



# CONSERVATION IN THE PROCESS OF URBAN RENEWAL FOR NAJAF OLD TOWN-IRAQ (An Arab-Muslim City)

THESIS SUBMITTED FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

IN ARCHITECTURE AND PLANNING

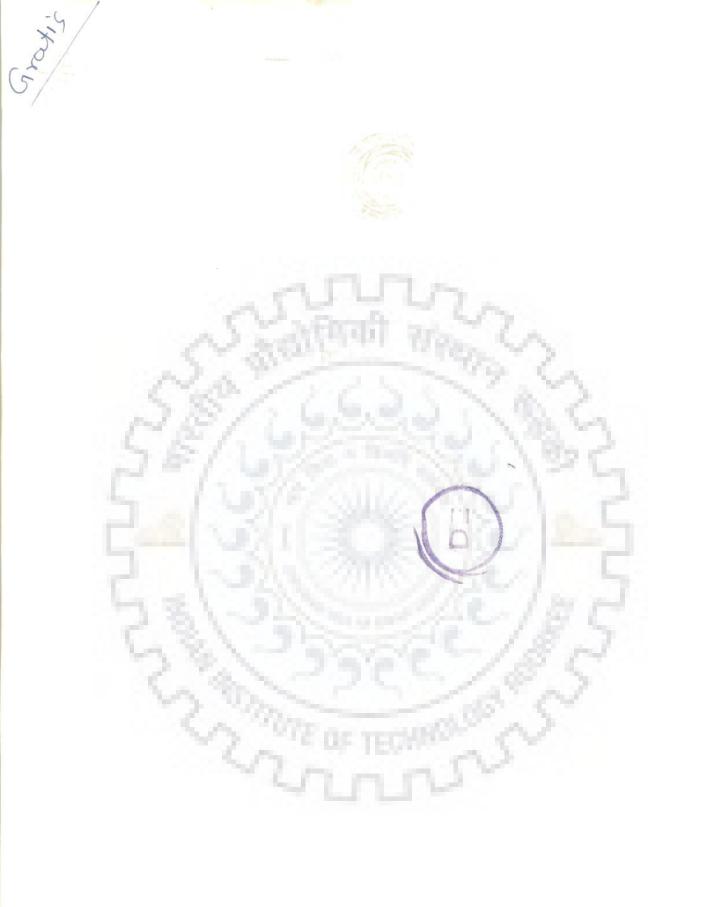


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#### CANDIDATE'S DECLARATION

I hereby certify that the work which is being presented in the thesis entitled Conservation in the process of Urban Renewal for. Najaf Old Town - Iraq (Arab - Muslim City) in fulfilment of the requirement for the award of the Degree of Doctor of Philosophy, submitted in the Department of Architecture and Planning of the University is an authentic record of my own work carried out during a period from 20th March, 1984 to th Oct. 1987 under the supervision of Prof. Rattan Kumar.

The matter embodied in this thesis has not been submitted by me for the award of any other degree.

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This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

Date: 17-10-1987

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The candidate has passed the Viva-Voce examination held on at . The thesis is recommended for award of the Ph.D Degree.

Siganture of Guide

Signature of External Examiners

For Arab nation, the "imitation" **taqlid** is "Retrogressive," while "innovation and inspiration" **ibdaa w istilham** are "Progressive". This should be adopted by the Arab architects and planner, in order to revive the Arab-Islamic Architectural Cultural Heritage.

President Saddam Hussein

In an international seminar held in September 1980 in Baghdad, entitled "Our Architectural Heritage and Contemporary Arab Architecture."

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Falah AL-Kubaisy

## GLOSSARY OF ARABIC TERMS

(Arabic term	s with an asterisk colloquial in Iraq)
AL-Barrani* (Outside)	The guest section in Najaf Old Town.
AL-Jauani* (Inside)	The family section in Najaf Old Town.
AL-Sahen	The Shrine's courtyard.
Amsar* (sing. <u>misr</u> )	Settlements newly founded or designated as centres for their regions during early Islamic period. Kufa for example is nearby Najaf about 10 Km. to the east direction. See Fig. (2.8).
Awqaf	The official organisation which administers the property bequeathed by Muslims for charity.
Azan	The call to the faithful to attend the prayer.
Badgeer* or Badgir*	Air-Scoop, Wind-Catcher.
Darb	The semiprivate thoroughfare of residential areas.
Diwan or Diwankhana*	Reception room for males and male guests.
Diwan or Diwankhana* Fiqh	Reception room for males and male guests. The science of law or Jurisprudence
Fiqh	The science of law or Jurisprudence
Fiqh Hadith	The science of law or Jurisprudence The saying of prophat Mohammad
Fiqh Hadith Hammam	The science of law or Jurisprudence The saying of prophat Mohammad Public bath
Fiqh Hadith Hammam Haram	The science of law or Jurisprudence The saying of prophat Mohammad Public bath Women's section in the traditional house. Creative, innovation
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Fiqh Hadith Hammam Haram Ibdaa Ijtihad Imam	The science of law or Jurisprudence The saying of prophat Mohammad Public bath Women's section in the traditional house. Creative, innovation The exercise of human reason to ascertain a rule of Shariah Law, exertain. Spiritual leader of the Islamic Community.

Madina or Medina	Traditional Islamic town, also the Arabic word for a town literally means.	
Madrasia	Islamic religious school.	
Mahalla	Traditional residential quarter.	
Mawakib* (Pl. Mawkib)	Organized religious tour, where groups of pilgrims come to visit the Holy Shrine on memorial and other holy days.	
Midan	Plaza	
Muqarnas	Stalactite-like geometric structures in Islamic architecture especially used in <u>Iwans</u> ,pendentives and friezes.	
Neem*	Semi-basements in traditional houses.	
Saha	Square, open space.	
Shanashill*	Oriel window.	
Shariah	Law of Islam	
Sirdab	Basement	
Suq or Souq	Market	
Sunnah	Lit. "trodden path". It denotes the model behaviour of the Prophet-the practice he endorsed and the precedents he set.	
Talar*	A colonnaded Iwan in traditional houses.	
Taqlid	Immitation; the principle of strict adherence to the law as expounded in the authoritative legal manuals.	
Ulmaa	Religious men.	
Urf	Action or belief in which persons persits with the concurrence of the reasoning powers and which their natural dispositions agree to accept as right.	
Waqf (pl. <u>awqaf</u> )	A settlement of property under which ownership of the property is "immobilized" and the usufruct there of is devoted to a purpose which is deemed charitable by the law.	

In an Islamic City the traditional *Medina* is virtually a historic entity - a reservoir of social milieu and cultural heritage. However, its destruction appears to be imminent due to the short sighted commercial developments and traffic that are making heavy inroads into the Medina . Since Medina enjoys a central location and has a high price tag on its land, temptation is always great to pull down the old residential properties and replace them with a commercial venture. It is done to provide its owner with manifold economic returns than would have been possible otherwise, with scant regard to loss that would be borne by the community in depriving posterity an access to its irreplaceable cultural heritage. This, however, does not imply that Medina districts would remain static and deprived of all development. On the contrary, it is most essential that they be revitalized within the confines of the two extremes of absolute conservation and absolute commercial growth, and development. It is imperative that the inhabitants of the old historic towns be not deprived access to the amenities of modern life. They have an equal right to enjoy the benefits accuring from the modern pace of economic growth and development - made possible by the new found technologies and sciences. It also implies that they should be able to avail opportunities of upward social and economic mobility and convenience of spatial movement to reach their places of work and leisure.

These, apparently, diverse requirements of conserving the old and providing for the new, at one and the same time and virtually within the same space is going to be the central theme of this study of this study. To reveal and illustrate that the rich inheritance of **Media**, with its mixture of glorious residential quarters, the interwoven shopping streets and civic ammenities, is still amenable to integration with the emerging needs of the modern day life, specially at the level of the Home and Neighbourhood, the example of 'NAJAF old town' in Iraq would be deployed.

This study is basically concerned with the question of protection and planning of historic environment in Iraq, but takes Najaf as a special case study to focus on conservation in more detail, and seeking to throw ideas and proposals for Urban Renewal Plan for Najaf Old Town. Najaf was chosen not only because it contains some of the most valuable buildings and areas of cultural interest in the country but, more important, because relative to other cities, its heritage is believed to be in greater danger and loss.

Because conservation is a relatively recent development in Iraq, the study also endeavours to develop an understanding of its concept as a special form of planning and emphasises both the comprehensiveness of its approach for dealing with total environments as against single buildings and its accommodation for change and continuity of use in contemporary society.

This study provides a brief description of the Proposed Principle Measures for Urban Design with design guidelines for individual zones for Planning Area. Urban Design measures are aimed at enhancing the unique characater of the Old Town. The core area of the Old Town around the Holy Shrine has been redesigned to emphasise its role as the heart of Najaf and to reflect the religious and cultural importance of the Shrine. The space outside its wall will be a differentiated mixture of streets, small and larger squares, and arcades under the new building fronts facing the Shrine. In order to retain the valuable dominance of the golden domes on Najaf Skyline, all new buildings have been proposed to be restricted to a maximum height of 12 metres.

An Urban Renewal Plan has been propounded incorporating the aforementioned urban design concepts with an over all aim of retaining the general structure of the old town in the form of its present streets and alleys. In certain areas designated as conservation and preservation areas, because these are juxtaposed to important historical buildings, it has been recommeded that renovation, preservation or replacement of buildings should be in conformity with traditional features, elements and proportions to ensure that the environmental flavour of the old town is not destroyed but inhanced.

The study concludes with general and specific recommendations on the need for greater action and a more systematic and comprehensive approach to protecting, documenting and enhancing the cultural heritage of the nation, the creation of conservation authority to carry out the proposed Urban Renewal Plan, the need for greater allocation of funds and the training of staff for this specialist type of work.

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#### **INTRODUCTION**

In the last two or three decades there has been a concerted and conscious effort at major cultural revival in the Islamic world. Notwithstanding the end result of such a cultural revolution, one thing, however, can be said with confidence, that Islamic Arab Cultural heritage frozen in the ubiquity of its beautiful monuments and the built environment is worth preserving and contemplating about. Such contemplation, apart from ensuring that the heritage is not lost to the posterity in the din of modern advancement and development, would provide telescopic link and roots to the current and future generation on which to build their faith and fashion their environment.

It is in this light that I wish to recall that when Muslim culture and civilization was at its peak, the Arab city had reached the zenith of urban culture which surpassed the older well-established cities of both the East and the West. "In addition to Makkah and Madinah, other magnificient cities took their place on the world stage, including Eaghdad, Damascus, Kufa, Basra, [Najaf], Fustat, and Qaironan, among others. All were renowned for the Islamic character of their art and architecture. Their mosques and their centres of learning and of arts science (notably astronomy, medicine, and mathematics), spread the fame of Muslim thinkers and scientists far and wide."<sup>1</sup>

From the 1950s onward, the Arab world witnessed a dramatic growth, especially in its cities as opposed to other types of settlements. In this evolving context, the Arab cities felt the need to comfront the effects of the dramatic change that accommpanied the doubling of their area and population. There was also a need to upgrade and improve basic infrastructures and municiple services. The felt need was, essentially, to strike a balance between the requirement of rapid growth and the preservation of the authentic character of the Arab city and its Islamic cultural heritage.

Urban Design in the Islamic world is now at a cross-roads. Much of the traditional urban form is in the process of being oblitereated and is in the danger of being lost forever. The loss of historical evidence would mean that future generations will be deprived of their historic continuity and, consequently, would remain largely ignorant of the richness of their cultural heritage. In this context, Iraq has been no exception. During the last 40 years or so, it has undergone several radical socio-economic and cultural changes of far-reaching effect. The abundance, at least for the time being, of oil resources and the desire to develop the country rapidly have both led to a heavy dependence on Western Technology. Thus, a progress has become socially and culturally associated with Westernisation, and much of the traditional heritage has either been lost or now looked down upon and. described as "backward". Despite much destruction, however, enough remains today to warrant serious protective action, and, if such an action is not taken soon, the loss of the remaining heritage will not only continue unabated but is very likely to accelerate.

The real pressure is on the central areas - that is the *Medina* - of the traditional historic towns. Because of the enormous <u>pecuniary</u> gains that the owners derive in allowing their residential properties to be converted to commercial use, a continuous process of pulling down or drastically modifying historically important buildings is set

in motion. To cater to the increased activity and servicing of the new uses in the area, local authorities wittingly or unwittingly aid this degenerative phenomena; often culturally and historically important buildings and structures are pulled down to provide wider streets and spaces for parking and related activities. Thereby, simultaneously rupturing the old fabric of the intertwined streets and structure of these traditional historic towns.

However, it is evident that the *Medina* districts and historic town cannot be preserved as static museum pieces. In effect, for these towns to remain throbbing with life, it is imperative that their inhabitants be not denied access to amenities of modern life and opportunities for upward social and economic mobility.

It was in this wider context of finding ways and means to bridge this apparent gap between the two extremes of absolute conservation and absolute commercial growth and development occuring in laissez-faire manner that the current research on Conservation In The Process of Urban Renewal was conceived. Najaf old town was chosen as a case to provide a real and pragmatic point of reference for the proposed research, because of its being a typical example of a historic Muslim city.

Najaf is a religious and cultural centre in Iraq next to Mecca & Medina and represents a typical Arab Muslim city in its layout. Wherein the main mosque is located in the centre and the winding pedestrian streets connect the mosque with the periphery of the site. Off the pedestrian routes branch several minor cul-de-sacs, walkways

and alleys leading to individual houses and forming clusters of residential neighbourhoods with cohesive ties in their social structure. Its close-built mass of low interlocking buildings and interwined network of streets provides it with a lace like fabric structure betraying delicate urban tissue.

To achieve the fulfilment of objectives mentioned in the foregoing, using Najaf Old Town as a case study, the current research has been grouped into seven chapters, each chapter is further divided into different sections. The first chapter is a brief introduction providing a panorama of the Arab-Islamic towns in Middle Eastern countries during the medieval centuries (especially in Iraq and more generally in the Arab Countries), and highlights the need for conserving the Islamic Identity of the Arab-Muslim city. It outlines the contemporary problems facing the traditional Medina and questions the future of its historic centres. Built form of traditional Iraqi city includes the rural urban nexus, local building materials and methods of traditional construction and the development of the traditional construction and the development of the traditional ways of life. This chapter emphasises the religious and social conventions that have influenced the design and the layout of the traditional houses.

The second chapter, however, surveys the historic background of Iraq, its socio-economic customs and religious beliefs. Surveys and analysis of the present situation provides the main data - base for the development of the Urban Renewal Plan, and the significant results are presented in this chapter.

The third chapter comes sequential to the second chapter in that the survey carried out in the second chapter identified many problems already evident in the Planning Area. Major problems together with illustrations are presented in this chapter. They relate primarily to conflicts in the pattern of traffic and Land Use to physical decay, overcrowding, and to the destruction of the Najaf townscape.

The fourth chapter starts with an outline of the general philosophy and principles behind conservation and Urban Renewal. The situation in Iraq and particularly in Najaf is outlined including brief discussion on revitalizing the urban centres. The methodology of this study is developed and discussed in detail in this chapter. It includes the objectives, aims and the scope of this study, the criteria and method of selecting buildings for detailed study for conservation, the lack of adequate legislation and powers and identifies the number of different authorities concerned with aspects of conservation.

The fifth chapter is concerned with the planning objectives which are related directly to the solution of the problems already identified in Chapter 3, while the Sixth Chapter deals mostly with urban design concepts. The planning objectives are translated into concrete proposals regarding development over the coming years. All these proposals are coordinated and presented together in the capital plan in Chapter Seven which has been developed from few alternatives, covering development until the end of the century. Further, on the basis of particular criteria, several action areas have been recognised in the Old Town and awarded various degrees of priority.

## CHAPTER I : BACKGROUND : AN ARAB-ISLAMIC CITY STRUCTURE, ARCHITECTURE AND IDENTITY.

<b>1.1.</b> 1.1.1. 1.1.2	THE TRADITIONAL TOWN Anatomy of the Arab-Islamic <i>Medina</i> Architecture and Aesthetics.
<b>1.2.</b> 1.2.1 1.2.2	<b>THE EVOLVING CITY</b> Defining an Islamic City Urban Growth and Development.
<b>1.3.</b> 1.3.1 1.3.2	FUTURE OF THE ARAB-ISLAMIC CITY Planning for Conservation with Redevelopment Continuity with Change.
1.4.	BUILT FORM OF TRADITIONAL IRAQI CITY WITH SPECIAL REFERENCE TO NAJAF
1.4.1	The Rural-Urban Nexus
1.4.2	Construction Materials and Technology
1.4.3	Factors Influencing Built Form.

### CHAPTER I : BACKGROUND : AN ARAB ISLAMIC CITY STRUCTURE, ARCHITECTURE AND IDENTITY :

Najaf Old Town, conservation of which is the theme of this study, is a typical Arab-Islamic city. To enable the uninitiated to grasp an understanding of the term "Arab-Islamic," this chapter explores the several facets of a traditional city and subsequently attempts to define an Islamic city while establishing a link between the evolution of a city and Islamic principles. It then goes on to identify ways and means of conserving the city's identity given the nature of demands placed upon the city at the behest of modern needs and technology. Challenges to the functioning of a contemporary Arab-Islamic city are assessed to enable formulate observations on the future of Arab historic centres with specific reference to Najaf.

### 1.1 THE TRADITIONAL TOWN

Urban settlements of Arabia, even in the years preceeding the rise of Islam, though few and far between, were well-planned with fortified castles. With the spread of Islam outside Arabia, the knowledge and style of planning too was transported across several countries. During the initial centuries of Islamic rule the Arab-Muslims founded several urban settlements giving rise to a new culture of town-life. Towns were built for special purposes too as military towns, political centres or sanctuary towns. Najaf belongs to the last of these categories. Each of these groups of towns had a commonality in their anatomy which can still be distinguished in all surviving towns.

#### 1.1.1 Anatomy of the Arab-Islamic Medina

The basic anatomy of the typical Arab town, before it exploded and mushroomed into its present distended form, under the impact of the "oil civilization," is simple. It resembles, in basic structure and anatomy, the Medieval European town. The mosque-its dominant architectural feature-replaces the cathedral, the minaret the church spire, the *saha* or *Midan* the church square. By virtue of its size, location and distinctive architectural form, the mosque dominates the silhouette of the Arab town.<sup>1</sup> Around the mosque grew residential, commercial and artisan quarters. The intra-city road system, designed primarily for pedestrian and animal purposes, usually did not conform to any set geometric pattern but grew, in stages, creeping out and often ramifying into specialised commercial and artisan streets.

A high wall encircled each town, pierced only by gates which gave access from the cardinal directions.<sup>2</sup> Thoroughfares then linked these gates and coverged at a focal point, thereby dividing the town into a number of quarters.<sup>3</sup> In Arab-Islamic towns like Baghdad<sup>4</sup>and Cairo,<sup>5</sup> this expression is quite in evidence. Cemetries of all religions were often located outside these walls and near the gates. These walls are however, with a few exceptions, not in evidence today, having been pulled down to give way to the exploding cities. Originally, beyond the walls were areas for cultivation and pastures for animals.

A dominating form of the Arab-Islamic city is the strategically located Mosque. This focus did not originate from any specific focus in the **Quran**. The **Quran** does not emphasize on the physical structure

or location but merely specifies that the prayers of Muslims should be offered towards the Mecca.

Another distinctive expansion was in the form of minarets, a component of the mosque. Their primary function was to facilitate the **azaan** or the call to the faithful to attend the prayer.<sup>6</sup> They, however, served another vital purpose that of orienting a distant traveller to the town and once in the town, to the mosque or the **bazaar**.<sup>7</sup>

Houses were built close to each other, protecting one another from solar radiation and sand storms. Generally built around a courtyard, they became the entity around which the social life of the Muslim family revolved.

Mixed landuse was the order of the day in the traditional Islamic cities. The public spaces at the focus sought to promote interaction religious, educational, commercial, industrial and between recreational spaces in an attempt to express the full range of human activities. The primary spines of the central soug, the mainstream of the public life, integrated the laterally attached bays of sanctuaries, and specialised markets.<sup>8</sup> A variety of spatial experiences madersas , when one traversed through the closely knit city is what gave these early cities a unique and indigenous character. The play of light and shadow, and the changing view and distance relationships as one walked through the narrow and winding streets provided the interest. High intensity use of the ground space and the agglomeration resulting there from helped to minimize the defence perimeter.

The pattern of commercial activity too, was tied to the spatial organisation and to the practice of mixed land use. The entire city could be described as a bazaar with peaks and dips in activity as one moved through streets of different order.

There was, nevertheless, a clear division between the public and private realms, reflecting the Islamic concern for privacy in residential quarters. The compartments of secluded private space were embedded in a comprehensive architectural system composed of complex cellular structures. Smaller elements were contained by larger units, the whole being held together by a sophisticated system of interior passages, which were easy to lock in order to compartmentalise separate spatial entities.<sup>9</sup> With this system it was possible to create various grades of seclusion and privacy within an otherwise continuous urban structure.

