World*, transl. Sacha Rabinovitch, Harper and Row, New York.
- Legates, Richard T., and Stout, Frederic, 1996, *The City Reader*, Routledge, London.
- Lenz-Romeiss, F., 1973, *The City: New Town or Home Town?*, Pall mall, London.
- Levine, M., and Schefner, J. M., 1981, *Fundamentals of Sensation and Perception*, Addeson-Wesley, London.
- Lewis, B., 1971, "Hadjj", *Encyclopaedia of Islam*, E.J. Brill, Leiden, vo. III.
- Lewis, G. M., 1962, "Changing emphasis in the description of the natural environment of the Great Plains area", Trans. Inst. Br. Geogr. 30, pp. 75-90.
- Ley, D., 1972, *The Black Inner City as a Frontier Outpost: Images and Behaviour of a North Philadelphia neighbourhood*, University Park, Pennsylvania, PhD dissertation.
- Lorenz, K. Z., 1966, *On Aggression*, Methuen, London.
- Lowenthal, D., 1961, "Geography, experience and imagination: towards a geographic epistemology", Ann. Ass. Am. Geogr., 51, pp. 241-60.
- Lowenthal, D. and Prince, H. C., 1964, "The English landscape", Geogr. Rev., 54.
- Lukashok, A. K. and Lynch, K., 1956, "Some childhood memories of the city", J. Am. Inst. Plann., 22, pp. 142-52.
- Lurie, A., 1966, *The Nowhere City*, Coward-McCann, New York.
- Lynch, K., 1960, *The Image of the City*, MIT Press, Masseurhussets.
- Lynch, Kevin, 1981, *A Theory of Good City Form*, The MIT, Cambridge.

- Madanipour, Ali, 1996, *Design of Urban Space: An Inquiry into a Socio-spatial Process*, John Wiley & Sons Ltd., England.
- Mahmassani, S. 1961, *Falsafat al-Tashri fi al-Islam: The Philosophy of Jurisprudence in Islam*, trans by F. J. Ziadeh, E. J. Brill, Leiden, (pp. 16-17, 109-114), cited from op.cit, Husaini, (p.17).
- Makki, Mohamed S., 1982, *Medina, Saudi Arabia, a Geographic Analysis of the City and Region*, Avebury Publishing Company, England.
- Maslow, A., 1954, *Motivation and Personality*, harper & Row Publishers, Inc. New York.
- Maudoodi, A. A., 1966, "Abu Hanyfah and Abu Yusuf", in *A History of Muslim Philosophy*, vol. I, pp. 688-703.
- Maurer, R. and Baxter, J. C., 1972, **Images of the neighbourhood and city among black-, Anglo-, and Mexican-American children**, *Envir. Behav.*, 4, pp. 351-88.
- McKinder, H. J., 1935, "The progress of geography in the field and in the study during the reign of H. M. King George V", *Geogr. J.*, 86, pp. 1-12.
- Mecci, Mohammed S. I., 1979, *An Aalysis of the Effects of Modern Pilgrimage on the Urban Geography of Medina*, Ph.D. thesis, Department of Geography, University of Durham.
- Mercer, C., 1975, *Living in Cities*, Penguin Books, harmondsworth.
- Merton, R. K., 1948, "The social psychology of housing", in W. Dennis (ed.), *Current Trends in Social Psychology*, University of Pittsburgh Press, Pittsburg, No. 2.
- Michaelson, W., 1970, *Man and his Urban Environment: A Sociological Approach*, Addison-Wesley, Reading, Mass.
- Michon, J. L., 1980, *Le Soufi marocain Ahmad Ibn`Ajiba (1746-1809) et son Mi'raj*, L'invocation du nom divin, Paris.
- Minai, A., 1989, *Design as Aesthetic Communication: Structuring Random-order; Deconstruction of Formal Rationality*, Peter Lang Publishing, New York.
- Moretti, L., 1974, "Structures and Sequences of spaces", in *Oppositions: 4* Institute for Architecture and urban studies, Witterborn Art Books, Inc, pp. 123-139.
- Morris, D., 1969, *The Naked Ape*, McGraw-Hill, New York.
- Mumford, L., 1961, *The City in History*, Seckor & Warburg, London.
- Muslim, 1976, (translated to English by Siddiqi, Abdul Hamid), *Saĥīĥ Muslim*, Sh. Muhammad Ashraf, Lahore, V.I.



- Nairn, I., 1957, *Counter Attack against Subtopia*, Architectural Press, London.
- Nasar, J. L., 1998, *The Evaluative Image of the City*, Sage Publications Inc, U.S.A.
- Nash, Roderick (ed. 1976) *The American Environment: Reading in the History of Conservation*. Addison-Wesley Publishing Company, Reading, Mass.
- Nasr, S. H. 1972, *Sufi Essays*, London, p. 51.
- Neisser, U, 1976, *Cognition and Reality: Principles and Implications of Cognitive Psychology*, W. H. Freeman, Co. USA.
- Neisser, U., 1967, *Cognitive Psychology*, Appleton-Century-Crofts, New York.
- Nelson, Howard J., 1969, "The form and Structure of Cities: Urban Growth Patterns", from the Journal of Geography, Vol. LXVIII, No. 4, April 1969, pp. 198.207.
- Newman, O., 1972, *Defensible Space*, Architectural Press, London.
- Nohl, W., 1988, "Open Space in Cities: In Search of a New Aesthetic", in *Environmental Aesthetics*, Cambridge University Press, Cambridge.
- Norberg-Schulz, Christian, 1984, *Genius-Loci, Towards a Phenomenology of Architecture*, Rizzoli International Publication, INC., New York.
- Norberg-Schulz, C., 1971, *Existence, Space and Architecture*, Studio Vista London, Great Britain.
- Organisation of Islamic Capitals and Cities, 1997, *The Basis and Criteria of Classifying and Preserving the Islamic Heritage Buildings and Cities*, The Islamic Republic of Iran 16-18 Safar 1418 H (21-23 June 1997 AD).
- Orleans, P., 1973, "Differential cognition of urban residents: effects of social scale on mapping", in R. Downs and D. Stea (eds.) *Image and Environment*, Aldine, Chicago.
- Osgood, C., Suci, G. J. and Tannenbau P. H., 1957, *The Measurement of Meaning*, University of Illinois Press, Urbana.
- Osgood, C., May, W. and Miron, M., 1975, *Cross-Cultural Universals of Affective Meaning*, University of Illinois Press, Urbana.
- Panofsky, E., 1951, *Gothic Architecture and Scolasticism*, Latrobe.
- Pasternak, B., 1958, *Doctor Zhivago*, Collins, London.
- Philby, H. STJ. B., 1946, *A Pilgrim in Arabia*, Robert Hale Limited, London,.
- Piaget, J. and Inhelder, B., 1956, *The Childs Conception of Space*, Routledge and Kegan Paul, London.