What impresses one, so much about the Arab-Islamic city is its basic simplicity, its unity and its functionalism on the one hand, and the knowledge of Arab artisans in matters of builiding, orientation, and structural considerations on the other. The traditional Arab city has a clear cut urban form. It has a distinct, overall urban structure and it has a distinct personality in relation to the regional landscapes it occupies10[See fig. (1.1)]. In the countryside, the overall anatomy of urbanization and settlement was determined by walking distance to the fields, by a day's journey between major towns, by strategic factors and by factors crucial to life, survival, subsistence and socialization.<sup>11</sup>

## THE TIMES OF MESOPOTAMIA, CHRISTMAS NUMBER, 1921.

## (From the "Holy Places of Mesepotamia") PHOTOGRAPH FROM THE AIR: NAJAF.



#### NAJAF.

Fig. (1.1) : Najaf Town at the beginning of the 20th Century. Typical views of traditional Arab-Islamic Cities, examplified by the urban fabrics of Najaf: Human scale units closely interwoven, clear definition of spaces in correlation to their users, connections shaped to the needs of pedestrian movement and allowing for social interaction, organic growth patterns producing a variety of interrelated forms.

Saurce

: The Times of Mesopotamia, Christmas, Number, 1921.

#### 1.1.2 Architecture and Aesthetics :

It would be too ambitious to attempt to trace the history of Islamic Architecture in a few pages in this section. The attempt here is to indicate its main features, the concept of beauty, and exhibit how these monuments of Arab-Moslem art differ from one area to another, all the way from Spain to India.

Islam exercises a spectrum of influence on the city. So does the influence of physical location and climate. Guided by these factors, even the humblest of Arab hamlets possessed a `character,' a `personality,' an `Urban form,' and an `atmosphere' of its own.<sup>12</sup>

Muslim art and architecture is devoid of representations of the divinity or living beings. Notwithstanding, the Arab-Moslem contribution to the world's reserves of art and architecture is substantial and significant. The Arabs excelled in achieving simplicity, pleasing proportions and a compelling architectonic aesthetic. Arab-Islamic architecture had a tone of poetry and asceticism to its beauty.<sup>13</sup>

Bokhari sums up the concept of space and relation between form and funtion in Islamic Architecture :

"In Islamic Architecture, however, the dominant principle and motto has always been "Form follows Space," and "space is adapted to function." In other words, once the function was given in the traditional Islamic architecture, the space which will truly serve that function has first to be created, then the form is nothing more than a corollary. This is quite in conformity with the spiritual Islamic attitude, in which the essence of things is not its form or shape but the spirit usually hidden deep inside the body. The inner is more essential than the outer, and the inner is the determining factor. An inward looking architecture is perhaps the true philosophical meaning of Islamic architecture.<sup>14</sup>

With regard to style, the pointed arch and the Norse arch are two characteristics of Arab-Islamic architecture that are to be found in practically every monument. The overhanging stalactite style too is peculiar to the Arabs in use since the 12th century and applied at several parts in the mosque:

> "to connect the ledges outside the balconies of the minarets to the vertical surfaces; to fill in the vaulted ceilings of the mosque or to attach them to the supporting walls; to connect spherical vaults to square surfaces, etc."<sup>15</sup> [See fig. (1.2)].

Calligraphy is the most pronounced of all Islamic arts to the extent that it may even overshadow the architectural impact. At times, the latter merely provides the surface on which complicated inscriptions are carved, moulded or colourfully set down.

Islamic decoration consists of ornamental geometric designs mixed with inscriptions. Though appearing fanciful, the methodology of their

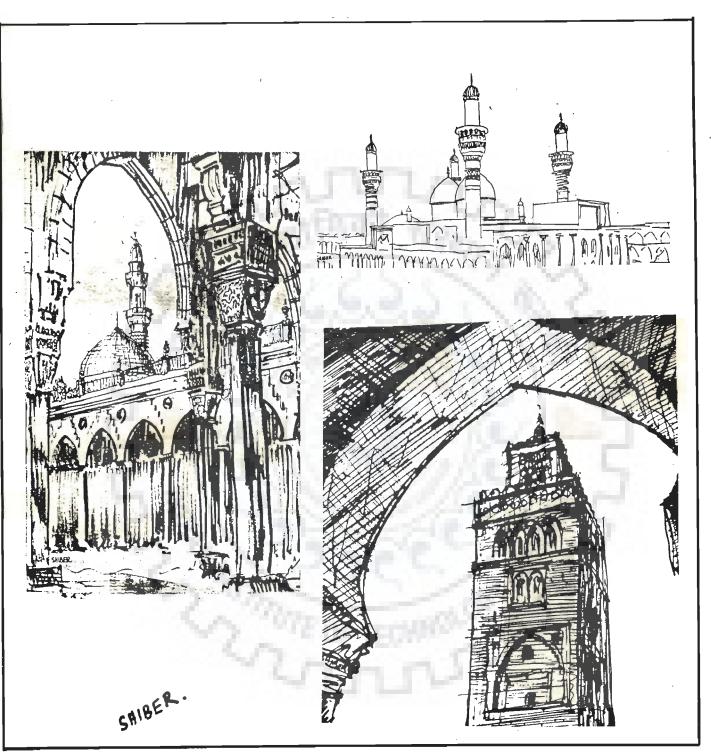


FIG. (1,2,): Typical urban-architectural scenes from Arab World : Morocco, Iraq, Saudi Arabia.

SOURCE: SHIBER; RECENT ARAB CITY GROWTH. KUWAIT. 1967. P.207.

creation follows a set of simple rules. Arabesques in the early periods would be cut into the stone or, if stone was not available, gypsum or small pieces of dried bricks were used. Arabic script harmonized beautifully with the arabesques.

#### 1.2 THE EVOLVING CITY :

This part explores several factors of a traditional Islamic city. At the outset it attempts to define an "Islamic City" and establish a link between the evolution of a city and Islamic principles.

The obvious question is : What is an `Islamic City'? Is it a fact or a misnomer ? Is the term Islam in this context synonymous to its use in `Islamic Economics' or `Islamic Sharia Law'? At this point it is imperative to distinguish between the generic use of the term Islam as in `Islamic Arts,' on the one hand, and as a religious expression indicating a derivative of Islamic faith on the other.<sup>16</sup>

Despite several commonalities in physical form among cities of the past, the present form that each of them has acquired defies explanation via any single model. Each has traversed a different path in its evolution. Any attempt to generalise the morphological change is unlikely to succeed. However, these very cities have of late been shedding their cultural idiosyncracies, in the process of social and physical transformation, to exhibit the universal values of the present century. Lifestyles, despite geographical and political barriers, are increasingly taking a universal form, and the so-called traditional Arab cities are no exception even where the transition has demanded a re-structinging of the society and the environment.17

#### 1.2.1 Defining the Islamic City :

An Islamic city can be defined on the basis of its recognition as a distinct physical form. Yet another ideal definition should include the socio-cultural context. A traditional Arab-Islamic City, in a structure and anatomy, was very similar to the medieval town. The Medina was a virtual historic entity. The mosque dominated the silhouette of the city by virtue of its size, location and distinct architectural form. The traditional urban form was a tight cellular matrix, contained by walls and ramparts, set in an arid regional context.<sup>18</sup> It responded to the social mores, climatic conditions, available technology, and building materials. The layout of the city had the mosque in the centre (focus) and winding pedestrian routes that connected the mosque to the periphery of the site. Off the pedestrian routes branched several minor cul-de-sacs and walkway alleys leading to individual houses thus forming clusters of residential neighbourhoods with very strong social ties.<sup>19</sup>

A number of characteristic architectural traits can be identified as being specifically Islamic. Prominant among these are the dome and the minaret. A subconscious urge for a symbolic incorporation of the heavens in the house of worship must have led the Muslims to adopt and perfect the dome.<sup>20</sup>

Other traits of Islamic city plan were an outcome of the Harsh Arabian climate and are best expressed in traditional residential areas. The neighbourhoods are compact and individual households virtually integrate into a large continuous mass. The low-rise high-density concept has evolved over the centuries as a result of climatic determinants and social needs. The characteristic design of houses tends to be courtyard-shaped with the focus of attention being on the interior rather than the exterior, with shaded alleyways.

One cannot underestimate the influence of Islam on the structure and architecture of the Arab city for Islam as a religion does associate itself with the urban environment. Social solidarity based on religion is the main force in the conception of a civilized culture the--main achievement of city life. The rules of conduct that applied in the Arab Islamic city highlighted social behaviour rather than be prescriptive. The convention, in the privacy issue for instance, was to prevent intrusion into a neighbour's privacy, rather than prohibit the opening of windows. The concern for privacy manifested itself in ways limited height of buildings throughout the city, several avoidance of windows on the walls facing streets, placement of doors within the street etc.<sup>21</sup> The Islamic concept of universal brotherhood was fundamental to the physical manifestation of socio-economic and issues. It promoted integrated and socially balanced spatial neighbourhoods rather than affluent suburbs and pockets of residential Islamic ideology pleads for conservation and abhors wasteful slums. consumption of natural resources, while also emphasizing creation of a healthy environment by preventive rather than curative measures.

A typical Arab-Islamic city cannot be built today not merely because of craftsmanship but also because its survival, socially and economically, is virtually impossible today. It, therefore, does make sense to preserve and revitalize such areas of the city which are of historical or archaeological value and also such areas which can reasonably co-exist with the new developments. Sources of conflict between the traditional and contemporary elements of the city can to a great extent be overcome with appropriate planning.

1.2.2 Urban Growth and Development :

In the last three decades, Arab World has experienced a dramatic transformation towards urbanization. The recent growth and development of Arab cities presents a picture typical of all the world over. There is a high rate of population growth (3-5 per cent); there are changes in the social system particularly in the larger towns and cities; there are changes in the modes of travel; and there is a change of life-style to one where the individual is less dependent on the large and extended family both socially and economically.

On the other hand, some indigenous factors make it difficult to predict, guides and control Arab city development in a rational way. Some cities have virtually stabilised in their growth while others continue to boom effectuated by forces that accelerate the growth of some cities in a rather unusual and orthodox manner.<sup>22</sup>

Several Arabian countries attained independence and the larger cities entered a period of rapid development due to one or the other factor; capitals as centres of government and administration, diplomatic representation, commerce, regional headquarters etc. Most countries with their new-found "oil wealth" experienced accerlerating standards of living. New transportation and communication networks were laid. The agriculture-based economy gave way to an industrialised economy. A dramatic shift in population distribution, with increasing concentration in urban areas resulted in a total change of lifestyles.

On a geophysical plane, the kind of urbanization underway is attribute to the automobile the vehicles imposing their order upon the organisation and structure of urban space. There is also an undesirable effect on the architecture and urban character. The historic *Medinas* have been seriously changed or ruthlessly destroyed by unsympathetic modern developments carried out at a disturbingly rapid pace. The large scale engineering works; demolition of buildings and clearance of areas for rebuilding or redevelopment, and spatial intrusion and removal of context by rebuilding in the vicinity have all contributed to altering the picture. Some of the buildings have disappeared and only pictorial fragments of them remain, others exist but have not been properly maintained. It has been estimated by experts that "more than twenty per cent of *Medina's* historic fabric has been lost since the First World War."<sup>23</sup>

A few cities Viz, Cairo, Tunis, Aleppo, etc, were lucky in having their expansion set apart from the existing *Medina* thereby least affecting their older neighbours in a purely physical-sense.

Some Arabian cities, faced with unprecedented urban pressures looked upto the West for answers believing that Western engineering and

design solutions, planning and administrative concepts, could all be successfully applied to modernizing Arab societies. Such lines of thought were given a further impetus by the international agencies and foreign governments, which provided bilateral aid, technical assistance or finance. The low density western style urban development occured outside the walled city largely separate from the traditional Arab-Islamic city. This was the implementation of the typical gridsystem which convenienced the laying out of utilities and transport networks but ignored the social needs and customs.

The new composition was not without inherent contradiction with Islam and its value systems:

> The confusion and the contradiction in the physical environment exists in most Arab cities, for two reasons: First of all, Islam is not merely an abstract religious faith, but it implies an entire social order and a set of rules of conduct which virtually encompasses all aspects of daily life. On the other hand, Western science, technology and political systems are far from being "neutral", and therefore they do not easily combine with any religious order : the tools of the European civilization imply a value system and an ideology of their own which is inseparable from the corresponding techniques.<sup>24</sup>

The recent urban architecture of Arab-Islamic cities reflects much of these transient values rather than timelessness and genuine aesthetics. Two possible reasons have been put forth to explain such developments<sup>25</sup>: First, the transition period from the old to new was too short; and second, because of the depth of indigenous experienced planners and urband designers to appropriately model the city's growth and development.

The entire urban fabric underwent drastic changes :

The new technological and societal developments thus created changes in size, distribution and patterns of usage of urban spaces. They led to increase in the height and massing of the built form, through the use of central air-conditioning and thin skin radiation insulating materials, and the creation of large open spaces between high commercial buildings in the central areas, at road intersections and between tall apartment blocks in the residential districts.<sup>26</sup>

The architecture and urban character, which historic *Medinas* once possessed, has been seriously damaged or ruthlessly destroyed by unsympathetic modern development. Perhaps inevitably, the employment of Western technology and its implicit culture is leading to the creation of a monotonously uniform built environment everywhere. The blind imitation of Western urban models, by the Arab authorities, is another important fact which explains their apathy towards conserving the historic fabric of *Medinas*. Often, large scale clearance programmes are carried out by municipal authorities, not because of purposeful planning, but largely because of a reaction or prejudice against "backward" areas. The authorities have been simply ignorant of the value of their historic environment and have believed that the "old" must simply be replaced by the "new ."27

1.2.3 Contemporary Problems Facing the Arab-Islamic City :

As discussed above, the Arab-Islamic towns under the impact of technology, transportation, and well-known twentieth century expansive forces have undergone changes of varying degree. Shiber has termed these impacts as "universal" in the sense that expanded urbanization has touched nearly all regions of the world; and "indigenous" or "pluralistic" in the sense that the growth of several cities has been more rapid than would have been expected in the normal course.<sup>28</sup>

The post 1950 developments were a result of the "oil-boom." The exponential increase in oil revenues received by the countries brought about a total change in their socio-economic picture. Influx of the rural folk to urban areas increased the latter's population manifold. Furthermore, a vigrous implementation of imported environmental planning techniques resulted in an almost complete rupture of the traditional urban fabric. Most subsequent planning interventions in historic Islamic cities too have, unfortuantely, followed the European system superimposing axial roads and dividing an otherwise organically developed coherent urban fabric into isolated blocks.

The traditional madinas were the worst effected. The construction of new roads through these areas is the single largest factor in destroying the traditional urban fabric. Increased vehicular access gives rise to new developments which overshadow the traditional structure, curtail the latter's privacy, capture the cool breeze

thereby changing the micro-climate, and the development in itself is little more than monotonous and unsightly high-rise concrete and glass blocks bearing no relation whatsoever to its environment.

Some such developments may, however, occur at a slower pace than others-making the transformation process so gradual as not to attract immediate attention. A case in point is the Najaf Old Town, Iraq, with which this thesis deals in detail. The initial intention was to provide adequate space for the movement of increasing number of pilgrims who visited the Holy Shrine of Imam Ali. In the absence of a comprehensive concept for a developed pedestrian environment, the resultant effect of road widening policy was that vehicles now circulate around the shrine with traffic bottlenecks caused at the footsteps of the now exposed monument.

The problems that Arab-Islamic *Medina* faces today are in the nature of the following :

- (a) increased land and building costs coupled with housing shortage have particularly affected the dwellings of the lower income groups-changing the situation from a highdensity organic living to overcrowding in the historic areas.
- (b) Lack of community facilities and services in the new developing areas of the *Medina* - unable to keep pace with the growing population.

(c) Traffic congestion in almost all parts of the traditional

cities - a result of large imports of cars.

In this context, Bokhari<sup>29</sup>, has suggested that the modernization process must always be guided rather than permitted to become the guide. Borrowings from international culture together with technological cooperation may be necessitated by circumstances but it should essentially be selective and adaptive.

## 1.3 FUTURE OF THE ARAB-ISLAMIC CITY :

The transformation from the traditional to the modern in the Arab countries can rightly be called "instant," thanks to the discovery of oil. The effects of such a transformation have briefly been reviewed in the foregoing. The task of the city planners and development agencies henceforth is to acknowledge the change, and with hindsight, to plan for the future or more appropriately the future itself. It is in this context that issues of quality and scale assume new dimensions. The former requires consideration of the life-style, culture, built environment and the changes therein. The latter is in terms of the operational areas - a decision dependent upon the rate and nature of growth of individual cities and the inter-relationship between settlements of all hierarchical levels.

1.3.1 Planning for Conservation with Redevelopment :

Urbanisation, in its absolute terms, is not new to Islam or the Arabian countries. What is new and alien, however, is the strong tendency to link urbanisation and modernisation with Westernisation. The incessant and indiscriminats import of Western culture and its technology has unfortunately, but inevitably, resulted in the rejection of the traditional. The old and indigenous have now become dirty words falsely associated with conservation. In physical terms, this blind rejection was quickly expressed in the neglect or outright destruction of historic areas and much that was valuable has now been lost for ever.

As previously mentioned, opening up of new roads and squares (with considerable demolition of traditional architecture) resulted in a total loss of coherence in the urban structure. Cities like Mecca, Madina and Najaf are glaring examples. However, such changes were not always motivated by traffic considerations alone. It is argued, in western philosophy, that vast open spaces serve to enhance important monuments. In the context of Islamic architecture nothing could be more erroneous than separating central buildings from their organic context and exposing them as if they isolated monuments. Bianca points out that the Islamic concept of space asks for interconnected cellular structure and for enclosed spaces, as opposed to the 'sculptural' approach of western architecture. "Symbolically, the separation from the environment means that the soul is extracted from the body and that the body no longer nourishes the spiritual center."30

A city's life and spirit lies in the city centre and therfore, demolishing the traditional structures, even though to give way to more intensive developments, may prove uneconomical in the long run.31 The preservation of historic core should not be seen as a cultural fancy but viewed as a major step towards urban renewal. Unfortunately,

but for the historic cores very little has remained which could genuinely be called Arabic, and it is, therefore, all the more important that emphasis be placed on the conservation of these areas.

Bokari, provides a prescrition to remedy the situation suggesting that new developments be allowed only when absolutely necessary, and then too, always integrating the new with the old not allowing the new to efface the features and character of the traditional development.<sup>32</sup>

The new buildings filling the gap in the urban fabric should be sympathetic to the scale and character of the traditional buildings in the city; and respond in harmony to the Arab way of life, thereby ensuring that the heart of the Arab-Islamic city continues to beat and survive..

1.3.2 Continuity With Change :

The Arab-Islamic city should not be recognised from the physical structure alone but also from its socio-cultural context. The cities are, however, not without conflict.<sup>33</sup>On the one hand, there is a desire to severe all links with an economically impoverished past lifestyles and to 'develop' to compete with some of the most advanced cities; while on the other hand there is a fear that without elements of their cultural heritage, the people might lose their identity.

The idea of an authentic present and future, therefore, takes central place in all considerations of the Arab-Islamic urban environment and the preservation of the traditional and establishment of a sense of continuity with that tradition. The present needs to be viewed with a full understanding of the process of transformation that has been undergone and the future should be planned with this understanding so as to provide appropriate solutions for the city's problems.

History and morphology of a city distinctly define the ubiquity of continuity. A case in point is Najaf. Its history and architectural heritage assist in interpreting the processes which have shaped its contemporary character thereby providing guidance of practical relevance to planning. The evolution, expansion and change in Najaf has always been associated with many signs of continuity.

Relics of the past glory have survived in Najaf in larger numbers and more stable form than in other cities of Iraq. These have helped Iraq rediscover its roots and establish identity as a part of the Arab community of nations. On the morphological plane, the townscape of Arab cities is aesthetically pleasing for their unity of architecture, the feeling for scale and space, and the background and foreground effects.

Najaf has some splendid examples of harmonious juxtaposition of narrow streets and open spaces which evoke a variety of feelings when traversed upon. These and other subtleties of urban morphology together with space perception and attributes of urban space need to be well understood before modifications are made; else it should be allowed to remain untouched.<sup>34</sup>

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Parts of some Arab cities, owing to specialised monuments or

activities tend to develop as resources of considerable value for tourism.

"It is no coincidence that the most memorable tourist sites are not always the most spectacular, but those in which modern visitors most easily feel they have contacted ordinary folk of past ages through the work of their hands and in the places where they lived and worked."<sup>35</sup>

Blake goes on to say that the total assemblage of buildings, in Islamic towns, were closely grouped together to create an atmosphere which has rarely been bettered even in most highly planned environments.

While preservation of the old culture, tradition, and urban form, has its inherent advantages, a more realistic situation which demands change in the established systems cannot be overlooked. It is in this nexus of the past with the future that continuity assumes an important position. Architects and urban planners of today have to play a pivotal role in offering an image as to how the townscape as a whole, and that of the historic core in particular, should develop in the coming years.

### 1.4. BUILT FORM OF TRADITIONAL IRAQI CITY WITH SPECIAL REFERENCE TO NAJAF

Discussion in the foregoing has dwelt upon the urban form of Iraqi cities as a product of culture, tradition and religion. The form and construction of individual structures themselves too was influenced by

all of the above factors. The built form, however, had the added influence of local climatic conditions. Since cities were a subsequent outgrowth of rural settlements, there was a considerable extension of the rural construction practices with gradual transformations over time. This section traces the origins of buildings' form and construction and discusses the influences brought upon it by these factors.

1.4.1 The Rural-Urban Nexus :

Early Iraqi rural settlements depicted the transition between nomadic and urban ways of life. The emergence of a compact and clustered settlement was a result of security considerations which enabled the rural folk to deal effectively with hostile tribes and wild creatures. This also generated a sense of solidarity among the people - a spirit which still persists.