- Piaget, J., 1977, *The Development of Thought, Equilibration of Cognitive structures*, Viking, New York.
- Piaget, J., 1971, *Structuralism*, Translated by Chaninah Maschler, Routledge & Kegan Paul, London.
- Piaget, J., and Inhelder, B., 1948, *The Child's Conception of Space*, W.W. Norton, New York.
- Piche, D., 1977, *The Geographical Understanding of Children aged 5 to 8 years*, unpublished doctoral thesis, University of London.
- Pike, Burton, 1981, *The Image of the City in Modern Literature*, Princeton University Press.
- Pocock, Douglas, and Hudson, Ray, 1978, *Images of the Urban Environment*, The Macmillan Press Ltd., London and Basingstoke.
- Pred, A., 1967, *Behaviour and location: part I. Lund Studies in Geography*, series B, 27, Lund, Gleerup.
- Proshansky, H. M., Fabian, A. K. & kaminoff, R., 1983, "Place-Identity: Physical World Socialisation of the Self", *Journal of Environmental Psychology*, 3, pp. 57-83.
- Proshansky, H. M., 1972, *Methodology in environmental psychology: problems and issues*, *Hum. Fact.*, 14, pp. 451-60.
- Raban, J., 1974, *Soft City*, Hamilton, London.
- Radner, Daisie, and Radner, Michael, 1982, *Science and Unreason*, Belmont, Wadsworth, California.
- Rapoport et al., 1979, "An Approach to Designing Third World Environment", in *Third World Planning Review*, Vol., 1, pp. 65-77.
- Rapoport, A., *The Meaning of the Built Environment: A Non-Verbal Communication Approach*, (updated ed.), Tucson: University of Arizona Press.
- Rapoport, A., 1977, *Human Aspects of Urban Form*, Pergamon Press, London.
- Rapoport, A., 1969, *House Form and Culture*, Foundations of Cultural Geography Series, Englewood Cliffs, Prentice-Hall Inc., New Jersey.
- Rapoport, A., 1974, *Conflict in man-Made Environment*, Penguin, Harmondsworth.
- Reiser, R. L., 1972, "Urban spatial images: an appraisal of the choice of respondents and measurement situation", *Discussion Papers in Geography*, No. 42, Graduate School of Geography, London School of Economics, London.
- Relph, E., 1976, *Place and Placelessness*, Pion, London.

- Rose, D., 1968, "**Culture and Cognition: Some Problems and a Suggestion**", *Anthrop. Quarterly*, vol.41, No. 1, pp. 9-28.
- Royce, J., 1983, *The Spirit of Modern Philosophy: An Essay in the Form of Lectures*, Constable, New York.
- Rudofsky, B., 1969, *Streets for People: A Primer for Americans*, Doubleday, New York.
- Rutter, Eldon, 1928, *The Holy Cities of Arabia*, G.P.Putnam's Sons Ltd., London and New York, V.II..
- Rykwert, J., 1964, *Architecture, in Man The Artist*, Sir Gerald Barry McDonald Co. Ltd.
- Rykwert, Joseph, 1976, *The idea of a town: The Anthropology of Urban Form in Rome, Italy and the Ancient World*, Princeton: Princeton University Press,
- Saarinen, T., Sell, J. A. and Husband, E., 1982, "**Environmental perception: international developments progress**" in *Human Geography*, 6, pp. 515-546.
- Saarinen, T. F., 1966, "**Perception of drought hazard on the Great Plains**", Research paper, 106, Department of Geography, University of Chicago.
- Saarinen, T. F., 1969, "**Perception of environment**", resource Paper, 5, Association of American Geographers, Commission on College Geography.
- Santayana, g., 1896, *The Sense of Beauty*, Dove, New York.
- Saunders, P., 1981, *Social Theory and the Urban Question*, Hutchinson, London.
- Schnore, Leo F., 1966, "**The City as a Social Organism**", from *Urban Affairs Quarterly*, Volume 1, No. 5, March 1966, pp, 58.69.
- Scully, V., 1962, *The Earth, the Temple and the Gods*, New Haven, p. 9.
- Seamon, D., 1979, *A Geography of the Lifeworld: Movement, Rest and Encounter*, Croom Helm, London.
- Seamon, D., 1985, Heidegger "**Thinking and Christopher Alexander's Pattern Language**", paper in session "Experiential Perspectives on Place", Environmental Conference: EDRA 16, 10-15 June 1985, New York City.
- Searles, H. F., 1961, "**The role of the non-human environment**", *Landscape*, 11, pp. 31-4.
- Serjeant, R. B., Ed., 1980, *The Islamic City*, Selected papers from the colloquium held at the Middle East Centre, Faculty of Oriental Studies, Cambridge, United Kingdom, from 19 to 23 July 1976, published in 1980 by the United Nations, Paris.
- Sewell, W. R. Derrick, 1973, The Role of Perceptions of Professionals in Environmental Decision-Making, in Wilson, C. B. (ed), *Environmental Quality*, Scottish Academic Press

Ltd., Edinburgh, Great Britain.

Sharp, T., 1968, *Town and Townscape*, Murray, London.

Shore, Bradd, 1996, *Culture in Mind (Cognition, Culture and the Problem of Meaning)*, Oxford University Press.

Sime, D., 1986, "Creating Places or designing Spaces", *Journal of Environmental Psychology*, Vol. 6, pp. 49-63.

Simon, H. A., 1957, *Models of man: Social and Rational*, Wiley, New York.

Skinner, B. F., 1953, *Science and Human Behaviour*, Macmillan, London.

Smith, P. F., 1974a, "Familiarity breeds contentment", *The Planner*, pp. 901-4.

Smith, P., 1974, *The Dynamics of Urbanism*, Hutchinson Educational Ltd, London.

Smith, P. F., 1974b, "Human rights in architecture", *The Planner*, pp. 953-5.

Snider, J. G. and Osgood, C. E. (eds.) 1969, *The Semantic Differential Techniques*, Aldine, Chicago.

Sommer, R., 1972, *Design Awareness*, Rhinehart, San Francisco.

Sommer, R., 1969, *Personal Space: The Behavioural Basis of Design*, Prentice-Hall, Englewood Cliffs.

Spencer, D. and Lloyd, J., 1974, "The Small Heath schools session: metal maps of routes from home to school", Working papers, 24, Centre for urban & Regional Studies, University of Birmingham.

Steinitz, C., 1968, "Meaning and congruence of urban form and activity", *Am. Inst. Plann.*, 34, pp. 2333-48.

Summerson, J., 1964, *The Classical language of Architecture*, Methuen, London.

*The Holy Qur'ān*, 1938, Chapter III, verses 96 and 97, translated into English by Ali, Abdallah Yousuf, 3rd ed., Reprinted by Imam Muhammad b. Sa'ūd University, Riyadh.

Thiels, P., 1962, "A sequence-experience notion for architecture and urban spaces", *Tn. Plann. Rev.*, 33, pp. 33-52.

Thorns, D. C., 1972, *Suburbia*, MacGibbon and Kee, London.

Toffler, A., 1970, *Future Shock*, Bodley head, London.

Tolman, E. C., 1932, *Purposive Behaviour in Animals and Man*, Appleton-Century-Crofts, new York.

- Tolman, E., C., 1948, "**Cognitive maps in reats and men**", Psychol. Rev., 55, pp. 189-208.
- Tolman, E., C., 1963, "**Principles of purposive behaviour**", in S. Kock (ed.), *Psychology: Study of a Science*, vol. 5, MacGraw-Hill, New York.
- Tolman, E. C., 1952, "**A cognition - motivation model**", Pscyol. Rev., 59, pp. 389-400.
- Toynbee, Arnold, 1970, *Cities on the Move*, Oxford University Press, New York and London.
- Trier, Irminul, 1941, "**Westfälische Forschungen**", IV, Trier, First, 1940, Nachrichten von der Gesellschaft der Wissenschaften zu Gottingen, phil. hist. Klasse IV, NF III. 4.
- Trowbridge, C. C., 1912, "**On fundamental methods of orientation and imaginary maps**", Science, N. Y., 38, pp. 888-97.
- Tuan, YI-FU, 1977, *Space and Place*, Edward Arnold, London.
- Tuan, YI-FU, 1974, *Topophilia: A Study of Environmental Perception, Attitudes, and Values*, Englewood Cliffs, New Jersey: Prentice-Hall Inc.
- Tuan, Y. F., 1971, "**Man and nature**", Association of American Geographers, Resource Paper, 10, Commission on College Geography.
- Tuan, Y. F., 1972, "**Environmental psychology: a review**", Geogr. Rev., 62, pp. 245-51.
- Ujam, F. A., 1987, *Ecology, Culture, and Cognition*, PhD Thesis in Architecture, Edinburgh College of Art, Heriot-Watt University.
- Venturi, R., 1966, *Complexity and contradiction in Architecture*, New York Museum of Art, New York.
- Vernon, Raymond, 1962, *The Myth and Reality of Our Urban Problems*, Cambridge, Mass; Harvard University Press.
- Wagner, Philip L., 1960, *The Human Use of the Earth*, The Free Press, the Macmillan Company, a Subsidiary of Crowell Collier and Macmillan, Inc., New York.
- Walmsley, D. J., 1988, *Urban living: the Individual in the City*, Longman, Harlow.
- Warr, P. B. and Knapper, C., 1968, *The Perception of People and Events*, Wiley, London.
- Wavell, A.J.B., 1912, *A Modern Pilgrim in Mecca and a Seige in Sanaa*, Constable and Company Ltd., London.
- Watson, J. B., 1919, *Psychology from the Standpoint of a Behaviourist*, Lippincott, Philadelphia.
- Watt, Ian, 1957, *The Rise of the Novel*, University of California Press, Berkeley.



- Webber, M., 1964, "Culture, territoriality and the elastic mile", Pap. Proc. Reg. Sc. Ass., 13, pp. 59-70.
- Webber, M. M., 1963, *Explorations into urban Structure*, Philadelphia.
- Wheatley, P., 1971, *The Pivot of Four Quarters*, University of Edinburgh Press, Edinburgh.
- Whitman, Cedric, 1958, *Homer and the Homeric Tradition*, W. W. Norton, New York.
- Whitman, Walt, 1958, "Crossing Brooklyn Ferry" in *Leaves of Grass and Selected Prose*, ed. Sculley Bradley, Rinehart, New York.
- Whorf, B., 1956, *Language, Thought, and Reality*, MIT Press, USA.
- Whyte, W. H., 1957, *The Organisation Man*, Anchor Books, New York.
- Wilding, J., 1982, *Perception: Form Sense to Object*, Hutchinson Ltd, London, Sydney.
- William L. Thomas jr. (ed. 1956) *Man's Role in Changing the Face of the Earth*, two volumes. University of Chicago Press, Chicago.
- Williams, S. H., 1954, "Urban aesthetics", Tn. Plann. Rev., 25, pp. 95-113.
- Wilson, C. B., Ed., 1973, *Environmental Quality*, Scottish Academic Press Ltd., Edinburgh.
- Winder, R.B., 1986, "Al-Madina", *Encyclopaedia of Islam*, E.J. Brill, leiden, V.V..
- Wolpert, J., 1963, "The decision process in a spatial context", Ann. Ass. Am. Geogr..
- Wood, W., 1970, "Perception studies in geography", Trans. Inst. Br. Geogr., 50.
- Ylivsaker, P., 1971, *Old Cities and New Towns*, Alvin Schwarz, London.
- Zola, Emile, 1954, *Germinal*, transl. Leonard Tancock, Penguin Books, Harmondsworth.

### ARABIC REFERENCES:

- Āl al-Shyakh, 'Abdullah b. Ḥasan, 1984, *Fatḥ al-Madjāl, sharḥ Kitāb al-Tawhīd*, al-Maktab al-Ta'lymī, al-Sa'ūdī, Rabat, Morocco.
- al-'Aiyāshī, Ibrāhīm, 1994, "*Al-Madinah bayn al-Māḍī wal-Ḥādīr*", (*Al-Madinah between Past and Present*), Maktabat al-Thaqāfah, Second Edition, Al-Madinah Al-Munawrah.
- al-Anṣārī, 'Abd al-Ḳadūs, 1985, "*Athār Al-Madinah Al-Munawarah*", (*Antiquities of Al-Madinah Al-Munawarah*), al-Maktabah al-'Ailmiyah al-Tidjāriyah, Forth Edition, Al-Madinah Al-Munawarah.



- al-Halāwī, M.A., (without date), *Dalā al-Ħādī al-Kāmil Fī Manāṣik al-Ħādī Wa al-'Umrah*, Maktabat al-Ḳurān, Cairo.
- al-Hathlul, Saleh, A., 1994, *Al-Madinah Al-Arabiyyah Al-Islamiyyah (Arabic-Islamic City)*, Dar Al-Sahan, Al-Riyadh.
- al-Khaḍrāwī, Dr Muḥamad, 1982, "*Al-Madinah fi al-'Aṣr al-Djāhilī*", (*Al-Madinah in the Ignorance Era*), 'Ulum al-Ḳurān, First Edition, Dimashq.
- al-Nadjār, Muḥamad, 1981, "*Akḥbār Madinat al-Rasūl*", (*Records of the City of the Prophet*), Maktabat al-Thaḳāfah, Third Edition, Makkah.
- al-Rūmī, Muḥammad b. Khid'r, 1972, al-Tuḥfa, al-Laṭyfa Fī 'Amārt al-Masdjīd Wa Sūr al-Madina al-Sharīfa, in al-Djāsir, Ḥamad, *Rasāl Fī Tārykh al-Madina*, Dār al-Yamāma, Riyadh.
- al-Samhūdi, 1981, *Wafa al-Wafa*, 3rd. ed. Dār Iḥyā' al-Turāth al-'Araby, Beirut, V.I..
- al-Sāmūrā, Khalīl, 1984, "*al-Mazāhir al-Ħādīriyyah fi 'Aṣr al-Nubuwwah*", (*The Urban Characteristics of Al-Madinah Al-Monawwarah in the Era of the Prophet*), Maṭba'at al-Zahrā, First Print, al-Mūṣil.
- al-Wakīl, Dr Muḥamad, 1986, "*Al-Madinah Al-Munawrah 'Aāṣimat al-Islam al-Ula*", (*Al-Madinah Al-Monawwarah (the first capital of Islam)*), Dār al-Mudjtama', First Print, Djidah.
- al-Wakīl, Dr Muḥamad, 1986, "*Al-Madinah Al-Munawrah Yathrib ḳabl al-Islam*", (*Al-Madinah Al-Munawrah (Yathrib before Islam)*), Dār al-Mudjtama', First Print, Djidah.
- Badr, Dr 'Abdul-Bāsiṭ, 1993, "*al-Tārikh al-Shānil Il-Madinah al-Munawrah*", (*The Comprehensive History of Al-Madinah Al-Munawrah*), First Part, First Edition, Al-Madinah Al-Munawrah.
- Broadhurst, R.J.C. (trans.), 1952, *The Travels of Ibn Jubayer*, Jonathan Cape, London.
- Ħāfiṣ, 'Alī, 1984, *Fuṣūl Min TāriKh al-Madina*, 2nd. ed., Sharikat al-Madina al-Munwara liṭiba'a Wa al-Nashir, Jeddah.
- Ibn Mūsa, 'Aalī, 1972, Waṣf al-Madina al-Munawara, in al-Djāsir, Ḥamad, *Rasāl Fī Tārykh al-Madina*, Dār al-Yamāma, Riyadh.
- Ibn Shabah (annotated and edited by Shaltūt, F.M.), 1979, *TāriKh al-madina al-Munwara*, (*waḳf*, published for charity) by al-Sayd Ḥabyb Maḥmūd Aḥmad, Al-Madina, V.I..
- Kisam al-Ma'Lumāt, 1988, "Fī al-Yawm al-Waṭanī li al-Mamlaka", *Iqraa*, No. 686, September 22nd.
- Ibn Khaldūn, 1984, *Muḳadimat Ibn Khaldūn*, 5th ed., Dār al-Ḳalam, Beirut.
- Ministry of Planning, 1980, *Third Development Plan (1980-1985)*, Ministry of Planning,

Riyadh.

Ministry of Information,, 1979, *Saudi Arabia and its place in the World*, Dar Al Shorouq, Jeddah, and Three Continents Publishers, Lausanne, Switzerland.

Mostafa S.L., 1981, *Al Madina Al Munawwara*, Dar Al Nahda Al Arabiya, Beirut.

Municipality of Al-Madina, 1987, *Dirāsāt al-Niḡāḡ al-'Umrānī*, Municipality of Al-Madina, Al-Madina.