With the passage of time and the development of urban centres, the pace of rural-urban migration become a social phenomena an activity of far-reaching consequences. The stepped upward mobility of these migrants from unsatisfactory to modest and subsequently to better-off living conditions also involve physical movement from one locality to another. Such social urbanization lays various demands on the city's structure and morphology. The distinction between rural and urban areas is generally based on community size, density, heterogeneity, social differentiation, stratification, mobility, environment and wealth. Migratory trend tends to diminish many of these distinguishing characteristics. The migrants preserve this traditional social pattern and construct traditional type houses. To a great extent, it were the rural to urban migrants who brought about the adoption of traditional and cultural values to the built form in urban areas. The traditional buildings, in their appearance and inter-relationship of their spaces, reflected the established design and planning considerations amenable with a rural life style. Construction materials and methodology was, however, considerably advanced.

1.4.2 Construction Materials and Technology :

Construction materials and practices in Iraq, as elsewhere, have gradually changed from the traditional to the modern. All regions of Iraq have however not undergone the same degree of change. The availability and utility of local building materials and the economic development of the region have been the influencing considerations.

An examination of the materials and techniques for each major element helps to clarify the picture. Most of urban Iraq uses baked clay bricks for load-bearing wall construction the 1965 census figures placing the nation-wide use of baked clay bricks for almost 71% of urban buildings.<sup>36</sup>A major exception is the north-east where stone is plentiful. Recent years have witnessed a small-scale introduction of hollow concrete blocks in north-Iraq. Dwellings of the poor are generally made of sun-dried bricks. In South Iraq, reed and bamboo are used extensively.

Roofs and floors have been traditionally constructed of timber, most of which had to be imported. Locations where date palm grows in abundance make use of palm tree trunks. In Najaf and its neighbouring region the traditional system of roofing is flat vaulted. A major change came about after the First World War when imported steel joists were employed for floor and roof construction. The system of constructing jack arches, made of brick, resting on rolled steel joints became so popular that it is today considered synonymous with the traditional. Of late, in the construction for middle and upper classes, reinforced concrete is finding wide acceptance for roof slabs.

*Fershi* – large square paving bricks, was the only material for paving rooms and courtyards before the introduction of cement and cement tiles. More appealing but expensive alternatives, presently in use, are the terrazo or marble tiles slabs imported from Jordan or Itlay, and to a limited extent making use of marble found in the north of the country.<sup>37</sup>

For the construction of doors and windows, timber was formerly the only material used in the better off urban buildings. Buildings of the poor made use of reed shutters or pieces of corrugated iron sheets. Timber flush doors and steel doors are extensively used today. Rolled aluminium sections are used for the more expensive buildings. Amongst the many varieties of timber, teak was particularly favoured in traditional homes for its strong resistance to termites. Most part of the external walls of the first floor, in traditional houses, were built of framed window panels of wood.

Only in the recent years have mechanisation and use of imported materials been on the rise. A result of such developments is that while these buildings give a more modern look when viewed in isolation, they instantly appear to be misplaced when viewed in context of the surrounding built environment. Should the tendency continue unabated, it is likely that, at a date in future, the traditional buildings may appear out of context--A bleak picture but not wholly unlikely if proper attention is not paid to the deteriorating urban fabric.

1.4.3 Factors Influencing The Built Form :

In a manner similar to the effect of Islam on city form and structure, the religion has had its profound impact on the built form of buildings particularly dwelling units. Also influencing the development of the ultimate form of buildings were the severe climatic conditions and to a considerable extent the established social conventions.

It is useful to understand the social and spiritual implications of Islam on Architecture. Islamic urban and cultural organisation is also the physical manifestation of equilibrium between social homogeneity and heterogeneity in a system requiring both the segregation of domestic life and participation in the economic and religious life of the community.<sup>38</sup>

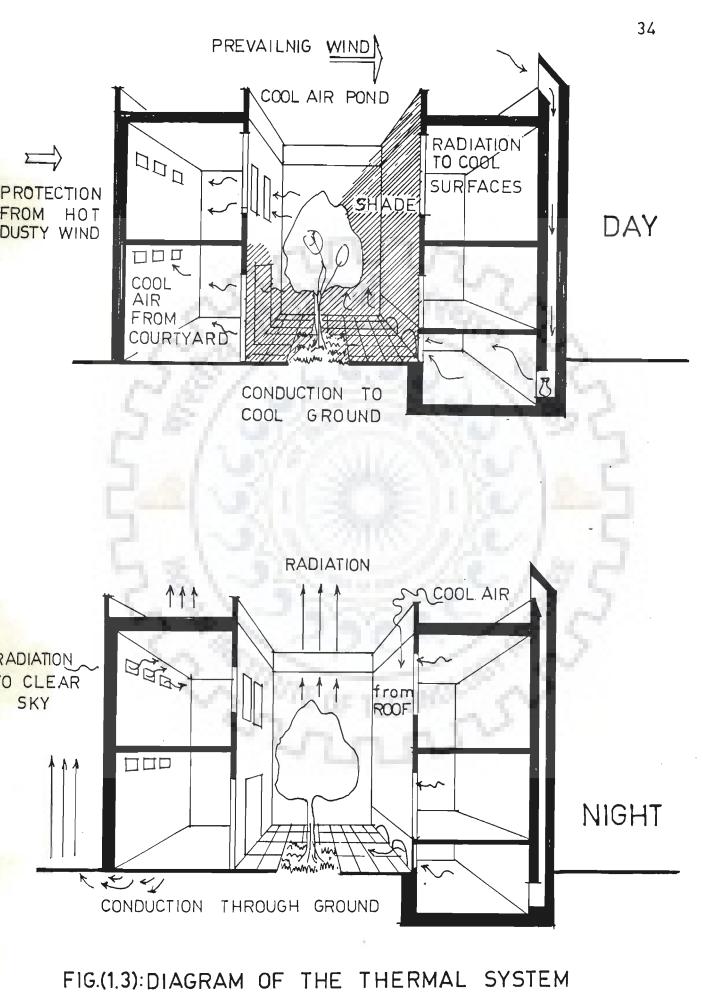
Islamic laws pertaining to building structures are originally derived from two main sources - the *Shariah* and the *Sunnah* - derived from the

Hadith (the Sayings of the Prophet). Another source from which Islamic laws draw their judgement is the wrf - "action or belief in which persons persist with the concurrence of the reasoning powers and which their natural dispositions agree to accept as right."<sup>39</sup> The Islamic laws required the organization of a house such as to provide maximum privacy and protect the dwellers from the prying eyes of the outsider. Added to this the required segregation between males and females in Islamic life led the layout of the traditional house to be developed on a "double circulation system" or the division of the house into two parts. Larger houses were planned with two courtyards, one for the men Diwankhana, and other for women haram. In smaller houses with a single court, the Diwankhana was raised to the first floor with a separate staircase from the entrance, as in the many examples found in Najaf Old Town. One of the main characteristics of the traditional house is the bent entrance leading to the courtyard which for many centuries remained the dominant element in the plan of Iraqi houses.

For several millenia, the residents have evolved indigenous systems to beat the harsh climate's discomforts. Most attempted to create domestic microclimates of which courtyard houses were the most common. Houses were laid out in appropriate orientation and the fenestrations of rooms opened into the court facing the direction of cool breeze. Environmentally, the courtyard has gone a long way to mitigate the hot and dry climate of Iraq. In most regions of Iraq there is a high percentage of sunshine and a high summer diurnal range (i.e. the difference between day and night temperatures) accompanied by low relative humidity. [For more detail see the climaticial figs. in Chapter 2.] Most traditional houses had an underground level, either cellars or semi-basements. The cellars were known a *Sirdabs* and the semi-basements as *neems*. Both were brick-vaulted rooms and both gained light and ventilation from the courtyard, the *Sirdabs* having a central oculus and the *neems* clerestoreys.<sup>40</sup> This is below and identical in plan dimensions to the family room, and it is here that the residents take their summer afternoon siesta. Because it is below ground level and naturally ventilated by cool air, the basement remains cool the whole day.

The heat lost during the night to the clear sky by radiation allows the courtyard to remain cool most of the day. The covered terraces, usually on two or three (occasionally four) sides of the courtyard, and the identical first floor covered gallery immediately above, help to reduce the quantity of heat gain during the day by obstructing the direct solar radiation. [See fig. (1.3)]

Because the height of the courtyard is greater than any of its plan dimensions, the area exposed to this radiation is reduced to a minimum, leaving adequate space in the shade, even at mid-day when the summer sun is near the zenith.<sup>41</sup> By means of a fountain, plants or both, the very low relative, humidity of the air is raised to a comfortable level. In addition, the courtyard is usually washed at least once a day and showered a few times daily. All this is aimed at raising the relative humidity. Because of its position within the house, the courtyard is much quieter than the alley-ways.<sup>42</sup> The enclosing rooms, which are built with thick walls also act as an effective buffer against noise.



OF A COURTYARD BUILDING.

The social convention of providing privacy to each family was another major design consideration which gave Islamic houses an inward orientation. The openings were constructed in such a way as to prevent anyone intruding unseen into the intimacy of his neighbour's life. The preoccupation with privacy exerted another fundamental control. Since the roof was used for sleeping for about six months in a year, and the privacy of a family at all times, was fundamental, no house could look down upon its neighbour nor could one house look into the court of another. This proscription effectively limited most houses to two storeys above ground. Such self-imposed social restraint was much more than mere good neighbourliness.

Buildings, particularly dwelling units, were therefore a culmination of influences from the religion, the climate and the social conventions. The vernacular solutions emerged through an evolutionary phase over several centuries before they came to stay. It, therefore, becomes all the more important that deserved attention to the traditional form of the built environment be paid, at all times, for projects aimed at revitalising or modernising the historical Iraqi cities, and particularly their historic core.

## CHAPTER II - THE STUDY AREA - NAJAF OLD TOWN

- 2.1 GENERAL BACKGROUND
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# CHAPTER II : THE STUDY AREA - NAJAF OLD TOWN :

It has been considered expedient that before converging on the description of the study area and the Najaf Old Town a general narration about Iraq and Iraqi people be incorporated to provide the reader with a frame of context which will permit better comprehension of the disposition of Najaf itself. Accordingly, in this chapter we will first provide a historical background of Iraq itself, highlighting socio-economic structure and religious mores of its inhabitants; climatic and related physicological factor that have influenced life style of people and physical disposition of their habitat at different levels of its community structure.

#### 2.1 GENERAL BACKGROUND

Iraq is a land of great antiquity dating back to the period of great river valley civilizations which flourished around 2500 B.C. What came to be known as Mesopotamian civilization was strewn around the great rivers of Tigris and Euphrats, which form a backbone of todays Iraq.

It was the homeland of some of the Worlds most ancient civilizations which included the Sumerian, Akkadian, Babylonian, Assyrian and Islamic Abbasrid. Urbanisation evolved in Mesopotamia (Iraq) a few thousand years before the birth of Christianity. Cities like Ur, Babylon and Ninevah were probably the first to develop in the history of civilization.In its long and chequered history Iraq saw many ups and downs. It was conquered by the Arab-Muslims during the first half of the seventh century. After the Mongal invasion of A.D. 1258, which virtually destroyed the Arab-Islamic civilization of Iraq. It entered a period of war-fare and alternate occupations by Parsians and Turks for almost four centuries. Between 1680 and 1917 the country had autonomous rule within the Ottoman Empire which was brought to an end by the defeat of Turkey in the First World War. In 1921 Iraq was declared a Kingdom and in 1932 it was granted independence after the British Mandate ended. In 1958 the July Revolution, led by the Army, took place and a Republic was established. Moreover, in 1968 another progressive revolution, led by the Arab Baath Socialist Party (A.B.S.P.) took place to plug the gaps left in the 1958 revolution, and in order to infuse new inspiration and fresh enthusiasm to develop and build a progressive Iraq based on its glorious past heritage and the aspirations and yearnings of its new generations.

There are in the country about 10,000 archaeological sites in which lie hidden the remains of a long succession of civilization that dates back, as far as the palaeolithic age, 100,000 years ago. The most recent are those that belong to the Islamic periods.....The cultural formation of the country was distinguished for its originality and continuity, which gave its civilization a uniqueness of its own. This partly explains why it was a focal point from which radiated sciences and arts that contributed to the progress of many parts of the World.<sup>1</sup>

During the last 30 or 40 years, Iraq has been undergoing several radical socio-economic and cultural changes of far-reaching importance. The abundance, at least for the time being of oil

resources and the desire to develop the country rapidly have both led to a heavy dependence on Western technology. Consequences of this shall be discussed in the later paragraphs of this Chapter.

Given hereunder is a general information about Iraq which will provide the reader with an overview of its current status :

TOTAL AREA OF IRAQ	:	438446 Sq. Kms.							
POPULATION	:	Around 15 Million (estimated)							
CLIMATE	:	Hot, arid, sub-tropical							
ARABLE LAND	:	: 75,364 Sq. Kms.							
CAPITAL	:	Baghdad, was built in A.D.762	Baghdad, was built in A.D.762						
CURRENCY	:	Dinar (= 1000 files)							
		= U.S. \$ 3.22.							
1-2/16		= Rs. 38/- approximately.							
LOCATION	:	Iraq is situated between	the						
じょうしょう		Latitudes 37.25° and 29.5° and	the						
1.4.		Longitudes 45.48° and 38.45°.							

2.1.1 Customs And Religious Beliefs :

Religion has been one of the most crucial and important single factor which has influenced the life style of Iraqian inhabitants and in consequence moulded the configuration of their shelter and habitat. Social life in Iraq is still traditional and owes most of its customs to the techniques of Islam "Women are generally segregated from men who are not closely related to them by blood or marriage."<sup>2</sup> The purpose of this section is to examine the chief factors responsible for the transition in ways of life and urban process from the traditional Arab-Islamic City ( the pre-industrial city) to the modern city. However, the transformation got under way during the nineteenth and present century. "It came not as a natural development of late medieval society, but rather through an alien European invasion, initially through trade but later, through direct military action."<sup>3</sup> However, this section would focus on the socio-economic aspects and how the religious beliefs and the social order have influenced the town's life in Iraq.

After the attainment of independence in 1932 and the discovery of oil there was a great upsurge in the developmental activities, new industries were established, the trade and commerce got enormous filip. However, simultaneously there was considerable migration from the underprivileged rural areas to the urban centres, especially the larger ones like Baghdad, Mosul, Basrah, Kurkuk and Najaf.

The oil boom, industrialization, urbanization and economic development have made enormous impact on the social and cultural life of Iraqi people. Dependence on Western technologies has had its share of exposure of Iraqis to an extent that the Western thinking and Western life style has percolated into the routine living of Iraqi people.

In effect Iraqi society at present is in a state of transition from that of a traditional-tribal-partriarchal set-up it is moving towards a modern emancipated society where men and women are supposed to enjoy equal rights in most walks of life.

### 2.1.2 Family And Social Structure :

Traditionally the family has played a vital role in the social structuring of Iraqi Society. The status of an individual was gauged by the position of his family and his own placing within this group rather than his personal achievements. "Kinship groups were the fundamental social units. Rights and obligations centered on the extended family and lineage."<sup>4</sup> However, urbanization has progressively reduced individuals dependence on his family; and extended family especially in the urban areas is on its wayout. This is likely to aid the modernization of Iraq.

In the past the position of men in society was superior to that of women. However, with rising level of literacy and improving standards of living, there has been a steady emancipation of women. Veiling amongst woman is gradually disappearing. Women can now be seen taking up parallel jobs with men, specially in teaching and medical professions which entail their being away from home for long hours. Polygamy which was practised in some parts of Iraq is almost a taboo now, for it is neither accepted socially nor it is viable economically.

### 2.1.3 Socio-Economic Conditions :

Like any other developing country Iraq has a low per capita income, short life expectancy, high child mortality, and low productivity in most fields. More important is the fact that these drawbacks are unequally distributed across the country and different social stratum and classes. The cities fare better, and have higher socio-economic averages than the national average, essentially because of higher standards of living obtaining in cities. In the larger cities, access to public and social services is notably higher than that of smaller towns and villages.

> The average per capita income for 1956 in rural areas was estimated at 29.7 per cent of that in urban areas. As for 1972, the average annual per capita expenditure was 76.3 Iraqi Dinars representating 92.41 I.D. in urban area but only 55.5 ID in rural areas. The affects of the expenditure of the oil revenues and the introduction of new ideas was first apparent in the cities, but have been slow to reach the hinterland, especially in the early stages of development (upto 1958). However, with the implementation of the Agrarian Reform Programme in 1958, the rural areas have been enjoying a steadily rising standards.<sup>5</sup>

However, aid by the state in excess of the actual requirements of the farmers proved to be counter productive because beneficiaries had diverted the assistance to other uses than farming, thereby negating the cause of farming. Thus the productivity of Iraqi peasants came down, which for example is currently "lower in comparison to the productivity of Egyptian peasants."<sup>6</sup> With the state aided assets the farmers had the scope to weigh options of investment in farming or in trade or commerce in the urban centres.

The combined income of a peasant family, that moved to the usually exceeded its previous income and therefore, city. standard of living. In the towns, their there are opportunities for them to further improve their economic and social position. The degrees of social and cultural change in rural areas is slower than the degree of change in urban areas and in economic, technical and scientific fields. Besides, the efforts made by the state in eliminating social backwardness by expanding the power of television and radio networks and compulsory free education, elimination of and linking of rural areas paved ways illiteracy to facilitate their link with the city.

Recently, with the extension of rural planning being undertaken by the Government, agriculture has got its due priority. Nevertheless, the gap in the living standards between the rural areas and the cities is still persisting, as also the difference between the prosperous and those living at subsistance level within the cities themselves.

2.2 THE NAJAF REGION

2.2.1 Geographical Location :

The city of Najaf is located at Latitude 31.6° and Longitude 44.50°, on the west desert of Iraq, and about 160 kms. to the south-west of the capital of Baghdad [see fig. (2.1)]. For many decades Najaf has been an important cross roads between Iraq and the Arabian desert, in fact it was the nearest town to Kufa, the second capital of the Islamic state.



# FIG(2.1) IRAQ: ADMINISTRATION BOUNDRY SCALE .1:5000000

SOURCE: Sketch by the author 1986.

The climate of Iraq, in general, is hot in summer and cold to moderate in winter. But in reality Iraq's climate does not belong to a single type.

The following are the broad climatic zones in Iraq :°

- a) The Mediterranean climate which largely coincides with the high folds in the North East.
- b) The steppes climate which is a traditional climate between the Mediterranean climate zone and that of the desert climate. This largely coincides with the low folds region and represents eighteen per cent of Iraq's area.
- c) The hot desert climated zone, which covers the alluvial plains and the desert plateau. This represents about seventy per cent of the total area of the country. However, it must be emphasized that the change from one zone into another is gradual, and that each zone has many climatic variations within it.

Generally, the temperature gets lower as one progresses towards the north and north-east. For instance the mean daily temperature in January for Basrah, in the south, is 12.4 C<sup>o</sup>, for Baghdad, in the middle, is 10.0 C,<sup>o</sup> and for Mosul, in the north, is 7.0 C<sup>o</sup>.

There is a general decrease in annual precipitation from north and east to south and west, eventually fading out to well below 100 milimetres in the western desert.<sup>10</sup> Precipitation occurs in winter and spring, with five months of drought.

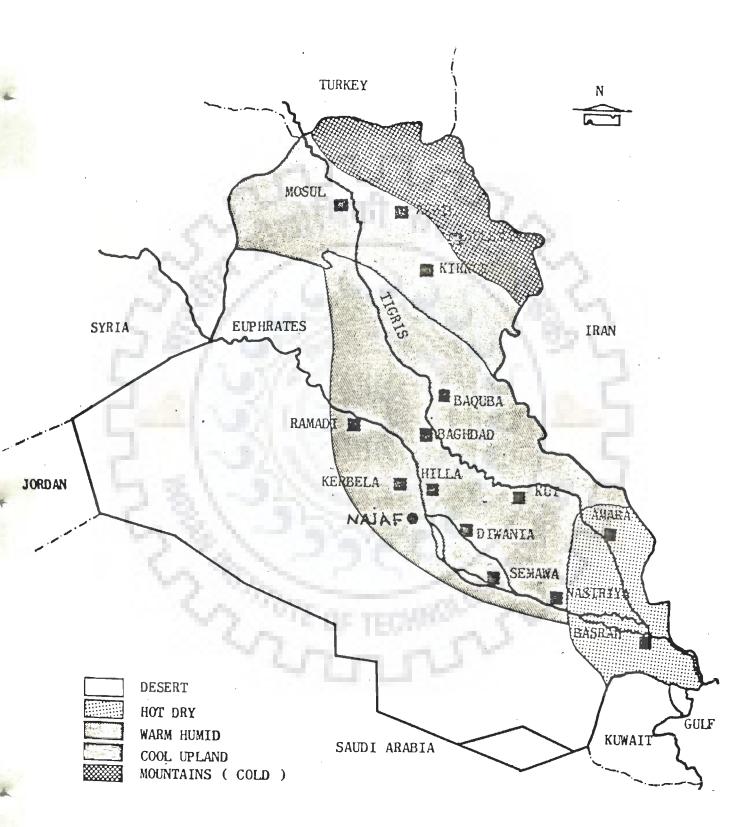
The climate in Najaf is generally moderate, with four clearly separated seasons. Summer is hot and dry (maximum  $44^{\circ}$ ). Winter is cold and rainy (main 6.1 C° and average 22 mm. rainfall as a monthly average for December, January and February). The maximum rainfall reaches upto 4.5 mm per hour. Winds are generally dry, and hot in summer time, and blow mainly (75 % of it) from the north-west. [See fig. (2.2, 2.3, 2.4, 2.5 and 2.6)].