Mustafah, Ahmad, F., 1986, *Al-Kiyam Al-Islamiyah Fi Al-'Umran Al-Mu'asir (Islamic Values in Contemporary Architecture)*, Bablie Lecture, Riyadh.

Rif'at, Ibrahim, (without date), *Mirāt al-Ĥaramayn*, Dār al-Ma'arif , Beirut, V.I..

Sābiḡ, al-Syid,, 1985, *Fiḡah al-Suna*, 7th ed., Dār al-kitāb al-'Arabī, Beirut V.I..

Shurrāb, M. H., 1994, *Al-Madinah Al-Nabawiyah (The Prophet's City)*, Vol. I, Adar Al-Shamiyah, Beirut.

# GLOSSARY

## Glossary of English Terms

The glossary has been prepared by the author of the book and is intended to provide a general guide to the meaning of the terms used in the book.

**Abolition** - The act of abolishing or the state of being abolished.

**Capitalism** - A social and economic system characterized by private ownership of the means of production and the operation of these means for profit. It is based on the free market and competition. Capitalism is a system of economic organization in which the means of production are privately owned and operated for profit. It is based on the free market and competition. Capitalism is a system of economic organization in which the means of production are privately owned and operated for profit. It is based on the free market and competition.

**Capitalist** - One who owns or controls the means of production in a capitalist system.

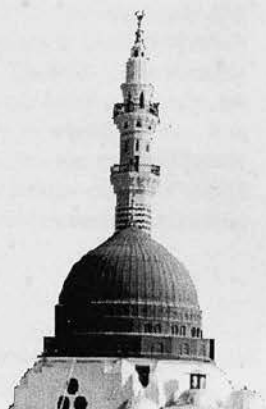
**Contract** - A legally binding agreement between two or more parties. It is a promise or understanding that is enforceable by law. A contract is a legally binding agreement between two or more parties. It is a promise or understanding that is enforceable by law. A contract is a legally binding agreement between two or more parties. It is a promise or understanding that is enforceable by law.

**Capital** - The sum of money or assets that is used to produce more capital. It is the wealth that is used to generate more wealth. Capital is the sum of money or assets that is used to produce more capital. It is the wealth that is used to generate more wealth. Capital is the sum of money or assets that is used to produce more capital. It is the wealth that is used to generate more wealth.

**Industrial** - Relating to the industry or the process of manufacturing goods. It is the sector of the economy that produces goods and services. Industrial is relating to the industry or the process of manufacturing goods. It is the sector of the economy that produces goods and services. Industrial is relating to the industry or the process of manufacturing goods. It is the sector of the economy that produces goods and services.

**Trade** - The exchange of goods and services between individuals or nations. It is the process of buying and selling. Trade is the exchange of goods and services between individuals or nations. It is the process of buying and selling. Trade is the exchange of goods and services between individuals or nations. It is the process of buying and selling.

This book is published by the author. The author is the only person responsible for the content of this book.



## Glossary of English Terms<sup>1</sup>

The thesis has used frequently a number of concepts and terms which are thoroughly explained in the main context of the thesis and some of it are briefed in the followings:

<b>Artifact</b>	Something made by human effort or intervention.
<b>Cognition</b>	As broadly defined by many psychologists and used in this thesis, the inner mental processes of perception, memory, and information processing by which the individual acquires information, makes plans, and solves problems. Cognition in the narrow sense is often considered to entail at least some conscious thought and to be uniquely human, but the possibility of conscious experiences on the part of the more intelligent animals cannot be discounted.
<b>Cognitive Psychology</b>	The scientific study of cognition.
<b>Concept</b>	Concepts are not iconic: they do not look like, sound like, and so on, what they signify. They are individuated sets of functional properties of objects or events that explain particular phenomena of communication. Herein, images connote structural properties, but concepts connote functional properties.
<b>Culture</b>	The sum of all the artifacts, behaviour, institutions, and mental concepts transmitted by learning among members of a society, and the holistic patterns they form. In the human beings the culture of each society is characterized by some traits (culturgens) that are general to the whole species and others that are idiosyncratic. The transmission also entails cognition, which loads the traits with meaning and typically but not invariably labels them with words and other symbols that are then manipulated in a language to create complex new messages. It is also used in its historical context to refer to knowledge, productivity and way of living of a certain civilization.
<b>Description</b>	It is a phase for studying of, for example, patterned ways different subsocietal segments of a community use the city, its facilities and its services. the descriptive and explanatory stages are seen as a pre-analysis or preprocessing phase prior to the development of a system's approach and structural approach, which would come into play in the simulation stage of research and development and eventually in testing planning and policy proposals in the evaluation stage.
<b>Design</b>	In system view, a design consist of a 'system' of decisions. this means that it has properties that none of its parts do, and its parts acquire properties from the design that they would not otherwise have. Therefore, it is possible to have a feasible design none of whose elements, considered separately, are feasible. Moreover, design tells us about the society in which we live. It is a process of representation. It represents political, economic, cultural power and values. Designs , as cultural products, have meanings encoded within them which are decoded by producers, advertisers and consumers according to their own cultural codes.

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<sup>1</sup> These Terms derived from Lumsden, Charles J., and Wilson, Edward O., 1981, *Genes, Mind, and Culture, The Coevolutionary Process*, Harvard University Press, Cambridge, USA., pp. 366-383.

<b>Development</b>	Development is a process in which individuals or societies increase their abilities and desires to satisfy their own needs and those of others. It is much more a matter of learning than of earning. It is better reflected in quality of life than is standard of living.
<b>Genotype</b>	The genetic constitution of an individual organism, designated with reference to either a single trait or a set of traits (Contrast with Phenotype).
<b>Growth</b>	Growth is a change in size or number. It can be negative or positive. Organisms can increase or decrease in size, and populations can increase or decrease in number. Economic growth, therefore, refers either to a change in the size of an economy (e.g. its GNP) or a change in measure of its performance (e.g. per capita income). Growth usually occurs without choice in most biological systems. Physical or economic growth is necessary, if not sufficient, for development.
<b>Holism</b>	The method of explanation of complex systems, and the philosophy motivating it, that includes not just the properties of the components of the system but also the patterns and even the history of their relationships and the manner in which they are integrated to cause the system to function as a distinct, superordinate entity. Extreme holism eschews any meaningful connections between superordinate entities and their components.
<b>Image</b>	'Image' are individuated sets of structural properties and relationships between them to which subjects respond. Whereas, 'images' help us 'describe', concepts help us 'explain'. Herein, images connote structural properties, but concepts connote functional properties. Therefore, an image is an imitation or a reproduction or a similitude of something.
<b>Knowledge</b>	In a three-dimensional spiral the origin and end are in the opposite pole of a central axis of consciousness and its 'end' is not the second but the duplication. There is a third element keeping this dual picture in mind: 'relation' (process of production in artificial domain). by saying that, the distance between subject and object can be seen as knowledge.
<b>Knowledge structure</b>	Any set of linked nodes in long term memory, from a single node to a schema to the entire contents of long term memory. Some knowledge structures can be mapped onto culturgen and in many cases are identical with them.
<b>Learning</b>	Behaviour that is modified according to an organism's experience.
<b>Long term memory (secondary memory)</b>	The storage system of the brain in which information is retained for long periods of time, often for the life of the individual. (Contrasting with Short term memory).
<b>Meaning</b>	The pattern of relationships between one symbol and all others.
<b>Perception</b>	The psychological process of receiving and recognizing cues from the environment. The environment includes both the outside worlds and the internal physiological state of the organism (See also Cognition).
<b>Phenotype</b>	The observable properties of a trait or set of traits of individual.
<b>Psychology</b>	The scientific study of behaviour, with emphasis on the traits and capacities that are peculiar to human beings, or at least most highly developed in them.



<b>Schema (plural): schemata</b>	A substantial, often functional fragment of long term memory. Schema is a frequently used but vaguely defined term of cognitive and developmental psychology. It has two general meanings. The first is a large fragment of the knowledge or symbol structure in the mind. The individual refers to schemata in reflection and decision making. The word schema, and in particular the expression sensori-motor schema, acquired a very explicit connotation of a plan of action and of knowledge that relates input stimuli to decisions that activate behavioural responses. (See also Concept, Knowledge structure, Symbol).
<b>Short term memory</b>	The storage system in which information is retained for at most about fifteen seconds without rehearsal and in amounts not exceeding about seven symbols. (See Long term memory.)
<b>Simulation</b>	Simulation is the development of a model capable of reproducing, for example, activity patterns. Simulation encounters formidable problems in projecting activities into the future. Even simply redistributing the present population to a rearranged spatial structure of built environment poses some kinds of uncertainties in connection with moving behaviour.
<b>Symbol</b>	A 'symbol' is something that stands for something else. It may do this as the result of an association, a convention, or even an accident. A 'symbol' is the result of a cognitive process whereby an object acquires a connotation beyond its instrumental use. an 'object' may be ban environmental or a person as well as a material artifact (a product). Its meanings are derived from what an observer imputes to them. A 'sign' in contrast, is a conventional figure or device that stands for something else in a literal rather than an abstract sense. The symbol is also known as the basic unit of all human behaviour and civilization. Human behaviour is symbolic behaviour; symbolic behaviour is human behaviour. The symbol is the universe of humanity. A symbol may be defined as a thing the value or meaning of which is acknowledged by those who use it. The term <i>symbol</i> is also used in a less specialized manner in much of anthropology, linguistics, psychology, and psychoanalysis to denote some element or feature used in communication. it is not completely arbitrary in form but is chosen to be freighted with meaning and significance for the particular culture that incorporates it.
<b>Territory</b>	An area occupied more or less exclusively by an organism or group of organisms by means of repulsion through overt defense.
<b>Tradition</b>	Tradition is as a significant source for realizing the design both as a problem solving process and a creative action. Tradition is always young, fresh and new; not a defence of the old, the ancient, or the antique. A definition from Oxford English Dictionary refers to a significant point in the meaning of tradition which emphasis on the principle of transmission and indicates: "Tradition (Lat. tradition, -onem): 4. The action of transmitting or 'handing down', or fact of being handed down, from one to another, or from generation to generation; transmission of statements, beliefs, rules, customs, or the like, especially by word of mouth or by practice without writing".
<b>Transformation</b>	Time and change appear to be increasingly important dimensions for explaining transformation. Biological theories have advanced beyond the simple finite informational concept of cybernetics towards 'structured information' or symbolic concepts whose models are to be found in structural linguistics, anthropology, and mathematics. It appears to be precisely through the transmission of such non-deterministic but 'unfoldable' symbolic structures that living organisms retain their stable forms yet participate in a gradual evolution.

Glossary of Non - English Terms (Arabic)<sup>2</sup>

al- <i>Adhān</i>	The call to prayer.
<i>Ahl al-Sunnah</i>	Lit. "people of established way or path"; a term referring to the majority of Muslims who follow in the footsteps of the holy prophet (pbuh).
<i>Al al-Bayit</i>	The family of the Prophet Muhammad; the wives of the prophet.
Al-Masdjid Al-Harām	the Holy Mosque (in Makkah); the Inviolable Place of Worship (in Makkah).
Al-Masdjid Al-Nabawī	The Prophet's Mosque (in Al-Madinah).
al-Anṣār	Auxiliaries; Al-Madinah followers of the Prophet Muḥammad (pbuh) who supported him after the Hidjrah.
Aṭam (pl. Ūṭum)	Man-made heights for defense purposes; the word <i>aṭam</i> is Hebrew and means walls without windows from outside. In Arabic it means high buildings.
al- <i>Athar</i>	A saying, ruling or tradition of the prophet's Companions & their students.
<i>Ayah</i> (from the <i>Ḳurʿān</i> )	a (Ḳurʿānic) verse.
Bāb (pl. Abwāb)	Gate.
Dār (pl. Dur)	House.
Djāhiliyyah	The pre-Islamic period; pre-Islamic paganism.
Fard	Obligatory duty.
al-Fiḳh	Islamic jurisprudence; the understanding (and application) of Islamic divine law.
Ḥadith	(Saying, actions, or approval of the prophet) considered the second authoritative source of Islamic Law next to the holly <i>Ḳurʿān</i> .
al-Ḥadj	One of five Pillars of Islam ordained on all adult Muslims-- who are sound in mind, physically fit and economically able--once in a lifetime, the Pilgrimage taking place to the Holy Ka'bah in Makkah on specific days of Dhul-Ḥidjah (the twelfth month of the lunar calendar) and involving the performance of certain prescribed rites of worship (like staying at 'Arafāt, Muzdalifah, etc).
Ḥamām	Public bath.
Ḥārah (pl. Ḥārāt)	Quarter
al-Hidjrah	The emigration or the original exodus of Prophet Muhammad (pbuh) and his followers from Makkah to Al-Madinah, the year of its occurrence, i.e. 622, having been fixed as the beginning of the Muslim calendar.

<sup>2</sup> Some of these terms were derived from: Al-Maliki, Dr. Abdullah Abu-Eshy, and Sheikh-Ibrahim, Dr. Abdullah-Latif, 1995, *A Dictionary of Religious Terms, English - Arabic*, Maktabit Al-Obiykan, Riyadh.

<b>Ĥudjrah (pl. Ĥudjurāt)</b>	Room or Chamber.
<b>Hidjrī (H)</b>	Pertaining to the Hidjrah calendar, the date AD 622 being the starting point.
<b>Ĥuwsh (pl. Ĥhwāsh)</b>	A shared courtyard surrounded by a group of houses with a gate, usually locked at night.
<b>'Eīd al-Adhā</b>	Lit. "the Sacrifice Feast"; the Feast celebrated by Muslims on the 10th of Dhul-Ĥidjah (the month designating Pilgrimage, one of the rites of which is the slaughtering of an animal as a sacrifice in the cause of Allah), the Feast being sometimes called Greater Bairam.
<b>'Eīd al-Fiṭr</b>	Lit. "the Fast-Breaking Feast"; the Feast celebrated by Muslims at the end of Ramaḍān (the month of fasting), this Feast being sometimes called Lesser Bairam.
<b>al-Idjmā'</b>	The unanimous agreement of Muslim scholars on a point of Islamic law; an agreed upon opinion of the Muslim community; consensus; unanimous resolution; unanimity.
<b>al-Idjtihād</b>	Independent reasoning; an independent opinion; The attempt, when faced by a new situation, to establish a ruling or formulate an independent decision on a religious matter based on the interpretation and application of the four fundamentals of Islam (the Holy Qur'ān, the Holy Sunnah, Consensus & Analogy), and through a creative, scholarly effort.
<b>al-Ĥrām</b>	State of ritual consecration of the Makkah pilgrim (during which the pilgrim-- wearing two seamless, often linen sheets, usually white-- neither combs his/ her hair nor shaves, and observes sexual continence; garments of the Makkah pilgrim; pilgrim garb; warp & garment; <i>Ihrām</i> robe.
<b>al-Imām (in prayer)</b>	One who leads a congregational prayer; the prayer leader.
<b>Imām al-Muslimīn</b>	The leader of the Muslim community.
<b>al-Ka'bah al-Musharrafah</b>	The Holy Ka'bah; the structure in the central courtyard of the Holy Mosque in Makkah which encases the Black Stone, recognised as a shrine and being the point towards which Muslims pray.
<b>Khandaḳ</b>	Ditch.
<b>khiṭah</b>	See Territory.
<b>khuṭbah</b>	Sermon.
<b>al-Ḳiblah</b>	The direction towards the Holy Ka'bah; the place towards which the Muslims turn their faces in prayer, namely, the Holy Mosque in Makkah.
<b>al-Ḳur'ān al-Karīm</b>	The Holy Book revealed to Allah's last Messenger (pbuh).
<b>Madhhab</b>	A religious school of thought.
<b>Madhhab Fiḳhī</b>	A religious school of jurisprudence.
<b>Madrasah</b>	School.
<b>Maḳām Ibrāhīm</b>	Abraham's Station, a small building near the Ka'bah in Makkah (housing a stone with Abraham's footprints).