The climate affects the type of life in Iraq, and this is reflected in the layout and style of building, especially houses. The amount of shade provided by the style of building is always considered when designing the plan of a house. This type of building often contains a courtyard, a small garden planted with shade trees, vines and basement where it is much cooler in summer than it is outside plus a variety of living rooms. The climatic differences have influenced the design of houses in the different climatic zones.

2.2.3 Topography and Geology :

The wider region area of Najaf may be considered as including :

- a) The two cities (Najaf and Kufa)
- b) The barren land between them, (10 kms.), and
- c) The rural villages along the river, served by the city of Kufa.



# Fig. (2.2) : IRAQ - CLIMATIC REGIONS

SOURCE

: Hassan, A.N. Climate, Housing and Town Planning in the Tropics. Sheffield Univ. M.A. Thesis 1974.

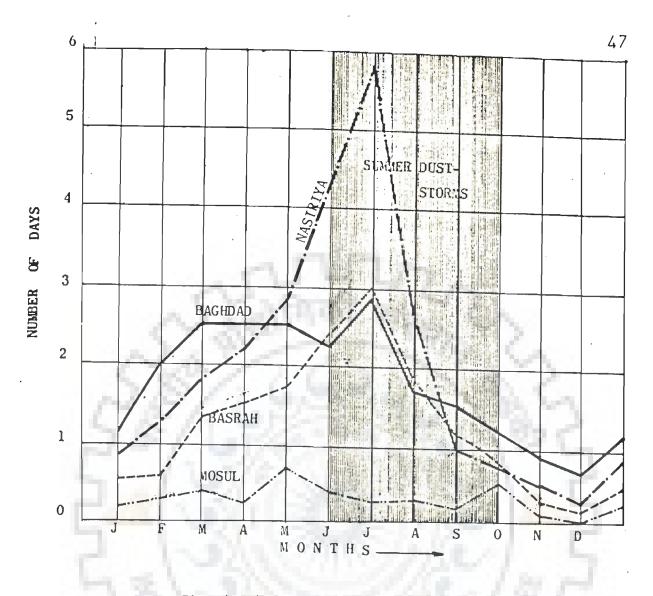


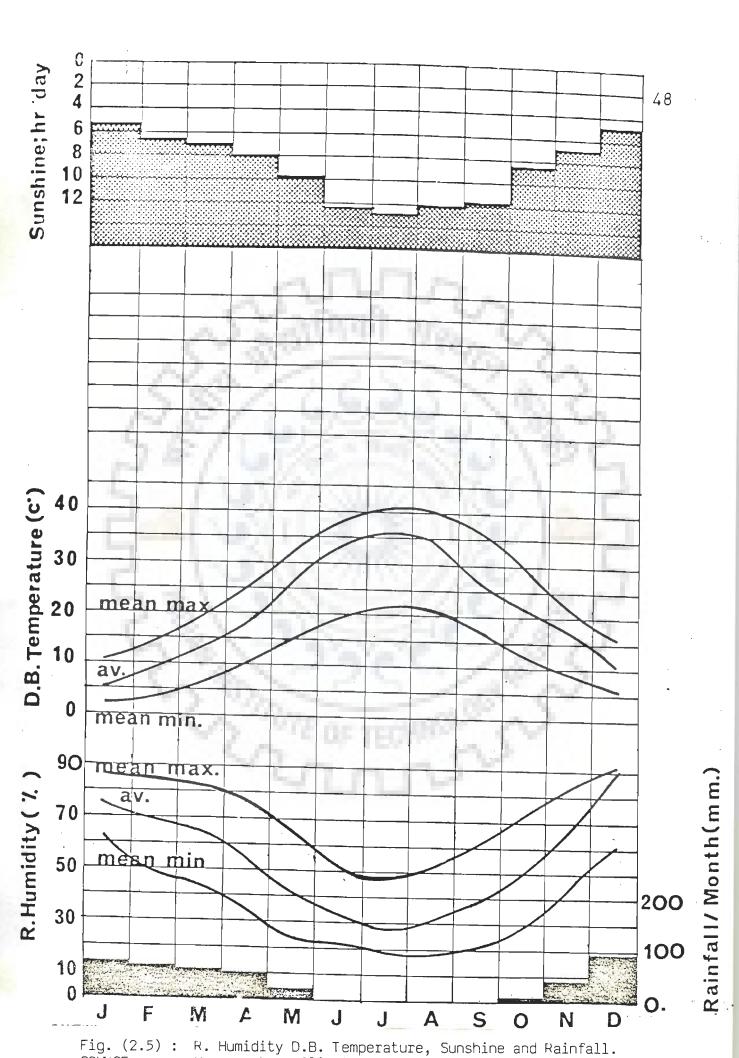
Fig. (2.3) : Dust – Storm : Average number of days in each month (Based on Meteo. Deptt.)

REGIONS	J	F	M	A	М	J	J	A	S	0	N	a
Mountains												
Intermediate												
Central												
Southern												

M'O'N T H S \_\_\_\_\_

Summer Spring Autumn Winter Fig. (2-4) : Seasons in Iraq in Relation to different climateic regions.

Source : Hassan, A.N. "Climate, Housing and Town Planning in the Tropics. Sheffield Univ. M.A. Thesis '74.

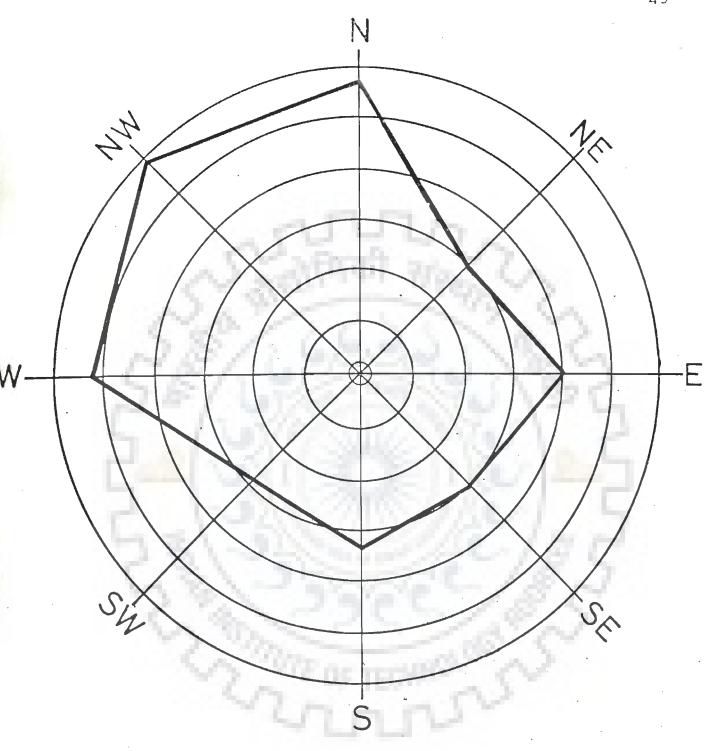


Along the right bank of the river, to an average depth of about one kilometre, the area is irrigated and covered with date-palm trees. The agricultural region of Najaf and Kufa extends to the south of the city of Kufa along the Euphrates. An abrupt change of elevation, a drop of about 50 M., with North West to South West direction, divides the region into high and low desert. This drop also determines the Western most limit of Najaf city. It expands from North West of Najaf up to Abu Skhair, South East of same, in Diwaniya. [See fig. (2.7)].

Towards South East of Najaf lies the unexcavated area where the ruins of ancient Hira, the capital of the Lachmid Kings, lie. Altitudes in the Najaf-Kufa region are much higher than those of the surrounding area. Levels increase gradually and normally from Kufa's elevation of 22 m., above sea level, to Najaf's, elevation of 60 M., which is built on the Western edge of the high desert, 10 Kms. West of the river Euphrates. Immediately West of Najaf the afore-mentioned escarpment separates it from a depression, the Bahir Al-Najaf, which has an elevation of about 10 m. Part of this depression remains flooded throughout the year.

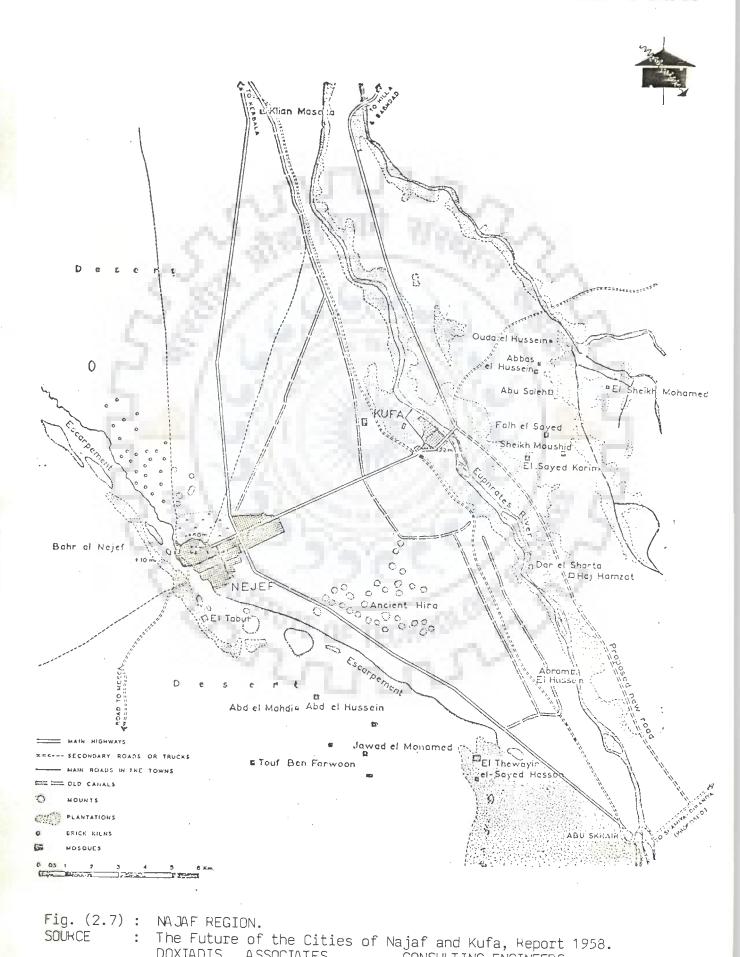
The subsoil of Najaf area consists of layers of debris on top and then conglomerate sand and a thick clay layer. In Kufa area the soil is mainly silt or sand. The underground water levels vary considerably in depth and rather irregularly throughout the year. In Najaf they fluctuate between 20-30 m.<sup>n11</sup>

1834 of Roother



THE PREDOMINANT WINDS IN THE AREA COME FROM THE NORTH WEST

Fig. (2.6) : WIND DRAWING SOURCE : Mosul Master Plan Report, 1974.



### 2.3 THE NAJAF OLD TOWN :

Najaf has enjoyed the status of a religious and cultural centre, next to Mecca and Medina for the last several hundred years now. The building in the Old Town reflect these centuries of history. There is the Holy Shrine of Imam Ali, the Great **Souq**, Mosques, and religious schools. There are more than fifty medieval mosques and religious schools of great interest and historical importance. Altogether, in the small area of the old town, there are 250 buildings individually or in groups which might be listed as being of historic or achitectural interest.

There are also many lengths of buildings frontage which, while not necessarily of historic significance but nevertheless, are important to the urban scene and worthy of protection. Although historic buildings are scattered throughout the old town; there are a number of important groups, and in particular there are whole areas west and south of the Holy Shrine, wherein much of the old town remains intact and requires to be considered for conservation.

Two events in modern times (1954) have in fact disturbed the old city of Najaf : firstly, the cutting of four major carriage ways radially towards the Shrine on all sides; secondly, the replacement of the Old Town Wall by the ring road. Though both events appear in retrospect unsympathetic, they have merit in terms of accessibility.

Najaf Old Town remains one of the finest examples of a complete small concentric Islamic town. Its integrity as an urban structure is,

therefore, of high importance. [See fig. (2.8)]. It is important to remember that, the traditional Arab City was built right up to the walls of its mosque, embracing in it a close-knit Mass of low interlocking buildings, as it was in Najaf town. [See fig. (2.18)]. Only in recent times has it become common to tear these structures away and expose the outer walls; Western-fashion; and these walls, which were never intended to be visible, often coarse and unfinished in consequence.

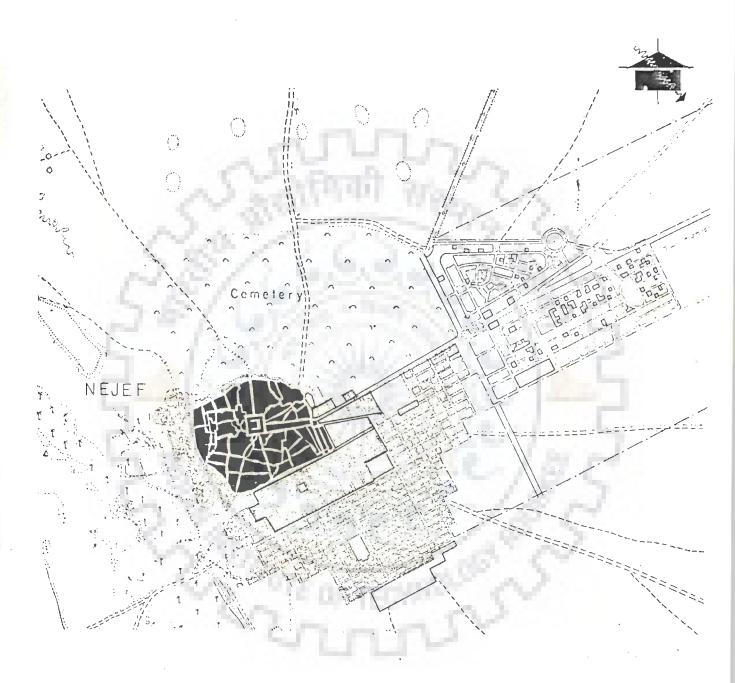
This section is going to give a full description of background of the historical and religious significance of Old Town; and the analysis of the present situation and its physical planning characteristics.

2.3.1 Growth and Development :

The oldest parts of Najaf is the Great Mosque containing the Holy Shrine of Imam Ali, around which settlements open up and where development took place. Najaf was surrounded by a wall that continued to exist until the third decade of the present century. The city wall had been demolished completely in 1938. Recently, the town expanded towards South-East and East only, as the cemetery to the North and the escarpment to the West prevented development in these directions. The following expansion of the town was undertaken by the Municipality of Najaf by implementing a high income housing scheme on both sides of the Najaf-Kufa road. Generally, the town had been growing slowly, until 1968, when a huge development – mostly for housing had emerged. [ See Area and Population (2.4.1), and figs. (2.9) and (2.10)].



Fig. (2.8) : Aerial photograph of Najaf Old Town, 1962. Source : Director General of Survey - Baghdad.



THE OLD	TOWN	BEFORE	1925
EXPANSIO	N BET	WEEN	1925-45.
			1945-54
i +			1954 -58

500 m 1Km.

Fig. (2.9) : The Future of the Cities of Najaf and Kufa: Report 1958. DOXIADIS ASSOCIATES - CONSULTING ENGINEERS

## 2.3.2 Impacts of Piligrimage :

In addition to natural and artificial increase of population in the city there is also a seasonal temporary increase due to the religious functions of Najaf. Hundreds of thousands of pilgrims visit the Holy Shrines of the city each year. Plilgrimages are usually combined with visits to the holy city of Kerbala. The average number of visitors is 10,000 per day.<sup>12</sup> Najaf being the last major centre in Iraq on the road to Mecca, it serves as a mid-halting point for the pilgrims heading for Mecca. [See Fig. (2.11), (2.12)].

The religious background of Najaf resulted in the cultural development of the town. Several famous religious schools exist in the city providing facilities for Iraqi and other students. [See (2.4.2.1)].

Further, to the above mentioned temporary influx of people into Najaf on pilgrimage and/or for studies, there is a continuous movement of other people who bring their dead relatives to Najaf for burial in its Great Cemetery. It is an old tradition of the Shiite Muslims to wish to be burried there.<sup>13</sup> [(See the Great Cemetery (2.4.2.4)]. Several guest houses have been erected in Najaf through donations, to serve the needs of foreign pilgrims and students. Such guest houses exist for Indians, Pakistanis, Iranians and other nationals. These guest houses usually have a square plan with a courtyard in the middle and rooms in two storey buildings around them. Najaf, same as Kerbala, owe their considerable growth and development through the centuries to the pilgrimages.

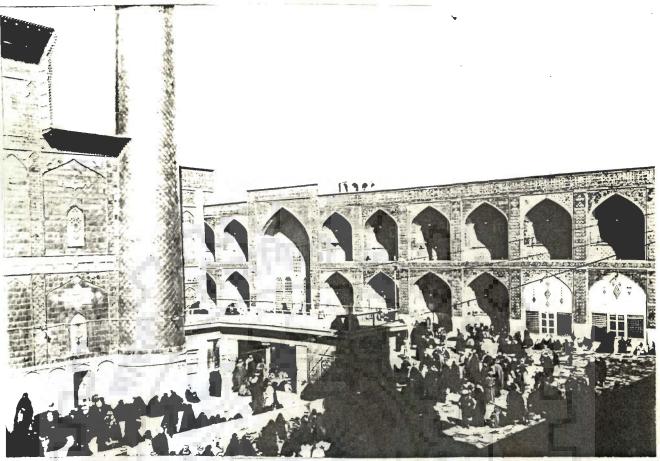


Fig. (2.11) and Fig. (2.12) : Two views of Pilgrims at the Courtyards of the Holy Shrine, Najaf. Source : State Organization of Antiquities and Heritage - Iraq.



Yet no worthwhile accommodation or services for the pilgrims exist in the city except those provided for the members of the religious schools and societies. Quite a number of pilgrims are accommodated in houses of the city. Due to lack of proper accommodation, most of the pilgrims stay in the open courtyard of the Holy Shrine. Such conditions obviously affect the health of the local population and further, affect the traffic and community facilities. There is urgent need to create proper accommodation infrastructural facilities to cater to the need of pilgrims of all shades and income levels. [(See 3.4)].

Adequate care has been taken by the Government to maintain the Holy Shrine, however, other traditional buildings and improvement of their environment is a problem which require urgent attention of the authorities to make amends and propose remedial measures.

2.3.3 Context Within Najaf Old Town :

The Old Town is the term used for the medieval city and now lies at the heart of modern Najaf. Originally surrounded by a defensive wall, this area still retains much of its original identity and is the focus of interest in the Urban Renewal Plan, particularly the core area around the Holy Shrine of Imam Ali.

The Old Town can not be considered outside of its physical context; and therefore, the Planning Area for the Urban Renewal Plan has been defined so as to cover an outer zone, lying between the Old Town and the rest of the city, and not including the Great Cemetery of Wadi elSalam. [See fig (2.13)]

The renewal of Najaf's central area could be closely related to planning and development elsewhere in the city. The fundamental relationship between the two is of course that the Old Town of Najaf will continue to function as City Centre for all Najaf City as it expands to a population of 550,000 inhabitants and more in year 2,000. [See (2.4.1) and fig (2.14)]. This functional relationship is complemented by a physical one, in that the Old Town must be an integral part of the urban fabric of Najaf as a whole. See chapter 7.

## 2.4. ANALYSIS OF THE PRESENT SITUATION :

Surveys were made of many elements of the Urban Fabric and living conditions in the Old Town including :-

- 1. Area and Population
- 2. Land use
- 3. Land Ownership
- 4. Building Conditions
- 5. Tourism
- 6. Traffic and Parking
- 7. Townscape

Survey activity was concentrated on the Old Town, reflecting its relative importance in the planning area. The outer zone was included in surveys wherever appropriate. The most important result of this work was the identification of problems presently evident in the Old Town. [See chapter 3]. The most significant of these will be discussed later.