<b>Maḳṣurah</b>	A chamber in the mosque for the Imām.
<b>al-Manākhah</b>	Place where caravans alight (Al-Madinah market).
<b>Manzil (pl. Manāzil)</b>	Independent settlement.
<b>Mihrāb</b>	Niche.
<b>al-Miḳāt (Iḥrām Station)</b>	An assigned place where Muslims intending to perform Pilgrimage or 'Umrah (Lesser Pilgrimage) take off their ordinary clothes and put on pilgrim garb (known as <i>Iḥrām</i> ).
<b>Mirbad</b>	Place where dates are dried.
<b>Mu'adhin</b>	A person who announces the time of prayer.
<b>al-Muhājirūn</b>	Religious Emigrants (especially those Makkans who emigrated to Al-Madinah in the early period of Islam.
<b>Muḥammad (pbuh)</b>	Muḥammad (pbuh) (570-632 AD), the prophet of God who received the revelation of God contained in the Holy Qur'ān.
<b>Muṣalla</b>	An open air place, usually outside the town, used for the feast prayer.
<b>Rawshān (pl. Rawāshin)</b>	Wooden latticed balcony.
<b>Ṣaḥīḥ al-Bukhāri</b>	Lit. "al-Bukhāri's Authentic Volumes"; the prophetic Traditions (or <i>hadith</i> ) narrated in the absolutely authentic compilation of the great Muslim scholar al-Bukhāri, constituting a source of Islamic Law immediately next in importance to the Holy Qur'ān.
<b>al-Ṣalāt</b>	Prayer; one of the five pillars of Islam consisting of standing, bowing, prostrating, and sitting, during which some Qur'ānic verses are recited along with certain invocations. The five prescribed prayers in Islam are <i>Fadjr</i> (Dawn) Prayer, <i>Zuhr</i> (Noon) Prayer, <i>'Aṣr</i> (Late Afternoon) Prayer, and <i>'Ishā'</i> (evening) Prayer.
<b>Ṣalāt al-Istisḳā'</b>	prayer for rain; rain-invoking prayer; invocation-for-rain prayer.
<b>al-Ṣawum</b>	Fasting; one of the five pillars of Islam ordained during the month of Ramadān and consisting in the Muslim's abstinence from food, drink, and sexual intercourse from dawn to sunset as well as the total avoidance of immoral acts and practices.
<b>al-Shari'ah al-Islāmiyyah</b>	Islamic Law; the revealed or canonical law of Islam; the whole body of rules governing the life of Muslims which are derived from the Holy Qur'ān and Sunnah.
<b>al-Shhādatiyn.</b>	The two testifications/ Attestations: (a) that there is no god/ deity but Allah; and (b) that Muhammad (pbuh) is the Messenger of Allah.
<b>Shi'ah</b>	A religious division of Islam which regards 'Alī Bin Abī-Ṭālib (Prophet Muḥammad cousin and son-in-law) as the legitimate successor and, among other things, rejects the first three Caliphs along with the Sunnite books handed down under their protection; partisans of 'Alī attached to the idea of the preeminence of 'Alī (may Allah be pleased with him) and his descendants.



<b>al-Sīrah al-Nabawiyah</b>	The Prophet's biography; the biography of Prophet Muhammad (pbuh).
<b>al-Şūfiyah; al-Taşawuf</b>	Sufism (the various orders which espouse mystical approaches to the understanding of Allah); asceticism; mysticism.
<b>Sūk (pl. Aswāk)</b>	Market place.
<b>al-Sunnah</b>	Lit. "the beaten path"; the collection of the recorded words, actions, and sanctions of the Prophet Muḥammad (pbuh) commonly referred to as <i>Ḥādīth</i> or <i>Sunnah</i> and established as legally binding precedents immediately next in importance to the Holy <i>Ḳurʿān</i> ; a recommended deed as opposed to <i>Farḍ</i> (i.e. a compulsory deed).
<b>Sunnī</b>	Lit. "a follower of <i>Sunnah</i> "; a follower of the mainstream of Islam; an orthodox Muslim who recognizes the first four Caliphs as the rightful successors (See <i>Shi'ah</i> ).
<b>Surah (from the Ḳurʿān)</b>	Chapter (a chapter of the Holy <i>Ḳurʿān</i> ).
<b>Tabi'i</b>	A term designating one who had met only a Companion of the Prophet (but not the Prophet himself) while believing in him, and died as Muslim.
<b>al-Tabi'ūn</b>	A term designating that generation of scholars and jurists who had met only the Prophet's Companions and learnt from them.
<b>al-Tawrah</b>	The Torah, the body of divine knowledge and law found in the Jewish religion and traditions, comprising the first five books of Moses/ the Old Testament: Genesis, Exodus, Leviticus, Numbers, and Deuteronomy.
<b>Ū'adhīn</b>	To proclaim the time of prayer; to give the call to prayer.
<b>al-Umah al-Islāmiyyah</b>	The Muslim Community; the Islamic nation.
<b>Um al-Mu'miniyn</b>	Mother of the faithful (a title accorded to any of the prophet's wives).
<b>al-'Umrah</b>	The Lesser Pilgrimage.
<b>Ya'tamir, ū'adī al-'Umrah</b>	To perform the rites of <i>'Umrah</i> (i.e. the Lesser Pilgrimage) to the House of Allah in Makkah.
<b>al-Zakat</b>	One of the five pillars of Islam designating a compulsory form of charity (poor-due) amounting to 2.5% of the surplus wealth over and above a stipulated minimum rate (called <i>niṣāb</i> ) that has remained in the possession of a Muslim for a year. The following categories of people are entitled to this poor-due (known as <i>Zakat</i> ): the poor; the needy; those who collect <i>Exact</i> or are employed to administer the funds; and those who are newly converted to Islam and whose faith needs to be consolidated. In addition, <i>Exact</i> may also be distributed for setting captives free, for assisting those who are in debt, for the cause of Allah, and/ or for wayfarers. <i>Exact</i> is paid out once a year.
<b>Zuḳāk (pl. Aziḳah)</b>	Lane or alley.
<b>Zyārah</b>	The visit to the Prophet's Mosque in Al-Madinah.



# APPENDICES

## The Qur'anicists

PO BOX 100000

HOUSTON, TEXAS 77210-0000

July

Dear Mr. Khalil:

My dear brother, I have received your letter of the 27th of June and am glad to hear from you.

The Qur'anicists are a group of people who are interested in the study of the Qur'an and its interpretation. They are a group of people who are interested in the study of the Qur'an and its interpretation. They are a group of people who are interested in the study of the Qur'an and its interpretation.

Thank you for your letter and for your interest in the Qur'an. I am glad to hear from you and I am glad to hear that you are interested in the study of the Qur'an and its interpretation. I am glad to hear from you and I am glad to hear that you are interested in the study of the Qur'an and its interpretation.

Thank you very much for your letter.

Wahid A. Khalil

P.O. Box 100000

Houston, Texas 77210-0000

Islamic Center of Houston



**Al-Medinah Al-Munawwarah**

## **The Questionnaire**

**IN THE NAME OF ALLAH  
THE COMPASSIONATE, THE MERCIFUL**

Date: 13.3.1415 H.

### **My dear brother, the inhabitant of the City of Al-Madinah Al-Munawarah**

There is a questionnaire enclosed with this letter. The purpose of it is to introduce some of the specific issues related to the social and urban environment of the City of Al-Madinah Al-Munawarah. This questionnaire is a part of my Ph.D thesis which is in the process of completion at the present time.