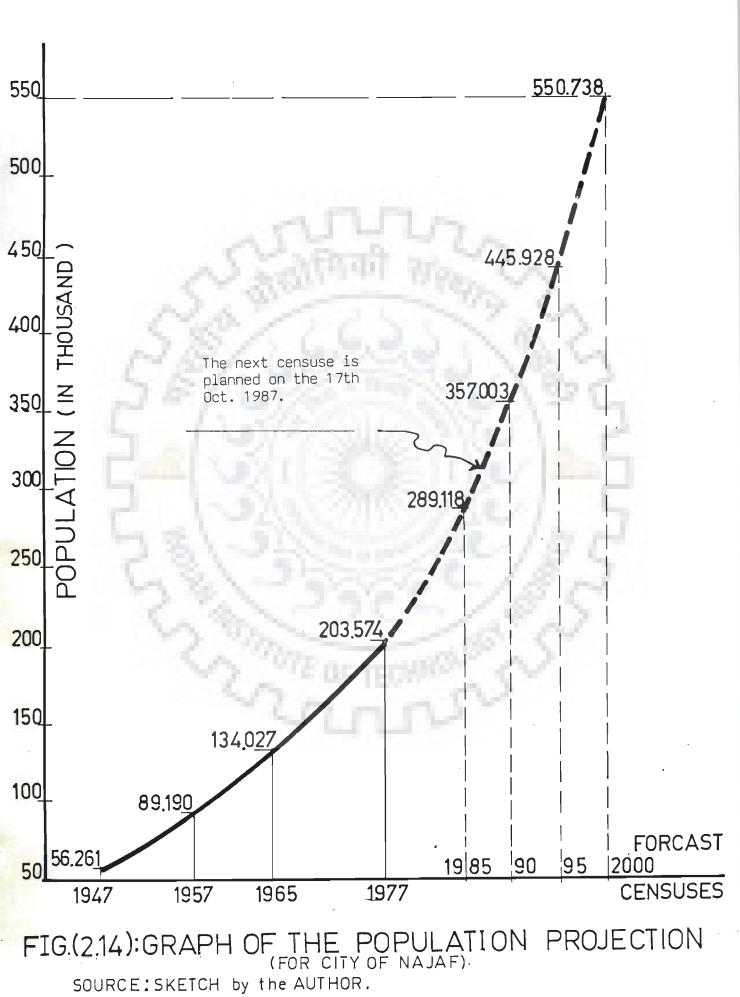
2.4.1 Area and Population

Najaf Old Town is now relatively more preserved than the other towns for historical and geographical reasons. The historical town core is basically a circular township having a radius of about half a Kilometer, covering some 58.3 hectares. The expansion of the rest of the city covers more than 2770 hectares. In 1973, the area was only 1533.8 hectares.<sup>14</sup>

Population of Najaf city according to 1977 census was recokened at more than 200,000 persons. Eighteen per cent of this population and 65% of commercial area are concentrated in the Old Town, with growth rate of 4.7% for Najaf City and 3.3% for the country as a whole. In 1973, 23.5% of the population lived in Old Town.<sup>15</sup> However, in the last thirty years, the increased sense of stability and overall urban expansion of the city has directly affected the down town of Najaf. The population figures available for the city of Najaf are those of the censuses of 1947, 1957, 1965 and 1977. [See table (2.1)]. The total area of Najaf Old Town is 58.3 Hectares, this is inclusive of the area of the Shrine (1.56 hectares), the area of the Great *Souq* (3.52 hectares) and the area of the major streets (3 hectares). The rest of the Old Town consists mostly of residential area covering nearly 50.2 hectares. The density of the Old Town in 1973 was estimated to be more than 800 inhabitants/hectare, while in 1985, it has come down to about 600 inhabitants/hectare. This is due to three major reasons, firstly the Government from 1980 onward has been providing land to every married couple at a very low price, and interest free loans to build houses in the new neighbourhoods, created for this purpose. Secondly, many houses have been converted to more profitable uses that is mostly to commercial activities. Thirdly, some houses are lying vacant because these are no longer habitable due to their dilapidated condition. In 1973, 123 houses out of a total of 4250 were identified to be vacant.<sup>16</sup> This number had inflated to 250 houses as revealed through the survey carried out by the author in the summer of 1985.

		and the second s
YEAR	POPULATION	GROWTH RATE
1 20	2000	185
1947	56,261	
1957	89,190	4.7
1965	134,027	4.6
1977	203,574	4.7
1985	289,118	4.7
1990	357,003	4.7
2000	550,738	4.7

TABLE 1 : THE POPULATION FIGURES FOR NAJAF CITY



#### 2.4.2 Land Use :

The following four elements characterise the predominant land uses in the central area of the Najaf Old Town :

- 1. The Religious Buildings
- 2. The Great Souq. (Commercial and Business Area)
- 3. Residential Area
- 4. The Great Cemetery

Map numbered fig (2.15) shows the disposition of Land-Uses in the Planning Area as these were obtaining in the year 1985. Housing is the most predominant land use in the Planning Area, both in the Old Town and in the outer zone. The next most extensive land use in the Old Town is commercial which is typical of a city centre. This is concentrated between and along Zin Al-Abiden and Al-Sadik streets. Commercial activity in the Outer Zone is generally scattered, but has a concentration along the eastern part of the zone, and is almost absent in the western section of the Old Town. Typical for a city centre is the absence of public buildings in the Old Town. These are scattered throughout the Outer Zone forming a concentration in the East Part around the 20th Revolution square and along Kufa Road.

Open space in the Planning Area is very meagre. The major open space is the Imam Ali Square where several shops and car parking are underground with unattended paving area above [See fig (2.16)], which is surrounded by major roads. The other major open space is towards East of the Planning Area which is currently being used for car



FIG(2\_15): EXISTING LAND USE

## LEGEND



BUILDING of HIGH ARCHITECT-URAL & HISTORICAL VALUE . (the HOLY SHRINE).

RELIGIOUS BUILDINGS (Mosque, Library, Husseiniya, School, and Graveyard).



COMMERCIAL AREA.(Shops, Offices,Clincs,Hotels..et.c).



UNDERGROUND COMMERCIAL AREA (Shops).



RESIDENTIAL AREA.



PUBLIC BUILDINGS (School, Hamam)



GREEN AREA



VACANT PLOTS or/and DETORIORATING STRUCTURE



PEDESTRIANS & ALLEYS. or OPEN SPACE

MAJOR ROADS.

parking, but in effect it is a reserved site for big Commercial (Centre project that is to come up later.

Very little Land in the central area is unused. There are a few small chunks of derelict land, notably those directly South-West of the Shrine (Main Mosque), and some on the periphery of the major roads of the Old Town. These are mostly the remnants of old residential units which had, over period of time decayed due to neglect and disrepair and have parished in the process leaving behind the hollowed chunks of vacant lands. These vacant spaces could be profitably used to provide respite to the continuously built area in the Old Town.

Also concentrated between the Old Town and the Najaf Valley (Bahir Al-Najaf) is the Largest Open Space which is included in the Planning Area. This escarpment to the West of the Old Town has prevented development of the town in this direction except for some development between the edge of escarpment and the peripheral ring road; and of course accross the valley.

# 2.4.2.1 The Religious Builidings :

Najaf is still a unique religious town in its urban tissue and pattern, it is full of activities like Mosques, religious schools, husseiniyas, and Libraries. These are the four elements which determine the character of the area.

The Main Mosque :

The mosque is located in the very centre of the area and remains its most important functional and visual feature. Together with its courtyard surrounded by a high arched wall it covers about 1.5 hactare area. [See figs. (2.18) and (2.22)].

The Main Mosque by itself is one of the most outstanding monuments in the Islamic World and certainly in Iraq. This mosque is also considered to be the Holy Shrine because it enshrines the sacred remains of Imam Ali, the Fourth Caliphat of Islam. The Holy Shrine is also a focus of muslim pilgrimage, attracting visitors and pilgrims in their thousands from as far as India. Great quantites of priceless objects, gifts of potentates and sultans, are treasured in this mosque. Most of its present form and structure, however, goes back to the early decades of the 16th century when it was rebuilt entirely. The Mosque complex is roughly a square area of about 120 meter sides consisting of four major components :

- The outer, 17 m. high wall pierced by (5) portals contains some 80 rooms. The East side wall is punctuated by a 35 m. high clock tower. [See figs. (2.18), (2.19)]
- A U-shaped open court, which surrounds the inner building proper except its Western side, has a length of 82 m. and a width of 77 m. [See figs. (2.11), (2.12)]
- The tomb building, which is about 40 x 50 m. overall, consists of the inner sanctum surrounded by superb gilded
   dome having a height of 35 m., directly over looks the golden

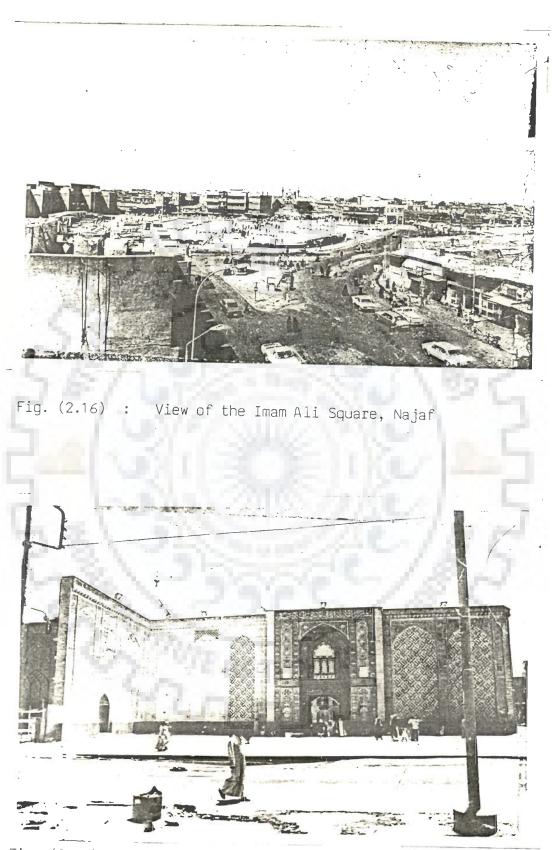
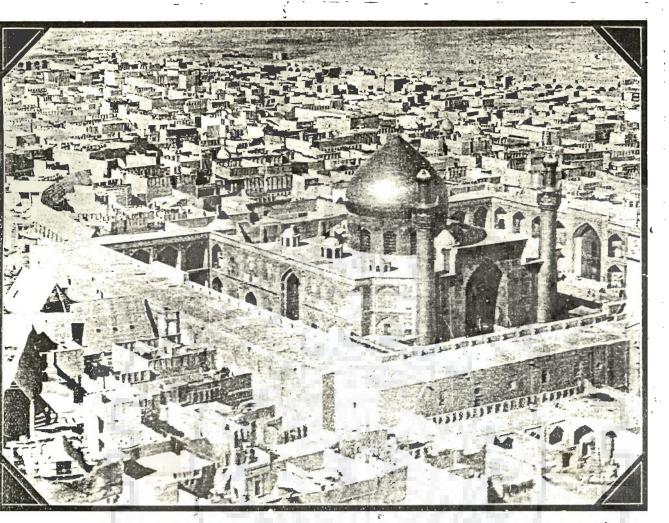


Fig. (2.17) : View of the Western Portal of the Holy Shrine, Source : Photographs by the Author



SHRINE OF HADHRAT ALL NAJAF.

Fig. (2.18) : View of the Holy Shrine of Imam Ali, Najaf, 1921. Superb gilded dome and the corners of the tomb building are expressed by two 35 m. high gilded minarets. From this Old photograph, it is important to note that, the traditional Arab City was built right up to the walls of its mosque, embracing it in a close-knit mass of low interlocking buildings, as it was in Najaf town.

Source

: The Times of Mesopotamia, Christmas Number, 1921, Iraq.

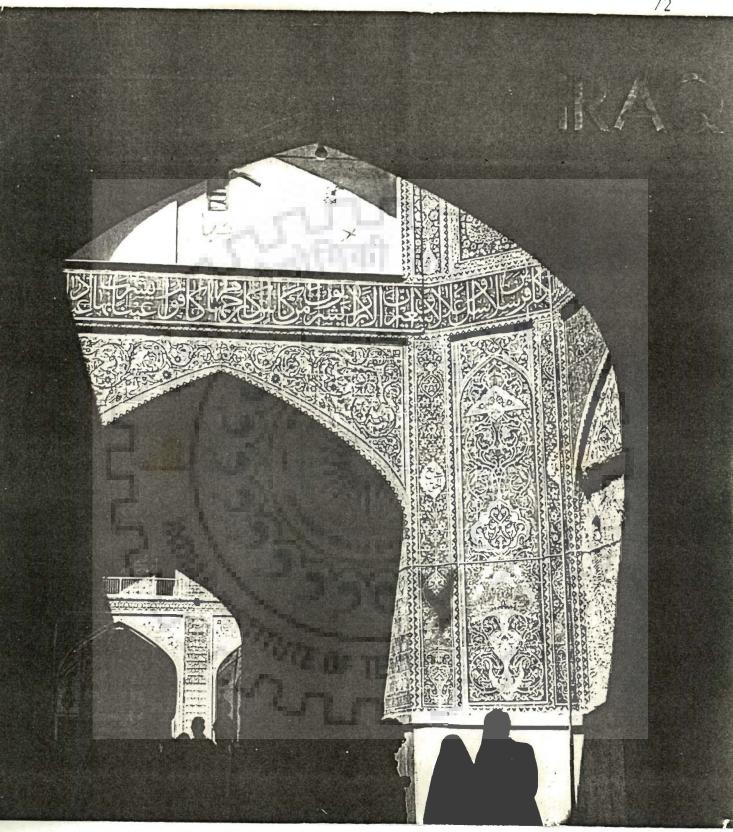


Fig. (2.19) : Islamic Decorative Ceramic Work at Southern Portal of Holy Shrine of Imam Ali, Najaf

Source : Iraqi Cultural Centre, London, 1977.

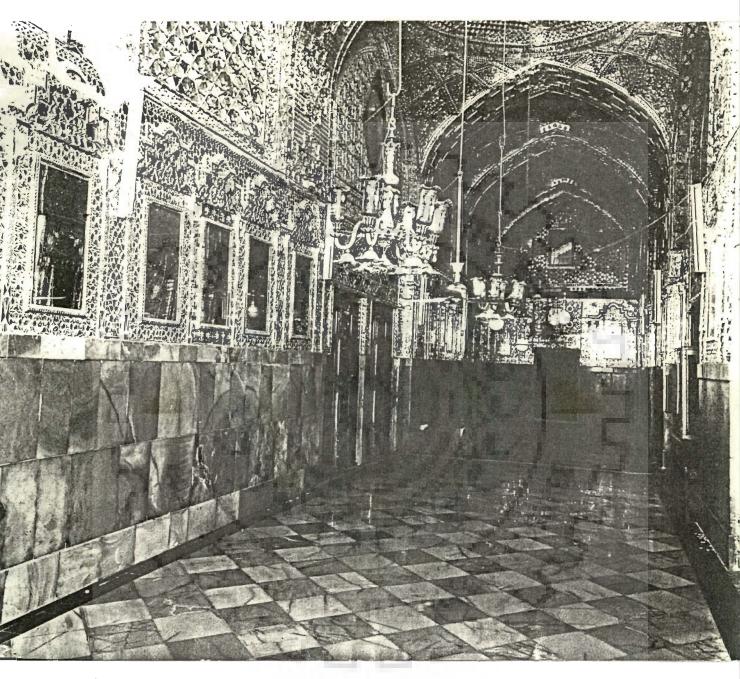


Fig. (2.20)	•	Islamic Decorative mirroric work inside the tomb building of Holy Shrine of Imam Ali	
Source	:	State Organization of Antiquities and Heritage Iraq	

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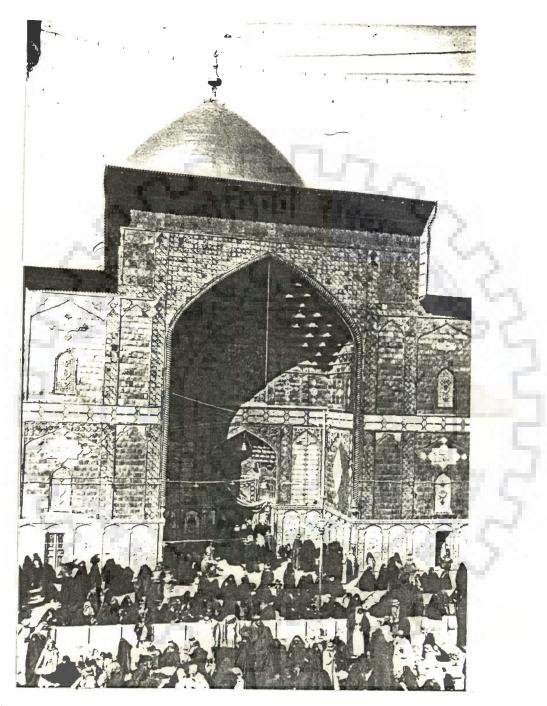
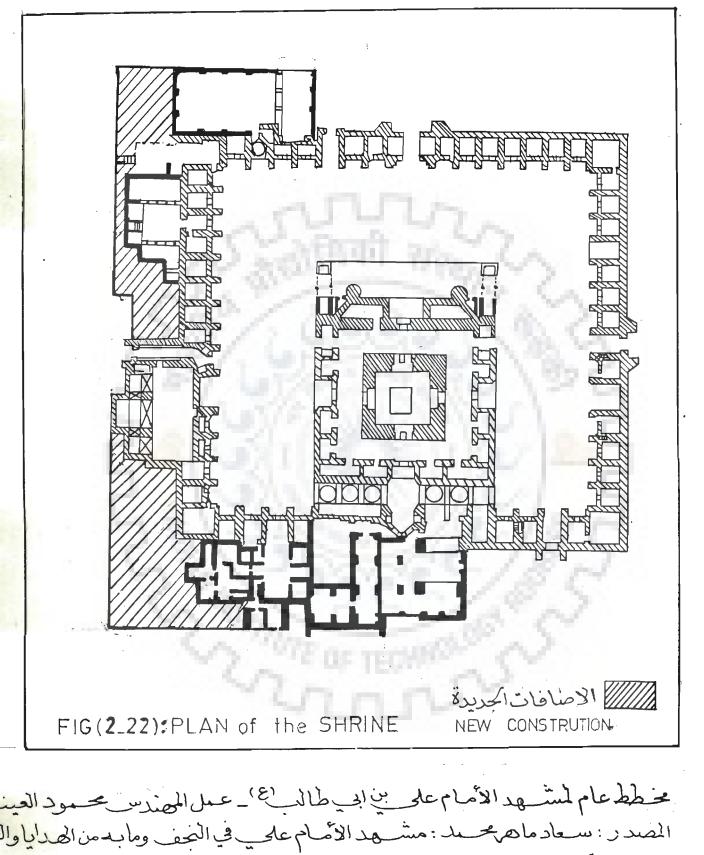


Fig. (2.21) : Superb gilded Dome and gilded Facade wall, with magnificient Islamic Decoration of the main gate to the Holy Shrine of Imam Ali – Najaf

Source

e : State Organization of Antiquities and Heritage – Iraq.

ింగా కొర్తి రోగ్యాంటికి ఇందింది.



SOURCE: Suad Mahir Mohammad. "Imam Ali Shrine" Cairo 1958.

screened Sanduq. [See figs. (2.20), (2.21)], and

- The surrounding inner *Riwaq* has an outer flat-roofed colonnaded portion. The corners of the tomb building are expressed by two 35 m. high gilded minarets, and have conopied balconies. [See fig. (2.22)].

Mosques And Husseiniyas :

Besides, the Golden Mosque of Imam Ali Ibn Abi Talib in the middle of the Old Town, numerous other mosques also exist in the city. There are some 15 large mosques and another 55 *masjeds* (small mosques). Eleven *Husseiniyas* also exist in the Old Town of Najaf. All these religious buildings are scattered in the Old Town, but are at a close distance from the Holy Shrine. Their total number is 81 and constitue a percentage of 76.5 when compared to the total number of religious buildings in the whole city of Najaf. [See fig (2.23)]. *Husseiniyas* have a main hall and a large open space for meetings, where ceremonies for prayers or reciting from religious books takes place.

Schools and Libraries

The religious character of Najaf is further reflected in its numerous, famous, religious schools and libraries which cater for the needs of the Iraqi students as well as scholars from abroad. As one of Islam's most important seats of religious instructions, Najaf has many schools where Grammer, Theology, History and Literature are being taught. Najaf City has about 34 religious schools; out of which 24 are located in the Old Town and accommodated in special buildings, architecturally Fig. (2.23) : View of a Courtyard of a small Mosque and private graveyard, Najaf Old Town

Source : Photography by C. Doxiadis Associates Consulting Engineers, Najaf, 1958



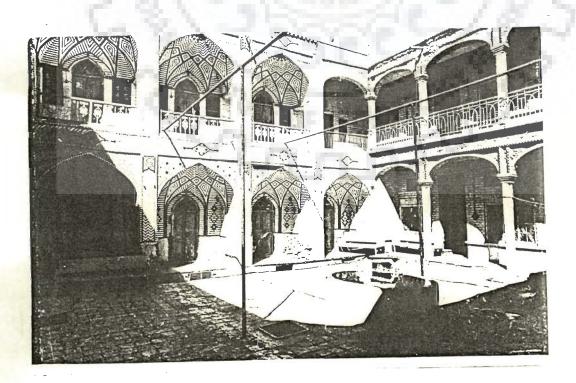


Fig. (2.24) : View of the courtyard of Religious School – Islamic Decorative Work. Source : Photograph by the Author

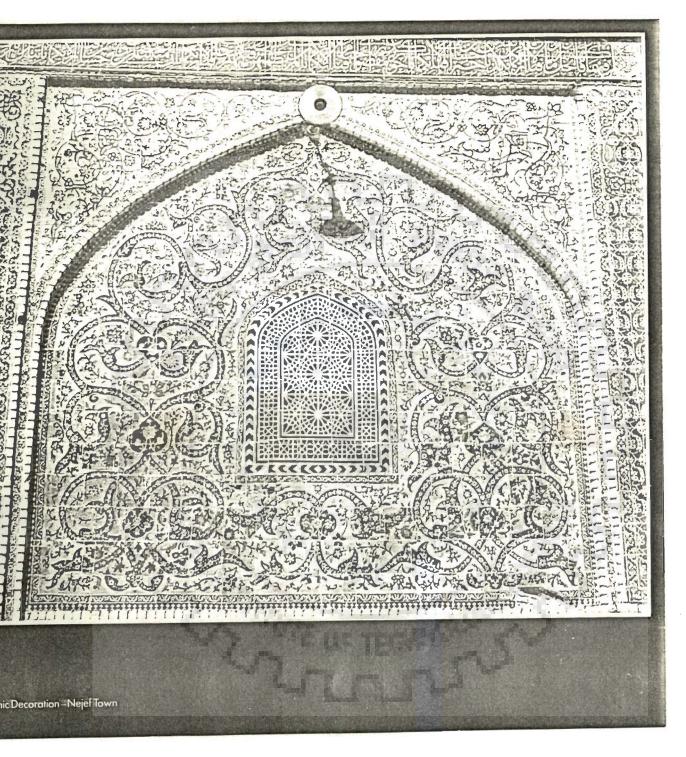


Fig. (2.25) : Islamic Decorative Ceremic Work Source : Iraqi Cultural Centre - London, 1977

interesting, with a central courtyard and elaborate decorative elements. [See figs. (2.24) and (2.25)].