Therefore, I would be very grateful if you could kindly answer these questions knowing that this will be of great significance to carrying out my research. Please remember that this questionnaire is for research purposes only and any information provided will remain confidential.

Thank you very much for your help.

**Waleed A. Kaki**

Ph.D Candidate  
Heriot-Watt University  
Edinburgh College of Art

**CIVILIZATION AND URBAN ENVIRONMENT OF  
AL-MADINAH AL-MUNAWARAH**

Would you please respond to the below questions:

**A- Personal Information:**

- 1- Name (no obligation): .....
- 2- Age: ..... 3- Gender: Male ( ) Female ( )
- 4- Period of Stay in Al-Madinah: .....
- 5- Have you lived in the Traditional Quarter? Yes: ( ) No: ( )
- 6- Period of Stay in the Traditional Quarter: ..... 7- Occupation: .....
- 

**PART I**

**B- General Information about the City of Al-Madinah Al-Munawarah.**

- 1- name five events from the general history of the City before the Hidjrah (the migration of the Prophet (peace be upon him) from Makkah to Al-Madinah) which can be mentioned as important features of the City, and how can these be commemorated in the historic fabric?

The first event .....

How it can be commemorated .....

The second event .....

How it can be commemorated .....

The third event .....

How it can be commemorated .....

The forth event .....

How it can be commemorated .....

The fifth event .....

How it can be commemorated .....

- 2- Mention ten events or indications from the historical time of the Prophet (pbuh) and his noble companions which can be pointed to as the main features of the City and how these may be preserved.

The first event or indication .....  
 How to be preserved .....

The second event or indication .....  
 How to be preserved .....

The third event or indication .....  
 How to be preserved .....

The fourth event or indication .....  
 How to be preserved .....

The fifth event or indication .....  
 How to be preserved .....

The sixth event or indication .....  
 How to be preserved .....

The seventh event or indication .....  
 How to be preserved .....

The eighth event or indication .....  
 How to be preserved .....

The ninth event or indication .....  
 How to be preserved .....

The tenth event or indication .....  
 How to be preserved .....

- 3- List five most important historical features that distinguish the City and give two reasons for each.

The first feature .....  
 The first reason .....                      The second reason .....

The second feature .....  
 The first reason .....                      The second reason .....

The third feature .....  
 The first reason .....                      The second reason .....

The fourth feature .....  
 The first reason .....                      The second reason .....

The fifth feature .....  
 The first reason .....                      The second reason .....

4- List five events which have negative affects to change the general view of the City and give a reason for each.

The first event .....  
The reason .....  
The second event .....  
The reason .....  
The third event .....  
The reason .....  
The forth event .....  
The reason .....  
The fifth event .....  
The reason .....

5- List five things you wish to happen in the City to improve and enhance its status, giving a reason for each.

The first thing .....  
The first reason .....  
The second thing .....  
The first reason .....  
The third thing .....  
The first reason .....  
The forth thing .....  
The first reason .....  
The fifth thing .....  
The first reason .....

6- List five things you do not wish to happen in the City and give a reason for each.

The first thing .....  
The first reason .....  
The second thing .....  
The first reason .....  
The third thing .....  
The first reason .....



The forth thing .....  
 The first reason .....  
 The fifth thing .....  
 The first reason .....

7- Mention five phenomena which visitors wish to observe in the City and give a reason for each.

The first phenomenon .....  
 The first reason .....  
 The second phenomenon .....  
 The first reason .....  
 The third phenomenon .....  
 The first reason .....  
 The forth phenomenon .....  
 The first reason .....  
 The fifth phenomenon .....  
 The first reason .....

**C- Special Information about Mosques, Historical Places and Ecological Sites in Al-Madinah Al-Monawarah.**

1- List the ten most important historical mosques in the City and give reasons for each.

The first Mosque .....  
 The reason .....  
 The second Mosque .....  
 The reason .....  
 The third Mosque .....  
 The reason .....  
 The forth Mosque .....  
 The reason .....  
 The fifth Mosque .....  
 The reason .....  
 The sixth Mosque .....  
 The reason .....

- The seventh Mosque .....
- The reason .....
- The eighth Mosque .....
- The reason .....
- The ninth Mosque .....
- The reason .....
- The tenth Mosque .....
- The reason .....

2- Mention ten architectural and historical buildings in the City and explain why.

- The first building .....
- The reason .....
- The second building .....
- The reason .....
- The third building .....
- The reason .....
- The forth building .....
- The reason .....
- The fifth building .....
- The reason .....
- The sixth building .....
- The reason .....
- The seventh building .....
- The reason .....
- The eighth building .....
- The reason .....
- The ninth building .....
- The reason .....
- The tenth building .....
- The reason .....

3- Mention five historical sites or locations in the City which enhance the city's structure and give reasons for each.

- The first site .....
- The reason .....

The second site .....  
 The reason .....  
 The third site .....  
 The reason .....  
 The forth site .....  
 The reason .....  
 The fifth site .....  
 The reason .....

- 4- Mention five places of the City in which you like to meet friends or relatives, give two reasons for each.

The first place .....  
 The first reason .....                      The second reason .....  
 The second place .....  
 The first reason .....                      The second reason .....  
 The third place .....  
 The first reason .....                      The second reason .....  
 The forth place .....  
 The first reason .....                      The second reason .....  
 The fifth place .....  
 The first reason .....                      The second reason .....

**D- Special Information about the Cultural and Social Life (Customs and Traditions) in Al-Madinah.**

- 1- Mention five most important customs and traditions which distinguishes the people of the City and its relation with the traditional urban fabric.

The first custom .....  
 The reason .....  
 The second custom .....  
 The reason .....  
 The third custom .....  
 The reason .....  
 The forth custom .....  
 The reason .....

The fifth custom .....  
 The reason .....

- 2- Mention five customs and traditions which disappeared from the City's heritage and explain why?

The first custom .....  
 The reason .....

The second custom .....  
 The reason .....

The third custom .....  
 The reason .....

The forth custom .....  
 The reason .....

The fifth custom .....  
 The reason .....

- 3- Mention five general activities which were exercised in the City and mention the places in which they take place.

The first activity .....  
 The place .....

The second activity .....  
 The place .....

The third activity .....  
 The place .....

The forth activity .....  
 The place .....

The fifth activity .....  
 The place .....

- 4- Mention the five most important activities which distinguish the daily life style of the City dwellers and give reasons why.

The first activity .....  
 The reason .....

The second activity .....  
The reason .....  
The third activity .....  
The reason .....  
The forth activity .....  
The reason .....  
The fifth activity .....  
The reason .....

5- Mention five factors which enhance the relationship between the visitors and the City dwellers which therefore reflect the City's status and explain why.

The first factor .....  
The reason .....  
The second factor .....  
The reason .....  
The third factor .....  
The reason .....  
The forth factor .....  
The reason .....  
The fifth factor .....  
The reason .....

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**PART II**

**E- Draw a cognitive map of Al-Madinah defining your concept about the image of the City through explaining the most important features of the City.**

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**PART III**

**F- Mention the first image come to your mind when you hear or read the following names of places:**



The places, monuments, features and sites	The first image
1- Al-Madinah	
2- Yathrib	
3- The old construction of the Prophet's Mosque	
4- al-Rawṭah al-Sarīfah (the Holy Garden)	
5- al-Ḳabr al-Sarīf (the Holy Tomb)	
6- Bāb al-Salām of the Prophet's Mosque	
7- The new construction of the Prophet's Mosque	
8- Mabrak al-Nāḳah in the Prophet's Mosque	
9- Ḳubā' Mosque	
10- al-Muṣṣalla Mosque	
11- al-Djum'ah Mosque	
12- 'Alī Mosque	
13- al- Ḳiblatyn Mosque	
14- al-Mustrāḥ Mosque	
15- Abī-Bakr Mosque	
16- 'Umar Mosque	
17- 'Uthmān Mosque	
18- al- 'Airīd Mosque	
19- al-'Anbariyah Mosque	
20- Banāt al-Nadjār Mosque	
21- 'Utbān Mosque	
22- Ḍirār Mosque	
23- al-Baghlah Mosque	
24- 'Arfāt Mosque	
25- al-Nūr Mosque	
26- al-Mi'aris Mosque	
27- al-Miḳāt Mosque	
28- al-Edjābah Mosque	
29- al-Faḍīkh Mosque	
30- Abī Dhar Mosque	
31- al- Sabḳ Mosque	
32- Fāṭimah Mosque	
33- Ūhud Mosque	
34- Sayid al-Shuhadā' Mosque	
35- Banī Ḳurayzah Mosque	
36- the Seven Mosques (al-Faḥ mosque)	
37- al-Khandaq battle	
38- Sayid al-Shuhadā' grave	
39- Ūhud martyrs	
40- Ūhud battle	
41- al-Maṣra', the spot of the Prophet's uncle death	
42- al-Dir'a dome	
43- Ṣihrīdj (cistern) Sayidnā Ḥamzah	
44- al-Baḳī' cemetery	
45- Bani-Sā'idah shed	
46- Mashrabat Um Ibrāhīm	
47- Dār Kalthūm ibn al-Hadm	
48- Babi Salamah cemetery	
49- Dār Sa'd ibn Khythamah	
50- The Prophet's father grave	
51- Hidjrah road	
52- al-Batrā'	
53- Turbat (soil) Ṣu'ayb	
54- Railway station	
55- Ḳubā' castle	
56- 'Airwah castle	
57- Railway track	
58- al-'Āun tower	

59- al-Takiyah al-Maşriyah	
60- Communications building	
61- Sabīl 'Ādilāh	
62- Ĥiṣn Ka'b Ibn al-Ashraf	
63- Aṭam Şirār	
64- Aṭam al-Āḥayān	
65- Aṭam Abu Dudjānah	
66- 'Aşim bin 'Umr palace	
67- 'Airwah bin al-Zubīr palace	
68- Sa'īd bin al-'Ās palace	
69- al-Saiḥ quarter	
70- al-Sāḥah quarter	
71- al-Āziqah (alleys)	
72- Zuḳāḳ al-Ṭuwāl	
73- al-Aḥwāsh	
74- al-Aghawāt quarter	
75- Bāb al-Madjudī quarter	
76- al-Siḥamī quarter	
77- Bāb al-Madjudī street	
78- Zuḳāḳ al-Ṭayār quarter	
79- al-'Anbariyah quarter	
80- Rubāt Maẓhr	
81- 'Arif Ḥikmat library	
82- Dār 'Uthmān	
83- Dār al-Aytām	
84- Dār Abi Ayūb	
85- Diyār al-Aasharah	
86- al-Rustumiyah school	
87- Rubāt Yāḳūt	
88- Rubāt al-'Ayn	
89- 'Alam al-Dīn school	
90- al-Manākhah market	
91- al-'Aniyah market	
92- Ṭaybh bath	
93- Swaiqah (djuwat al-Madinah)	
94- Sabīl Khisrū Bashah	
95- al-'Anbariyah bath	
96- Bāb al-Maşrī	
97- Bāb al-Shāmī	
98- Bāb al-Djum'ah	
99- Al-Madinah walls	
100- Bāb al-'Anbariyah	
101- Ḳal'at al-Ḳiyadah (the castle)	
102- Bāb Ḳubā~	
103- Bāb al-Wasaṭ	
104- Bāb al-Ĥadīd	
105- Ūhud mountain	
106- al-Rumāh mountain	
107- Thawr mountain	
108- Sil' mountain	
109- Sulay' mountain	
110- al-Rāyah mountain	
111- Big Bani Ḥarām cave	
112- Small Bani Ḥarām cave	
113- Dakat Djalāl, Djalāl terrace on Sil' mountain	
114- 'Air mountain	
115- Northern Thaniyat al-Wadā' hill	
116- al-Ḥarah al-Sharḳiyah	
117- al-Ḥarah al-Gharbiyah	

118- al-Djmāwāt mountains	
119- Southern Thaniyat al-Wadā' hill	
120- al-Ĥaram mountain	
121- Ĥarat Shūrān	
122- al-Mahārīs	
123- al-'Aḳiḳ valley	
124- Sayl Abu Djidah	
125- al-'Ayn (spring) al-Zrḳā~	
126- Ḳnāh valley	
127- 'Umar dam	
128- al-Zakī spring	
129- al-Sāhah spring	
130- al-Ĥārah spring	
131- Baḥhān valley	
132- al-Manākhah spring	
133- Ranunā~ valley	
134- Ĥā~ well	
135- Ghurs well	
136- al-Suḳyā well	
137- Budā'ah well	
138- al-Khātam well	
139- 'Uthmān well	
140- al-'Aihn well	
141- Zamzam well	
142- al-Buṣah well	
143- al-Dawūdiyah farm	
144- al-Mahmudiyah farm	
145- al-Ṣāfiyah farm	
146- Dharawān well	
147- al-Yahūb well	
148- al-Ĥilwah well	
149- 'Airwah well	
150- Anas well	

**G- Write, from your knowlege, any extra information about Al-Madinah which you believe could help in the research.**

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## APPENDIX TWO

The table below include all the formation related to the seven items were asked in part A:

No. of responses	A-1. Name	A-2. Age	A-3. Gender	A-4. Period of stay in the city	A-5. Did you live in the traditional quarter?	A-6. Period of stay in the traditional quarter.	A-7. Occupation
1	mentioned	63	male	55 years	yes	40 years +	retired employee
2	mentioned	56	male	48	yes	22 years	retired employee
3	mentioned	55	male	since birth	yes	40 years	merchant
4	mentioned	54	male	since birth	yes	22 years	retired employee
5	mentioned	52	male	since birth	yes	-	teacher
6	mentioned	50	male	40	yes	20 years	civil servant
7	mentioned	49	male	since birth	yes	20 years	lecturer
8	mentioned	49	male	since birth	yes	-	teacher
9	mentioned	49	male	since birth	yes	20 years	lecturer
10	mentioned	48	male	since birth	yes	-	teacher
11	mentioned	48	male	not mentioned	yes	30 years	lecturer
12	mentioned	48	male	17 years	yes	-	lecturer
13	mentioned	47	male	since birth	yes	-	deputy director
14	mentioned	47	male	since birth	yes	-	lecturer
15	mentioned	47	male	since birth	yes	15 years	educational - instructor
16	mentioned	46	male	since birth	yes	16 years	lecturer
17	not mentioned	45	male	since birth	yes	20 years	teacher
18	mentioned	43	male	39 years	yes	12 years	merchant
19	mentioned	42	male	11 years	yes	3 years	Director of Educational Aids Centre
20	mentioned	42	male	32 years	yes	-	teacher
21	mentioned	40	male	since birth	yes	12 years	lecturer
22	mentioned	38	male	since birth	yes	14 years	architect
23	mentioned	38	male	since birth	yes	-	educational instructor
24	mentioned	37	male	since birth	yes	18 years	civil engineer
25	mentioned	36	male	since birth	yes	15 years	teacher
26	mentioned	35	male	26 years	yes	-	retailer
27	not mentioned	33	male	since birth	-	-	civil servant
28	mentioned	32	male	since birth	yes	-	teacher
29	mentioned	30	male	25 years	yes	10 years	educational aids teacher
30	not mentioned	27	male	since birth	-	-	teacher
31	mentioned	27	male	since birth	-	-	civil servant, Saudi Airlines
32	not mentioned	20	female	on visit	no	-	student
33	mentioned		male	since birth	yes	26 years	teacher
34	not mentioned		male	-	-	-	not mentioned
35	not mentioned		male	-	-	-	not mentioned
36	not mentioned		male	-	-	-	not mentioned
37	not mentioned		male	-	-	-	not mentioned

Table 1: Personal Information