Most of the students studying in these schools are by their own choice devoted themselves to the developing of proficiency in reading and understanding of religious scriptures. They have to be necessarily resident scholars. In 1973, as many as 2637 students from different nationalities had been accommodated in 34 religious schools, which have a total area of 28600 sq.m.<sup>1.8</sup> This is besides the *Fiqh* College (religious and Jurisprudence institute), which had on its rolls 572 student in 1973.<sup>19</sup> It is located outside the Old Town, on the road to Kufa.

A special feature in Najaf is the large number of private libraries that exist in the old houses of the Old Town, which are open to the public. There are a score of 50 large private libraries and some 700 small libraries. During recent years some new public libraries have also been built. They are 19 in number and occupy an area of about 0.6 hectares.<sup>20</sup>

### 2.4.2.2 The Great Souq (Commercial Area) :

The Great *Souq*-commercial and business concentration-stretches along all paths leading towards the Holy Shrine; particularly from the South and East directions. [See fig. (2.15)]. They cater for both the visitors to the Shrine and the local population, and consist of numerous shops, workshops, clinics, offices and hotels. They represent a wide range of standards depending on the functional and structural values of buildings they occupy. Commerce and services are the most predominant economic functions in the city and a large number of people make their living out of these functions especially during the peak seasons of pilgrimage.

In accordance with the 1957 census of distribution and service 2194 persons were engaged in 1436 retail and whole-sale shops, which correspond to 13.3 shops per 1000 people.<sup>21</sup>Another 682 establishments, or 6.4 shops per 1000 people, were offering services to the people and engaged 1813 persons, or 17.1 per 1000 people. While in 1973 the number was 9536 persons, who were engaged in 4208 retail and whole-sale shops, and occupied an area of (5.75 Ha).<sup>22</sup>Some of the 3800 shops were located in the Old Town which made 86.2% of the shops in the commercial area.<sup>23</sup> It has been estimated by the municipality of Najaf that some 5,000 retail shops in 1985 existed in the Old Town. Considering that Najaf serves a very small region having a population of about quarter of a million (according to 1977 census), the excessive number of shops is justified by the influx of pilgrims.

The Great *Souq* is the commercial and business district which is consisting of separate markets for different commodities and exhibiting a remarkably uniform structure. It covers an area of 4 hectares. The producers or the retailers of the same kind of goods always occupying adjacent stalls or shops and each trade has one of the market lanes *bazaar* completely to itself. The Great *Souq* is containing several lanes for books, incense and perfumes, utensils, textiles, and various other household and luxury goods. There are today more than (25) *Souqs* and *Khans* within the Old Town of Najaf; most of these are connected or fall within the Great Souq. The layout plan also shows that these *Souqs* are interrelated. They are tied by pedestrian paths as well as served by vehicular traffic; some of these *Souqs* are reserved for pedestrian traffic. There are also shops situated along the streets, specially of Zin Al-ABIDEN, AL-SADEK, and AL-RASSUL streets. The pedestrian shopping areas provide a mileu of infinite colour, variety and noise. Frequently they are covered over, with contrived skylights being left for light and ventilation. [See figs. (2.26) and (2.27)].

Another type of establishment are the regional shops (*Khans* or *Wekalahs* ), which are building chiefly designed for the reception of merchants and their goods from distant places. In *Khans* merchants get lodging and storage for their merchandise until such time that they are able to dispose them off. It consists of rows of stores surrounding a court, with upper floors providing lodging for merchants. This building is situated not in direct relation to the main circulation area or the main spine of the Great *Soug*, but only in indirect relation. "(because the movement system of the shops form a linear circulation space, between these spaces, at frequent intervals, [there is] an entrance leading to a separate, self contained world, and has its individual character of a busy square)".<sup>24</sup>

It is a fact that the traditional *Souqs* of the Najaf Old Town are very much in demand by merchants and are sought by the shoppers in preference to any of the modern shopping centres. Halim Aref in a paper has discussed the popularity of the traditional *Sougs* in the

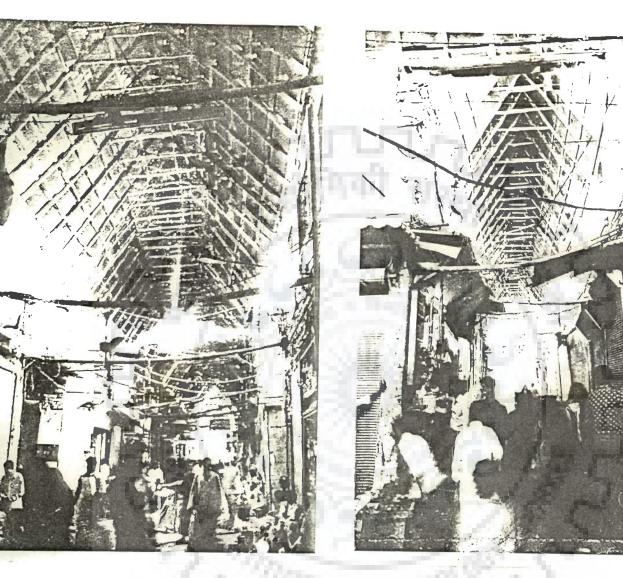


Fig. (2.27) : View of a secondary branch at the Great Souq

Fig. (2.26) : View of the Main Spine of the Great Souq.

Source : Photographs by the Author

Arab-Islamic City, which are popular for the following reasons :

- a. [These] are located in the heart of the city at the place where city dwellers go when they want to buy special or luxury goods, to search for a bargain or to obtain a wider choice than can be found in their neighbourhood shopping centres.
- b. Almost all the Sougs in the central area are at the focus of the city's circulation system, and near one or more of its main streets.
- c. The **Souqs** were in general combined with communal buildings such as the mosques, public baths, law courts, etc.
- d. Shops have been arranged for easy circulation. The pedestrian movement is completely separated from the vehicular movement as vehicles are only used during certain periods of the day early in the morning or late in evening.
- e. The **Souqs** are grouped according to trade or craft. Most of the shops are small and intimate. The shopper is always able to inspect the goods in close detail and can bargain about the price and make a comparison between the goods displayed in the different shops within a limited area with little effort.
- f. Another aspect which is also important is the architectural unity of the plan, the form and the design of the *Souq* as a whole.
- g. Weather-insulation is an advantage. The covered **Souq** is wellshaded, and the shoppers can circulate within without being exposed to the scorching sun of summer, and wind and rain in winter.
- h. A great proportion of these shops are in direct contact with, or in the vicinity of, stores and warehouses where the wholesale goods or the raw materials are stored within walking distances from each other and from the shops. In a number of these *Souq* we find the specialized craftsman still working and they form centres for small workshops engaged in service industry, most of the [non-obnoxious] type. In a lot of cases we find that the souq has also accommodations for living quarters for the craftsmen or merchants, usually on the second floor.<sup>25</sup>

On the contrary to the Great *Souq* area, commercial activity in Najaf City is conducted essentially in small shops fronting onto the main roads. This orientation towards main roads can be seen clearly in many districts. The pattern of shops has a tendency towards linear forms, because of the road-orientation, but major lengths of building-fronts along the roads concerned are not used for commerce. Storage space in these shops is generally small, which means that good access by delivery vehicle is an important factor. This is, of course, often made difficult through unregulated parking.

No study is available regarding the future needs of the commercial area in the Old Town or the city, but it is obvious that, the demand for commercial space is continuously out-stripping its provision. [For more discussion see (2.4.3)].

2.4.2.3 Residential Area :

Residential users cover about 76% of the traditional area in the Old Town. They are of a traditional type; courtyard houses, oriental in their character, covering the whole plot, in one or two floors plus a basement. The houses are accessible from narrow lanes, and sometime accessible from basement forming a network of walk ways at the mid-day to cover up the environmental conditions of the summer season and also to provide refuge when the city is attacked. It is also used as storage areas whenever convenient. This unique feature is not found in other *Medinas*. The built form of housing was solved organically and had emerged from the dictates of the harsh climate. It responded to social mores, climatic conditions, available technology and building materials. Houses were built close to each other, protecting one another from solar radiation and sand storms. Generally built around a courtyard, they became the entity around which the social life of a Muslim family revolved. [See App. A. Inventory of the 10 selected traditional buildings].

To understand the morphology of housing in an Islamic town it is imperative to look for social and spiritual influence that moulded the life style and thus the architecture of their housing. Division of the house into two distinct sections, the "*Diwan* or *Al-Barrani* (Outside)", for the males and their male guests, and the "*Haram* or *Al-Jauani*" for the women, female servants and women guests, is the direct outcome of socio-spiritual tenents imbibed in the Holy *Quaran*. Often, these two sections in the house have their own private social gatherings and family celebrations. On these occasions, it is covered by a canvas as a protection against dust storms or rain showers. Some other houses are planned with two courts, to meet the requirement of segregation.

Numerous Najafian houses have been influenced by the Turkish and Baghdadian style of building with regards to ventilation and masses. Whereas in Baghdad, natural ventilation takes place by means of airscoops (known as *Badgeer*). This system of ventilation is extensively found in Najaf Old Town as well. Also, bedrooms in these houses have one or two external elevations projected about 2 - 3 feet (60 -90 cm) beyond the external walls of the ground floor. This

projection provides just the right cut-off angle which shelters the ground floor elevations from direct solar radiation. Similarly, the roof projects beyond the external walls of the first floor to protect the first floor windows. [See fig. (2.28)].

The traditional houses in Najaf Old Town, however, remain a comfortable and satisfactory place in which to live. These offer certain obvious advantages over the more modern houses built of concrete, with excessively large windows. Statistical data regarding various residences and residential areas in Najaf Old Town is given hereunder.<sup>26</sup>

- There were some 4250 Dwellings in 1973, covering a total residential area of 38.25 hectares, which amounts to 76.2 % of the total area of Najaf Old Town.
- The residential area has a density of (84.4 Dwellings/Ha) and has a built up ratio of 66 %, 13.2 % for pedestrian and alley-ways, and 20.8 % for courtyards and open spaces.

Very few open spaces exist in the residential area of Najaf Old Town, and most of them are not properly planted and developed. Children wish to play and they do play. But they do so in narrow streets or out in the desert.

There are also 186 graveyards of famous personalities attached to the houses. These graveyards are special buildings, architecturally interesting, with elaborate decorative elements. [See figs. (2.29) and

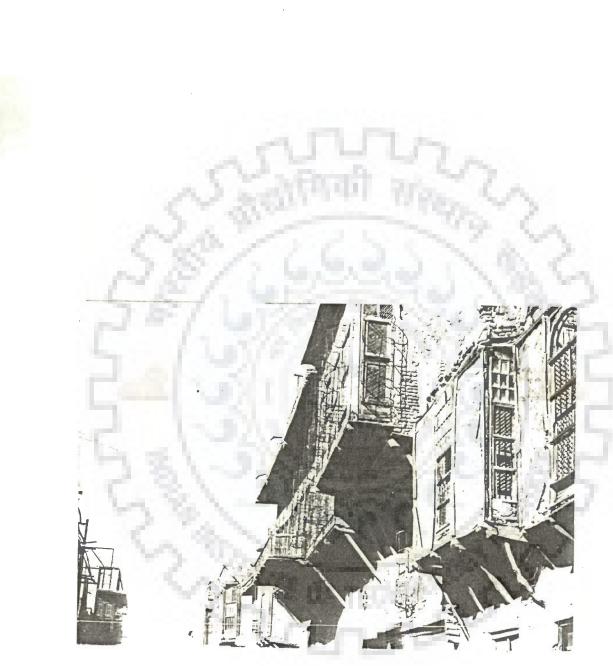


Fig. (2.28) : View of the Projections at Upper level (Shanashil), the timber cantilevers are clearly visible, Najaf Old Town.

Source : Photograph by C. Doxiadis Associates, Najaf, 1958.

(2.30)]. These buildings are scattered in the residential area, which cover a total area of 4510 sq.m.  $^{27}$ 

2.4.2.4 The Great Cemetery :

The Great Cemetery of Najaf is supposed to be one of the largest cemetery in the Middle East. It is located north of Old Town and adjacent to the traditional town and has expanded beyond the city boundary. It occupies an area as large as the whole of the Old Town i.e., nearly 200 Ha.

Najaf's cemetery has a national, and even international importance, Shiites from Iraq and elsewhere wish to have their burial in there. It is significant that the Arabic word for the Great Cemetery in Najaf is derived from "Wadi el-Salam" which literally means 'The peace valley cemetery.' A large number of dead are brought here every day for burial. It has been calculated that in 1973 the cemetery received some 27,000 dead bodies for burial. It was also estimated that since its establishment about thirteen centuries ago some 4 millions dead have been buried there.<sup>28</sup>These funeral ceremonies attract thousands of visitors daily to the city of Najaf, thereby strengthening its economic base. [See fig. (2.31)].

The cemetery is an open and dry area with no green of any kind. The several types of graves and tombs define the landscape in the area. All graves face towards Mecca. They are of various types, the deep, where a cellar is constructed underground, the single hump of earth, or the tombs of the rich person with a guest room, with paved roads, lighting and telephone installations etc. [See figs. (2.32) and 2.33)].

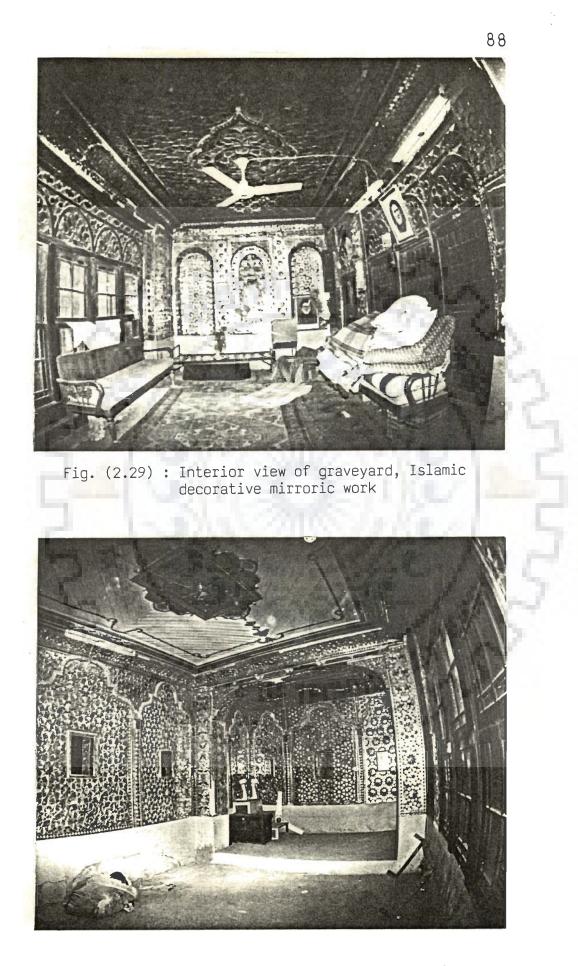


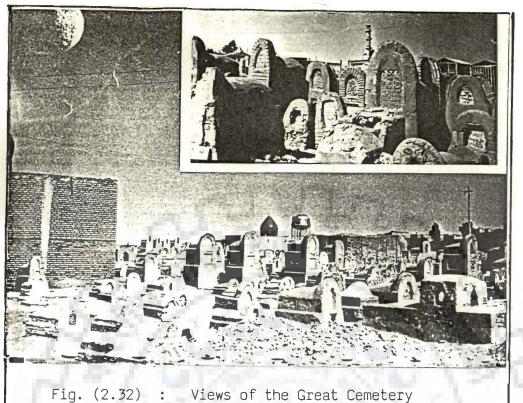
Fig. (2.30) : Interior view of graveyard, Islamic decorative mirroric work.



Fig. (2.31) : View of Al-Tousi Street, Show Taxis and private cars parking while visit take place to the Holy Shrine by the visitors and their dead, before the Funeral ceremonies at the Great Cemetery of Wadi el-Salam

Source

: Photograph by the Author.



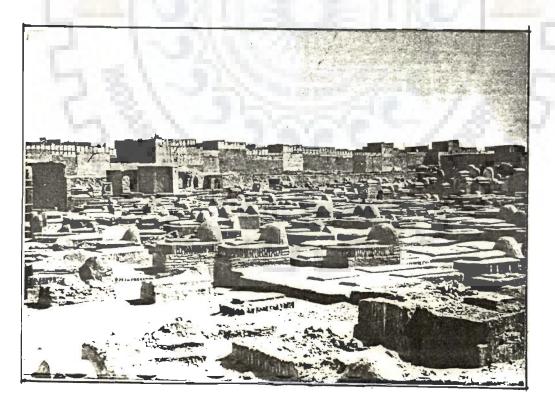


Fig. (2.33) : View of the Great Cemetery

Source :

: Photographs by C. Doxiadis, Najaf, 1958. Insert photograph by the Author, 1985.

### 2.4.3 Land Ownership and Development Schemes :

After wholesale demolishion of many parts of the Old City, the Holy Shrine is now cut off from its traditional environment. The resulting large surfaces are only partly used for indisciplinary commerce (some covered by temporary sheds), while most of it has become an urban waste serving for car parks, attracting vehicular traffic and generating large traffic congestions in front of the main entries of the sanctuary.

Land ownership in the Planning Area is depicted on next map. [See fig. (2.34)]. The Holy Shrine located in the very centre of the area remains its most important functional and visual feature, together with its courtyard surrounded by a high arched wall which covers about 1.5 Ha. This area belongs to the Shrine Authorities and is organized by the Ministry of *Awqaf* and Religious Affairs, Republic of Iraq.

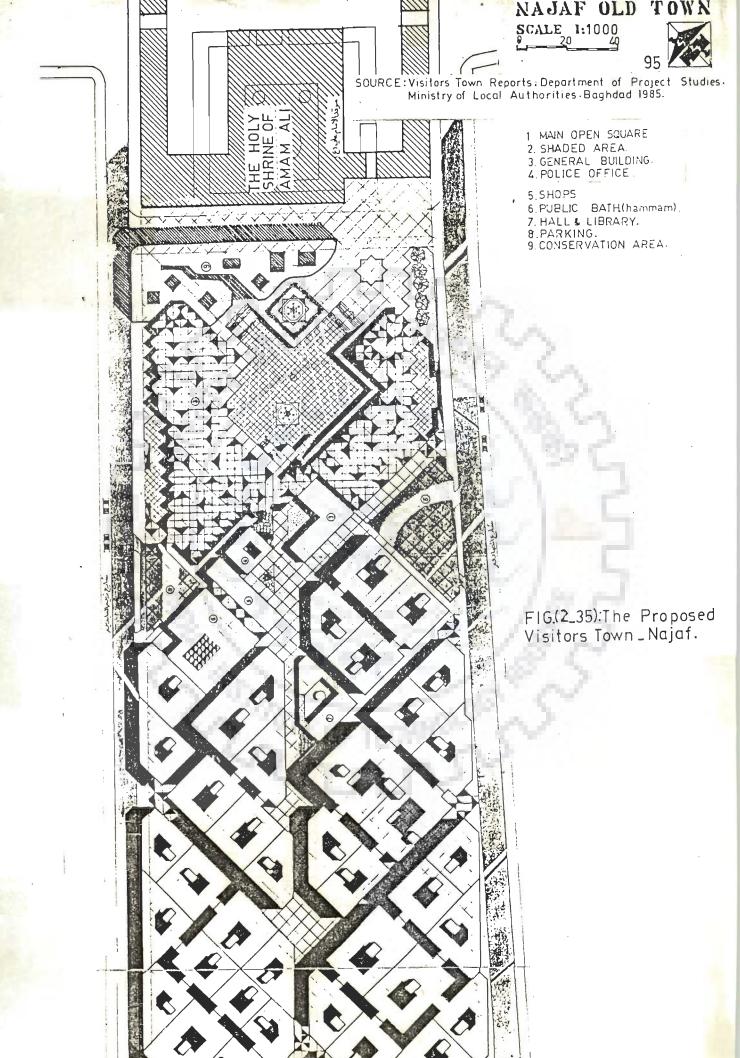
A massive compensation had been paid by the municipality of Najaf to the private land owners for acquiring different areas within the Old Town for purposes of environmental improvement and redevelopment of these central areas; the details of some of these areas and the purpose for which these were acquired is given hereunder :

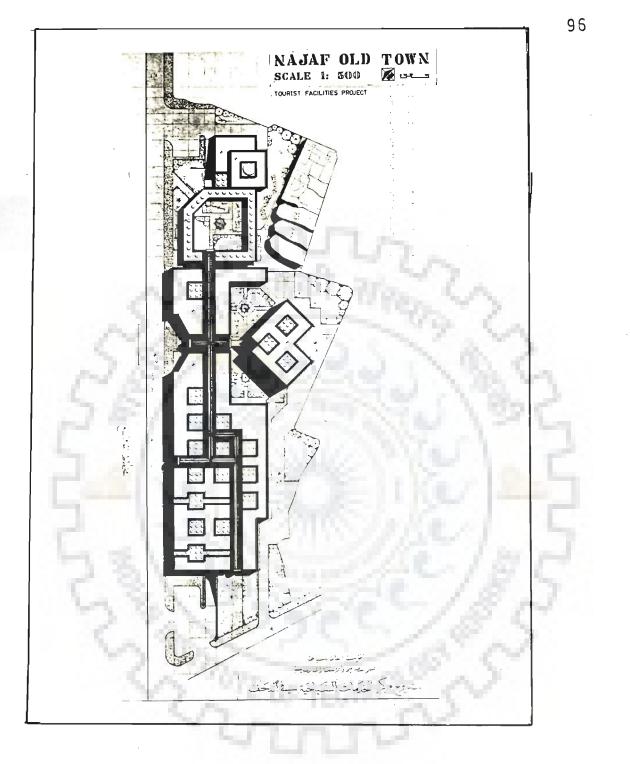
 An area of about 3 Ha. surrounding the Holy Shrine in four directions, upto a distance of nearly 60 meters beyond the Shrine's walls was acquired in the year 1980, however, no action has been taken for redevelopment of this delicate area from planning point of view, and a conscious and deliberate study of its urban design aspects is needed to ensure its harmonious development.

- 2. A site of an area of 4.3 Ha. in the West of the Shrine has been named for Visitor Town, in order to meet the requirements of accommodation and better facilities for the visitors and pilgrims to the city. A master plan for this project has been approved recently. [See fig. (2.35)].
- 3. A site of an area of about 3 Ha. in the South-West of the Shrine across the road to the previous one has been named for Tourist Facilities and Cultural activities; A master plan for this project has also been approved recently. [See fig. (2.36)]. The proposed cost of this project is about 13 million Iraqi Dinars, which contains several traditional guest houses to accommodate 200 beds, and 120 shops; also to have a multi-purpose hall and other cultural and traditional buildings.

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4. Municipality of Najaf has earmarked a piece of land adjacent to the main highway from Kufa-Baghdad, located in the East of the Old Town, for the development of a self sufficient commercial centre to serve the people of Najaf. The site has an area of about 9.5 Ha. The proposed Commercial Centre shall contain all the necessary facilities for retail and wholesale trade, essential civic amenities and rentable areas for commercial and professional offices with sufficient support facilities. The total built up





FIG(2\_36):The Proposed Tourist Facilities SOURCE :State Organization of Tourism, Baghdad.1985.



area of all the nine three storeyed blocks including the ground floor will approximate 128000 Sq.M. [See fig. (2.37)].

Actual implementation of the project will take place in the near future when financial obligation of the agencies involved in the same are sorted out.

2.4.4 Building Conditions :

In the survey of building conditions, three categories were recognised, based on a series of selected criteria which were taken as representative. These consisted of :

- (a) Building Structure
- (b) Windows and Doors
- (c) Exterior Wall Surfaces

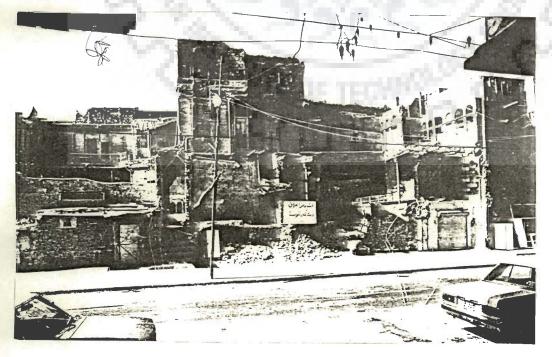
All of these could be assessed from outside. In actual practice interior conditions are much more difficult to survey, but a sample survey showed that these correlate in Najaf Old Town very closely with exterior conditions, and so only an exterior survey was carried out on a comprehensive basis.

On the next figure is a map showing the building conditions found in the Planning Area. In the Outer Zone of the Old Town, some 90 % of the buildings proved to be of acceptable standard, the remainder require only minor renovation to bring them to a level of acceptable standards. [See Map fig (2.38)]. Within the Old Town, however, where



Fig. (2.39) : Acceptable

Fig. (2.40) : To be renovated



most (estimated about 70 %) of the buildings are worthy of conservation, large-scale renovation will be necessary to achieve even saving of about 55 %. Indeed, some 15 % of the buildings are in such poor condition that renovation is no longer a feasible propositions and replacement appears to be the only solution. [See figs. (2.39), (2.40) and (2.41)].

It has been noticed from the survey that most of the areas that had been acquired by the municipality of Najaf since 1980, which were earmarked for redevelopment lie around and towards the west of the Holy Shrine. However, the local authority in Najaf has no clear concept or any directive to follow to deal with the question of redevelopment. Under the circumstances these areas are lying in a state of neglect, uncared and unprotected, and thus are continuing to decay and deteriorate further.

### 2.4.5 Tourism :

Tourism in Najaf takes two forms : Pilgrims visiting the Holy Shrine on the one hand, and the visitors interested in the sightseeing on the other. Pilgrims to the Shrine, however, do engage themselves in shopping and sightseeing of historical and archeologically important places. [See historical archaeological sites in Map fig. (2.8)].

According to a study of incoming visitors to Najaf carried out in 1984, it was revealed that on an average ten thousand persons visit Najaf every day, but on Friday and on occasions like *Id al-Adha* it may peak 70,000.<sup>29</sup> Sixty seven per cent of these visitors come from urban

areas and the rest 33 % from rural communities. 12 % of the visitors are foreign pilgrims and only 5 % of these belong to Arab Countries; 41 % of Adult female visitors score over the male visitors who number only 22 % remaining 37 % of visitors are accounted for by both male and female children.<sup>30</sup>

Approximately half of the visitors to the Shrine stay over night in Najaf. Many of them sleep within the walled courtyard of the Shrine itself. The others must find accommodation elsewhere, normally in some form of hotel. The survey had shown that 52 % of the visitors stay from 1 to 2 days, and only 5 % of the visitors stay for 3 to 7 days.<sup>31</sup>

Pilgrims come in organized religious tours called 'Mawakib' from different parts of the country to visit the Holy Shrine, on memorial and other holy days. Such visits last from 1 to 3 days, and sometimes a week. Although some come from Najaf itself, the vast majority, however, comes from outside the city and can be classified as pilgrims.

Receiving a huge number of visitors on one occasion or on a memorial and other holy days; the Holy Shrine of Imam Ali must be seen as a most important element in the functioning of the Old Town's Core.<sup>32</sup> Important problem is that of ensuring the physical space for such crowds and parking for the many vehicles that are used by them. 2.4.6 Traffic and Parking

There are many cities in Iraq where the traffic problem is given a twist by arguing that if the old centre was to be conserved, because of its historic and architectural character, then it is bound to prevent major reconstruction and thus the resolution of traffic in the central area.

The area of the Old Town is roughly less than a Kilometer across, and was enclosed on four sides by the Old Town Wall. Two events in modern times have in fact disturbed the old city of Najaf: The replacement of the Old Town wall by the Ring Road, and the cutting of four major carriage ways radially towards the Shrine on all sides. Though both events appear in retrospect unsympathetic, they have merit in terms of accessibility.

The main professional, business and commercial activities of Najaf are now concentrated in the Old Town together with a large part of the city's light manufacturing industry. Much of the former residential use has been displaced, and people have moved out to the suburbs.

Vehicular Traffic :

As might be expected in a busy city whose centre functions largely on a medieval street pattern, vehicular movement is restricted by congestion. Four roads coverage on Najaf, funnelling traffic towards the centre. The traffic on these roads is mainly destined for the Old Town. The traffic flows at six entry points into the Old Town area. The precise manner in which this traffic is dispersed within Old Town area is not yet available from the survey, but it seems clear that the old narrow thoroughfares are taking major flows, as also the widened shopping streets, Zin, Sadek and Al-Ressul streets. Congestion is sufficient to induce traffic to filter through whichever streets promise the shortest journey-time. Consequently the whole street network within the Old Town is at times used to its maximum traffic capacity.

The next map represents the primary road net work in the Planning Area, showing dual and single carriage-ways and the direction of traffic. Most of the primary roads in the Old Town are meant to carry only one way traffic. See Fig. ( 4.42 ). Noticeable is the relatively heavy traffic in the Old Town. Zin AL-ABIDEN and Al-Sadek streets are overloaded, especcially at junctions with Iman Ali Square. At the junctions of the Iman Ali Square with six major streets an additional conflict occurs between heavy vehicles and pedestrian flows, the latter associated with commercial activity.

Road Conditions :

Most of the roads are paved and can be graded to be in a condition that can be said to be from fair to good. The primary road network is almost completely paved. Other thoroughfares or alleys in the Old Town are mostly paved, but almost all in poor conditions. In the Old Town, an additional factor is the narrowness of the streets which were, of course, developed in the times before the motorised traffic came into

existance. Most of these are simply unsuitable for vehicles.

Pedestrain Movement :

The scale of the Old Town is intimate and essentially suited to the movement on foot and easily negotiable without any mechanical means. The area is only about a Kilometer in width. The street pattern was evolved at a time when most movements in towns were made on foot. There is still a great deal of pedestrian movement, but the pattern has changed with the changes in landuse. The terminus for local city bus services, for example, is now probably the largest single generator of pedestrian movement in the whole central area.

The main pedestrian movements takes place between points of arrival by vehicle (the bus station, and the car parks) and then footing the distance to the central shopping area and Holy Shrine Zones. In addition there is a certain amount of pedestrian movement between the central area and the nearby residential areas. The main concentrations of these pedestrian movements are in the vicinity of the Holy Shrine and about the central shopping streets.

Heavy parking in the main commercial areas leads to a hazardous situation for pedestrians, who find it difficult in any case to find space on the often narrow pavements. Continuous rows of closely parked cars and frequent double-parking creates dangerous situation for those wishing to cross the road. Apart from the danger created for vehicular traffic and pedestrians, improper parking affects the environmental conditions in the area due to its adverse visual influence. See the map Fig. (2.44) which shows the main pedestrian streams.

Parking :

Parking in the Planning Area is subject to little control at the moment. A survey was carried out of parking in the Old Town and is shown in the map. Fig. (2.43). This map shows the proposed parking areas which are located on three sites around the ring road. See Map in Fig. (2.43). Parking spaces were observed, but not identified, both on and off-street. While on-street parking dominates at the moment, there are about 1210 car park spaces available within the Old town. Of the five off street parking areas, two small areas are near the entrance of the Great Cemetery, one small area being used for parking is underground and contains a sum of 80 space and two largest parking spaces are on the eastern and western edge of the Old town.

Although no comprehensive survey was carried out of parking in residential areas of the Old City; observations indicated that these areas are unsuitable for vehicle parking due to their restricted width and the poor alignment of their road network.

The two larger off-street car parks were underutilised, because of their location, while the northern section of the Ring Road, Al-Tousi Street, and the Perimeter Road around the Holy Shrine were all overcrowded. Vehicles parked improperly at various intersections of the Ring Road are hazardous and hamper the efficiency of the junctions. On Fridays or on memorial and other holidays there is obviously an increased demand for parking by private buses and taxis bringing visitors to the Holy Shrine. ,

Furthermore, with the present level of car parking, every accessible piece of ground is taken up by cars in the central area. This takes place regardless of local amenity. Places of great interest and beauty such as the precincts of the Holy Shrine and the Great *Souq*, are packed with cars, thereby denegrading their visual environment.

Traffic And Environment :

It follows from what has been said about the historic buildings and street pattern, that Najaf is a town that could have an exceptionally high standard of environment--using that term in both its special and general sense. The street scenes are inherently attractive in scale and quality. There are numerous pleasant walk-ways, as well as the special amenities provided by the Great *Souq*, and the vicinity of the Holy Shrine.

This potentially high standard of environment is, however, lowered by the effects which vehicular traffic is having upon it. Although in most town centres traffic causes dangers, noise and confusion, in Najaf these effects force pedestrians and vehicles to come into closer conflict with each other. Both people and vehicles have to vie with each other for space for movement. Problem is further aggravated because moving vehicles come closer to the buildings where people are living or working.

The unity of the central part of the Old Town around the Holy Shrine are in six areas or "rooms" where the medieval street pattern is still intact, and where many historic or traditional buildings are concentrated, however, it is severed by heavy cross-flows of traffic, primarily due to the new through roads which have been planted over the old medieval street pattern. Measure to assist the flow of traffic by windening of central shopping streets only introduces а new element of danger for shoppers, and changes the original character of the street. This has taken place, for example, in Al-Tousi Street. See Fig. (3.17.14). In the present circumstances, therefore, a severe conflict between pedestrians and vehicles throughout this tightly packed central area is inevitable. It is most marked at points where the main pedestrian movement crosses heavy traffic flows. Nowhere is this more in evidence than in the Iman Ali Square where pedestrians cross in great numbers between the bus station and the Great Soug, and equally so at the west end of the Holy Shrine. See Figs. (3.7.16) and (3.7.17). The environmental conditions deteriorate as the number of vehicles increases; this also correlates positively with the increase in road accidents of casualities.

Public Transport :

External public transport operates from one terminus which is located about 1.5 Km. from the terminus for local city bus services near Imam Ali Square, and another distance of half Kilometer to reac the Holy Shrine. This distance is considered to be an inconvenience for those wishing to transfer between buses, and visit the Holy Shrine or the Great Soug. Many city bus routes operate from the local city bus terminus near Imam Ali square, all travelling outwards along Imam Ali Street to Kufa etc. board buses from here. The city's buses are, moreover, too few to contribute much to reducing peak-hour traffic congestion in Planning Area.

Traffic And Accessibility

Just as the standard of environment in the centre of Najaf suffers from too much traffic using the ancient street net work, so accessibility to the buildings suffers likewise. Because of the narrowness of the carriageways in many of the streets, regulations designed to keep traffic moving often frustrates access to individual premises. The concentration of shopping area within the residential area is largely served by the main street network, which is rather distant to serve these shops. This causes heavy vehicles to use the narrow thoroughfare of the residential zones .

The shortage of space for car parking is acute and increasing day by day. yet to provide additional car parking facilities in the centre would be surest way of increasing the amount of traffic using the already congested streets. In a study carried out in 1984, it has been calculated that the parking demand for car parking in the Old Town area, would amount to nearly 4956 car parking spaces, which would require an area of 12.4 Ha.<sup>33</sup> Howeveer, the forecast for parking demand for 1995 works out to 11691 car park space, which would require an area of 29.2 Ha. that is impossible to provide in a normal manner.

The Present Position Summarised :

In brief then, with the present level of traffic and the present arrangement of streets and buildings, the environmental capacity of much of the Old Town is already grossly exceeded.

Any general policy of widening the existing streets to cope with more traffic must be ruled out, because this would certainly destroy the historic character of the city. Similarly, to remove large number of buildings in the centre to make way for car parks would destroy the traditional compactness, and encourage more vehicles into the area. Therefore, the problems which has to be solved in Iraqi towns and cities, to both conserve the old tissue of the urban pattern and at the same time, meet the increasing demand for higher accessibility mobility over the coming years; taking into consideration the fact that the modern professional, business, and social life has now been integrated with the use of the motor car, so much so that it has become an essential part of their life.<sup>34</sup>

2.4.7 Townscape :

Whereas the previous examinations of the present situation dealt primarily with different functional aspects of the Planning Area, aesthetic aspect can well be covered under the one term `townscape.' Consideration of the townscape views the various objects in the Planning Areas as they are visible to those in the streets or looking out from buildings. It is concerned with the individual character and the inter-relationships of all these elements : building shapes, facades, materials and surfaces, street furniture, light and shadow, and so on.

Reference points are subjective, relating to the perceived qualities in the townscape : harmony, focus of interest, symbolisim, continuity, contrast, and similar factors. In this respect, guidelines for judging these qualities have been derived from an appreciation of what constitutes the Arabic and Muslim tradition in architecture and urban design, and also, of course keeping in focus the importance of the peculiar characteristics of Najaf's Old Town itself. These charactertics are crucial to planning in Najaf. They are the things which make Najaf what it is, unique: they are things which should be preserved, emphasised and used as a basis for creating the Najaf of the future.

Approaching Najaf from all directions, skyline is presented which is dominated by the two golden minarets and dome over the Holy Shrine of Imam Ali. Unfortunately, however, a tendency is evident for buildings to be constructed of more than 3 storeys. These are beginning to compete with the dome on the skyline and will destroy this if the tendency is not stopped. See Fig. (2.45).

Although the city walls no longer stand, it is possible to recognise the entry into the Old Town of Najaf in that its irregular street pattern and narrow streets clearly differentiate it from the surrounding built-up area through which the visitor has passed. The Ring Road follows the old line of the town walls along much of their course and thus helps to seperate the Old Town from the newer parts.

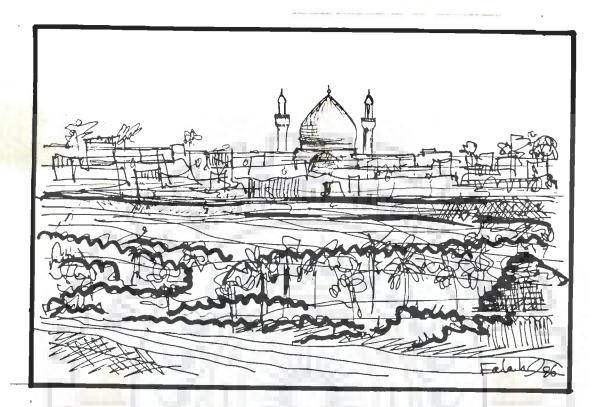


Fig. (2.45) : Silhouette view of Najaf Old Town, Approaching Najaf from all directions, a skyline is presented which is dominated by the golden dome and two golden minarets of the Holy Shrine.

Source : Sketch by the Author, 1986.

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Nonetheless, precisely on the main approach roads to the heart of the Old Town - Zin, Sadek, Rassul, and Tousi Streets - are the passage into the Old Town at its weakest, due to their wide and straight form.

The form of these four approach roads does, however, bring the advantage of affording a good view of the golden dome from within the Old Town. This means that Holy Shrine can continually function as a point of orientation and identification. Buildings with more than three storeys have, however, already begun to disturb these views of the Shrine. See Fig. (2.46).

Because of massive road widening, uncontrolled commercial development, decaying buildings and a general lack of order and urban design, the appearance of the heart of the Old Town specially around the Holy Shrine in no way corresponds to its importance and its representative function. New buildings here, up to 3 storeys in height, have failed to improve the situation, and on the contrary have begun to detract from the golden dome as the main point of emphasis.

On the smaller scale, most buildings in the Old Town - and virtually all older ones - have one or two storeys and follow "the traditional pattern of strictly segregating the private from the public worlds without any traditional zone in between".<sup>36</sup> At street level, buildings display closed facades, often with a single doorway as the only opening. These buildings are orientated inwards to the privacy of the home. Only on the upper level of two storey buildings are windows significantly in evidences looking out over the streets. See Fig. (2.47).



Fig. (2.46) : View of the Holy Shrine from Al-Rassul Street, showing buildings with three storeys which have disturbed its perception as a dominant.



Fig. (2.47) : View of the projections of upper level (Shanshil) Source : Sketch and photograph by the Author, 1985. Typical architectural details in the Old Town are the traditional use of brick walls, round and pointed archways for doors and windows, wooden bays, roof margin designs, and plaster decoration. Architectural detail tends also to be shown primarily in the facades of the two-story buildings. Such elements occasionally build richly differentiated patterns. Otherwise, the streets take the form of closed alleys whose very human character is emphasised by their narrowness and irregularity,<sup>37</sup>both of which serve to keep out vehicles. This irregularity also helps to avoid monotony in the street scenes despite the lack of detail in building facades.<sup>38</sup>

New building has of course been undertaken within the residential areas of the Old Town. This, and the widespread decay of individual buildings which has been allowed to occur, have both led to the loss of continuity in large areas of traditional urban fabric. A few areas have retained this fabric to a large extent intact, and these are shown in map. See Fig. (2.48). In these areas are nonetheless buildings in poor condition; but it would be a great loss if they were not renovated in order to maintain coherent areas of traditional urban fabric.

Buildings of particular architectural significance are those with a particular richeness of the architectural detail mentioned earlier and or where certain architectural elements have been particularly carefully constructed or designed. These buildings are shown in the folloing map. "Considerable importance must be attached to their individual preservation as being the conservation of an irreplacable asset in the urban fabric".<sup>39</sup>

Buildings which do not fall into these categories may nontheless be seen as contributing in general to the traditional character, and by their very nature, the remaining old buildings of Najaf should be viewed as being of critical importance in the townscape and should be considered within the context of their built surroundings. "New buildings and those of traditional character should therefore both be treated with sensitivity in planning";<sup>40</sup> and carrying out future development in the Old Town.

A primary element of the townscape is the role played by the height of buildings in contributing to the skyline and to the enclosure of streets and other open spaces.<sup>41</sup> As can be seen in the map Fig. (2.49), most buildings in the Planning Area are of 1 or 2 storeys.

In the main commercial area there are a substantial number of 3-storey buildings, primarily located in Zin AL-ABIDEN, Al-Sadek and Al-Rassul streets. Four elements attain a height of 4 storeys or more in the Old Town. Two of these are the two minarets, and the dome of the Imam Ali Shrine, which have a height of 35 m., and dominate the skyline of the Old Town. The fourth is a 35 m. high clock tower.

Another two buildings are existing on the eastern edge of the Planning Area and are under construction, one of these is a five storey office building, and the other is a four storey building for tourist hotel. CHAPTER III - THE PRESENT PROBLEMS

- 3.1 DEMOLITION OF STRUCTURES POSSESSING ARCHITECTURAL HERITAGE
- 3.2 URBAN DEVELOPMENT IN NAJAF OLD TOWN
- 3.3 OVERCROWDING PROBLEMS
- 3.4 PILGRIMS AND ITS AFFECTS ON TOWN LIFE
- 3.5 TRAFFIC AND ACCESSIBILITY
- 3.6 URBAN DESIGN PROBLEMS
- 3.7 OTHER PROBLEMS AND URGENT STEPS FOR URBAN RENEWAL

#### CHAPTER III - THE PRESENT PROBLEMS

In the foregoing surveys and analyses of the present situation, certain problems were identified in the Planning Area which are worthy of individual mention. These problems must be tackled in any of the alternative proposals of Urban Renewal Plan of the Old Town of Najaf, and may be related directly to the Planning Objectives of the Plan.

It is important to remember that embodied in or related to most problems is the potential for making a positive contribution to development in the Planning Area. This means that problem solving should not be viewed negatively - simply as the removal of the problem but positively, in the issue of replacing the problem with something considered desirable for the renewal of the older parts of Najaf.

In the Outer Zone of the Planning Area, the only problem worthy of mention here is the poor condition of buildings in some pockets, and, partly associated with this, the often poor residential environment. In contrast, there is a marked concentration of problems of various types in the Old Town itself, and these are considered individually in this chapter. The problems in the Old Town of Najaf may be typified according to their nature or their location. In their nature, the problems relate basically to one or more of the following :

- \* Functional conflicts, requiring Land-Use or/and Traffic Planning Solutions;
- \* Material quality, requiring appropriate investment;
- \* Townscape, requiring urban design solution.

Locationally, the problems have been grouped as shown in map, fig. (3.7); relating to :

- \* The Ring Road
- \* Approach roads leading to the Holy Shrine
- \* Holy Shrine Area itself and the road around its perimeter
- \* Imam Ali Square and its surrounding area; and
- \* The remaining, predominantly residential areas of the Old Town.

On the map fig. (3.17), the problems occurring in these five areas are briefly presented, together with their proposed solutions in the figures that follow. These proposed solutions are later taken up in the planning measures of the urban renewal proposal.

## 3.1 DEMOLITION OF STRUCTURES POSSESSING ARCHITECTURAL HERITAGE :

Najaf's heritage, architecture and urban culture are among the finest and richest in Iraq. However, the cultural property located within urban areas has been, and is being, rapidly destroyed by pressures for modern development. In contrast, "sites monuments and which are located in remote regions are relatively safe from danger except from ill-advised excavation or restoration work."<sup>1</sup> The survival potential of cultural property is found to be dependent largely upon three factors: Location, religious significance and durability of its building material. This explains why mosques and shrines, for example, tend to have a higher survival potential than other types of buildings, and even when they are replaced, the site itself often continues to be associated with a similar function. Consequently, the substantial majority of Iraqi mosques posses location and typological value.

Najaf's architectural heritage is being destroyed or damaged at a disturbingly rapid rate through several degenerative processes. These are identified as follows :

- 1. Large scale engineering works.
- 2. Neglect and decay.
- Demolition of buildings and clearance of areas for rebuilding or redevelopment.
- 4. Ill-advised restoration work.
- 5. Looting and vandalism.
- Spatial intrusion and removal of context by rebuilding in the vicinity.

Several conclusions can be drawn from the loss of heritage in Iraq. Firstly, that the majority of the destruction is being caused by official actions; the destruction by private sectors is minimal compared with that caused by government projects due to provision of new roads, and other engineering works within the historic areas.

Secondly, the most common causes are neglect and indiscriminate road constructions. Thirdly, that the overwhelming majority of the lost heritage has not been recorded or documented. "Even when some authorities were aware of a potential or an inevitable case of demolition of an important building, none has shown the willingness to undertake [the] minimal task of photographing and documenting [these structures].<sup>2</sup>

The individuality of architectural and urban character, which historic *Medinas* once possessed, has been seriously damaged or ruthlessly destroyed by unsympathetic modern development. Perhaps, inevitably, the employment of Western technology and its implicit culture is leading to the creation of a monotonous and uniform built environment everywhere. The blind imitation of Western urban models, by the Iraqi authorities, is another important fact which explains their apathy towards conserving the historic fabric of madinas. It must be recognised however, that apart from the above mentioned destructive curves, most municipal and local authorities in Iraq are simply ignorant of the value of their historic environment. "Their blatant disregard of it is, more often than not, based on a naive but sincere belief that 'old' must simply be replaced by 'new'."<sup>3</sup> Lord Goodman, writing a foreword for a book on the destruction of historic Bath, aptly describes this seemingly universal phenomenon as follows.

"It is unhappily the case that most of the scenic and architectural descration that happen, arise, not from malice, but from folly-since stupidity is even more difficult to control than evil."<sup>4</sup>

The demolition of buildings, groups of buildings, and sometimes whole areas of cultural interest, is another common type of loss that is often sudden, ruthless and final. Buildings, including those of historic or architectural value, are demolished without first

obtaining the consent of the local authority. In Britain, for example, listed buildings or any building in a Conservation Area can not be demolished without the consent of the authority maintaining record of "Listed Buildings."

Although there are no records or statistics documenting demolition in Iraq, it can be safely stated, nevertheless, that private demolition is small comparison to official demolition, which often involves the clearance of large old areas in central location. The most damaging single cause for demolishing historic areas in Iraq has been, and still is, the construction of new roads through such areas. Most of the historic cores of the main cities and towns in Iraq have been effectively damaged, mutilated and partially destroyed by new wide roads, which ruthlessly cut right across their dense urban fabric in a straight line--likewise in Najaf Old Town. [See fig. (2.15)].

Last event in Najaf is the clearance of an area of (9 Ha.) of traditional fabric in the central area which had been demolished in 1980, at the periphery of the Old Town. This clearance had been undertaken by the municipality of Najaf, within a time of less than a week, but action on redevelopment of the area is still pending.

Clearly, the destruction of the historic environment can not be simply calculated and assessed on the basis of number of the buildings demolished. The introduction of new and largely incompatible uses, the damage to the historic sky-line, the generation and attraction of vehicular traffic, and the disruption of the social fabric are other losses which should be taken into account, but because they are



Fig. (3.1) : Demolition of Structure Possessing Architectural Heritage

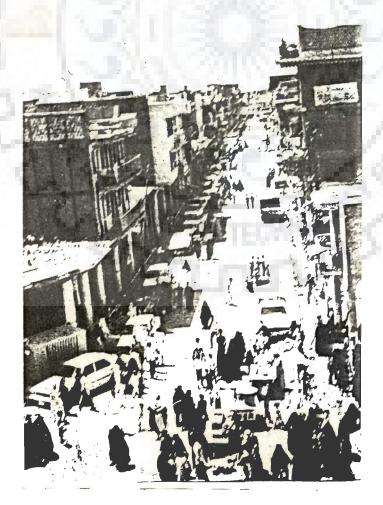


Fig. (3.2) : Urban Development Problems.

difficult to quantify, they tend to be overlooked by planning authorities. Hitherto, the various protective agencies, especially the State Organization of Antiquities and Heritage and the Ministry of Awqaf and Religion Affairs, have shown little interest in recording buildings and areas of cultural interest, even when these are threatened by a definite demolition programme. Consequently, it is often very difficult for individuals to trace a demolished building of a certain cultural value; it is often a matter of chance when an old photograph or a drawing of a lost, valuable building, is found.

# 3.2 URBAN DEVELOPMENT IN NAJAF OLD TOWN :

In the last thirty years, the increased sense of stability and overall urban expansion of the city has directly affected the down town of New streets have been constructed, considerable modern Najaf. commercial and residential developments have quickly penetrated and surrounded the old parts of the core itself. These roads, as well as the recent clearance of the areas immediately surrounding the Mosque and large part of the Great Soug have not only destroyed more than (9) acres of some of the most architecturally interesting parts of the core, but also brought an inevitable array of modern multistorey blocks that are unsightly and unsympathetic to the overall historic character of the town. Another common feature is the fact that in contrast to the social environment, the historic old city cores due to their central location close to the modern centre posses considerable land value and, therefore, are subject to strong pressure to utilize the land in a more commercial manner.

Since 1980, massive compensation had been paid by the municipality of Najaf to the private land owners, for purchasing different areas within the Old Town. The intention was to seek a higher quality of environment through redevelopment and improvement of the central areas. There are four such sites having total area of about 20 Ha. [See (2.4.3)]. Huge redevelopment plans have been suggested by the Municipality of Najaf for the traditional centre, however, the government in 1979 had provided a sum of 72 millions Dinars; but due to the lack of any clear policy or directive this budget was spent by the Municipality mostly on compensation and thus no development has really occured.

# 3.3 OVERCROWDING PROBLEM :

Another important negative impact on the historic fabric has been and still is, its great overcrowding. The magnitude of overcrowding has led, and still leads to a rapid deterioration of the structural condition of buildings and the decay of the environment. However, the larger houses, which are often rich in architectural interest, are usually rented by an agent, who in turn, sublets individual rooms to the poor families and thus makes a profit. [See (2.4.1) Area and Population]. With such a low return, absentee landlords are naturally reluctant to repair their buildings and, in fact, the majority of them allow their buildings to deteriorate to such an extent that they are eventually demolished, thereby allowing them to be replaced by more profitable commercial uses.

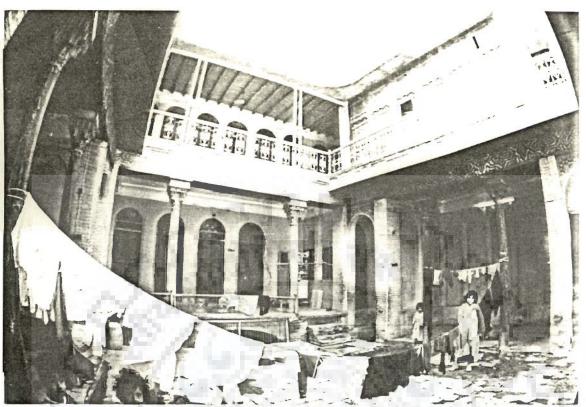
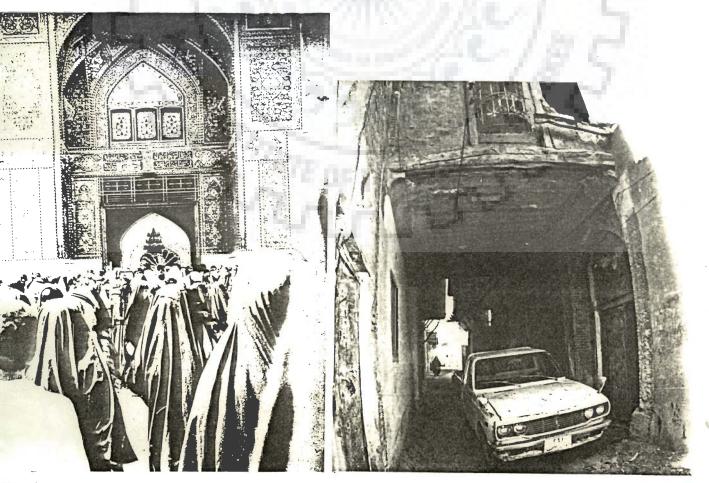


Fig. (3.3) : Overcrowding Problems. Many families are occupied a single traditional house.



ig. (3.4) : Pilgrims and its affects

Fig. (3.5) : Traffic and Accessibility

With the extreme housing shortage and the very low standard of accommodations that the buildings in historic quarters offer at the present, the most important thing for the people living there becomes the finding of reasonable housing, and questions of preserving the social structure of the historic quarter becomes secondary. Most of the residents of such quarters seem to be (understandably) quite anxious to move into a new house or apartment if they can get one. Historic quarters are at times extremely overcrowded and their density requires to be reduced.

### 3.4 PILGRIMS AND ITS AFFECTS ON TOWN LIFE :

As mentioned earlier, hundred of thousands of pilgrims visit the Holy Shrine of the city each year. In other cases Najaf, being the last major centre in Iraq on the road to Mecca, also attracts pilgrims going to the latter; who buy their provisions for the long journey in this town. For more detail, [See (2.3.2)].

The religious background of Najaf resulted in the cultural development of the town. Many famous religious schools exist in the city providing facilities for Iraqi and other students. Further to the above mentioned temporary influx of people into Najaf on pilgrimage and/or for students, there is a continuous movement of other people who bring their dead relatives to Najaf for burial in its Great Cemetery. [See (2.4.2.4)]. It is an old tradition of the Shiite Muslims to wish to be burried there. Najaf, owes its considerable growth and development – through the centuries to the influx of pilgrims. Yet no worthwhile accommodation or service for them exists in the city except those provided for the members of the religious schools and societies. Quite a number of pilgrims are accommodated in the private houses in the city, others have to remain content with some make shift arrangement in the open. Such conditions obviously affect the traffic and community facilities and worses the housing conditions of the Old Town. Steps should be immediately taken for finding a solution of this problem by providing proper accommodation and services for pilgrims of all incomes.

# 3.5 TRAFFIC AND ACCESSIBILITY :

Most of the recent growth of Najaf city is based on automobile traffic and long straight roads are destroying much of the intimate tissues of the old town. Just as the standard of environment in the centre of Najaf suffers from too much traffic using the old street network, so accessibility to the buildings suffers likewise. Because of the narrowness of the carriage-ways in many of the streets, a stationary vehicle can impede the flow of traffic in the whole stretch of that street. Conversely, regulations designed to keep traffic moving often frustrate direct access to individual premises.

Furthermore, with the present level of car parking, every accessible piece of ground is taken up by cars. This takes place regardless of local amenity. Places of great interest and beauty such as the main mosque and the Great.*Souq* are packed with cars with grave detriment to their appearance. In brief then, with the present level of traffic and the present arrangement of streets and buildings, the environmental capacity of much of the old city is already grossly exceeded.

Any general policy of widening the existing streets to cope with more traffic must be ruled out because this would certainly destroy the historic characater of the city. Already there is evidence to this effect in the four major streets in the old town. It would be unthinkable to widen more streets in this way. Similarly, to remove large numbers of buildings in the centre to make way for car parks would destroy the traditional compactness, and encourage more vehicles into the area.

Thus a dead-lock has resulted, for neither was the movement problem considered in all its dimensions (i.e. including pedestrian, mass movement, public transport, transition from vehicular traffic to pedestrian movement etc.), nor were the environmental and social problems taken into account in their entireity (continuity of built fabric, commercial activities, needs for social facilities for visiting pilgrims etc.).

It is now a common knowledge that these transport systems are not the ideal solutions to the problems of cities. The more one can dispense with trasport systems inside the city, the better the plan of the city. Thus, the retention of old historic areas and area of special architectural interest is dependent upon the maintenance of satisfactory environmental standards. There would be no point in seeking to retain such areas except in conditions in which they could be favoured and enjoyed. Therefore, these areas can be retained in the age of the motor vehicle provided a reduced standard of accessibility is accepted, including a strict discipline of vehicular movement.<sup>5</sup>

### 3.6 URBAN DESIGN PROBLEMS :

Meehan in a paper has discussed the urban design problems in typical down town relating to building facades which can be grouped into a hierarchy of three classifications :  $^{6}$ 

- 1. General streetscape design problems.
- 2. Individual building design problems, and
- 3. Signs and identification system problems.

In each one of these categories, certain recurrent urban problems can be found in many town centres throughout Iraq. These recurrent urban design problems are listed here for each of the three problem classification categories identified.

1. General Streetscape Design Problems :

- \* Building facade development and design, creating conflicting horizontal and vertical line emphasis along horizontally linear streetscape facade.
- \* Conflicating remodeling of an individual building facade within overall streetscape appearance of surrounding buildings. This sometimes includes the alteration of inherent symmetrical and rhythmic qualities of the streetscape and the use of in harmonious colours, textures, materials, etc. in order to accomplish the remodeling.
- \* The presence of poorly maintained vehicular parking areas, pedestrian paths, and service and loading areas.
- \* The lack of, or the improper placement and selection of, landscape plant materials, street furniture, and lighting.
- \* The presence of television antennae and various types of building mechanical equipment which add to the visual pollution and clutter the streetscape.

- \* The existance of visual voids or gaps in a streetscape facade created by large empty lots or `blank' wall surfaces.
- \* Buildings built at or near front property lines and/or public rights-of-ways VS buildings built with deep setbacks are sometimes found to be visually and functionally in conflict with each other and with the overall streetscape appearance.
- 2. Typical Individual Building Design Problems :
- \* Structural deterioration of the building.
- \* Exterior wall surfaces in need of cleaning, repair and/or replacement.
- Functionally obsolete building size and building shape for existing building use.
- Lack of sufficient site space for future building expansion.
- \* Upper floor levels not utilized.
- \* Remodelling of the street level facade in an architectural style drastically different from the upper building level facade.
- \* Building remodeling which ignores human scale and proportion.
- \* Rearrangement of original store front design elements.
- \* The treatment of one building facades as though, it were several buildings rather than as one architectural entity.
- 3. Typical Signs And Identification System Problems :
- \* Multiple building identification signs which result in sign redundancy.
- \* Insufficient signs for necessary minimum building identification.
- \* Visually incompatible and conflicting signs and signage systems.
- \* Inapprorpriate sign lettering, design, color, height, size and/or scale.
- \* Inadequate maintenance of signs.
- \* Signs projecting over public rights-of-way causing hazardous and visually unappealing situations.
- \* Signs which are difficult to read and/or understand.



Fig. (3.6) : Urban Design Problems : Signs and Identification problems

# 3.7 OTHER PROBLEMS AND URGENT STEPS FOR URBAN RENEWAL :

The problems in the Old Town of Najaf may be typified according to their nature or their location. In their nature, the problems related basically to one or more of the following :

- Functional conflicts, requiring Land-use or traffic planning solutions;
- Material quality, requiring appropriate investment;
- Townscape, requiring urban design solutions.

Locationally, the problems have been grouped as shown in the following map [See fig. (3.7)] relating to :

- . The Ring Road
- . Approach roads leading to the Holy Shrine.
- . Holy Shrine Area itself and the road around its perimeter.
- . Imam Ali Square and its surrounding area; and,
- . The remaining, predominately residential areas of the Old Town.

On the following pages the problems occuring in these five areas are briefly presented, together with their proposed solutions. These proposed solutions are later taken up in the planning measure of the urban renewal.

NOTE : All Photographs and Drawings in this section have been taken by the author.

THE RING ROAD PROBLEMS :



Fig. (3.7.1) Inappropriate land uses (small-scale industry, e.g Metal-working or Car repair shops) around the North-East section of the Ring Road, create disturbance through noise, dirt,traffic and parking.

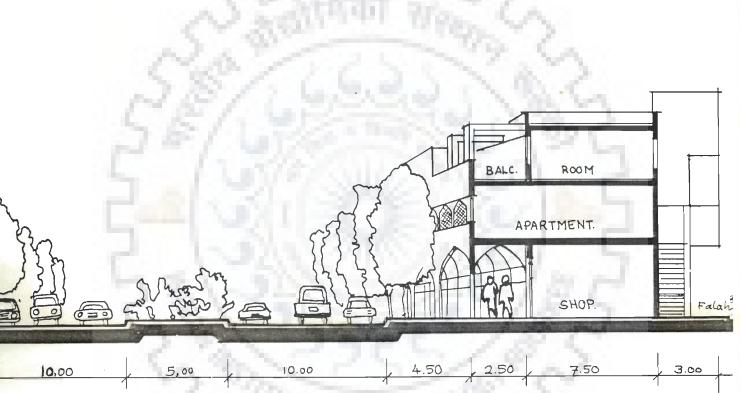


Fig. (3.7.2) The activities referred to in Problem 1. encroach onto the carriageway and walkways due to inadequate space for such activities on the private plots.

### PROPOSED SOLUTIONS FOR 1 AND 2 :

Relocate Offending activities and implement appropriate traffic management measures, e.g. extend areas of parking prohibition.

Fig. (3.7.1-A): Section through the North-East Part of the Ring Road.



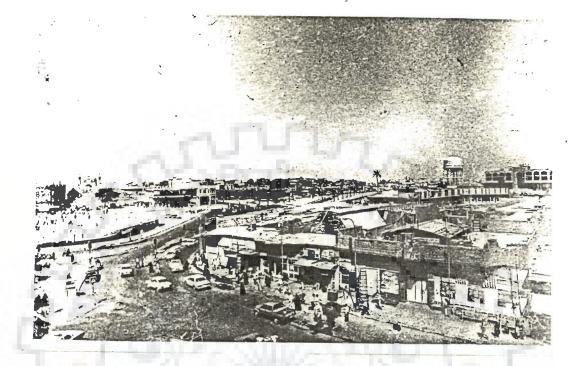


Fig.(3.7.3) : A Large number of buildings bordering the North-East section of the Ring Road are in a bad condition and, in terms of Layout and design, cannot function effectively in a main commercial area of the Old Town.

Fig.(3.7.3-A): Proposed Solution : Redevelop the whole North-East Section of the Ring Road.

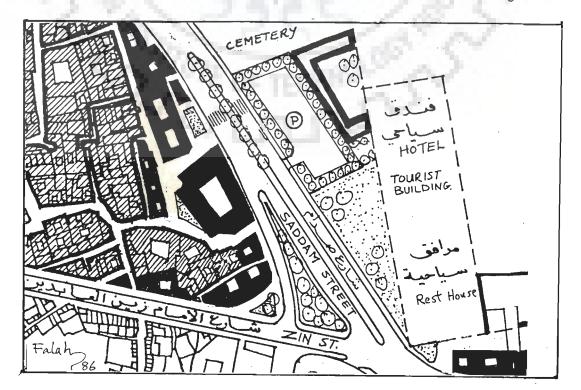


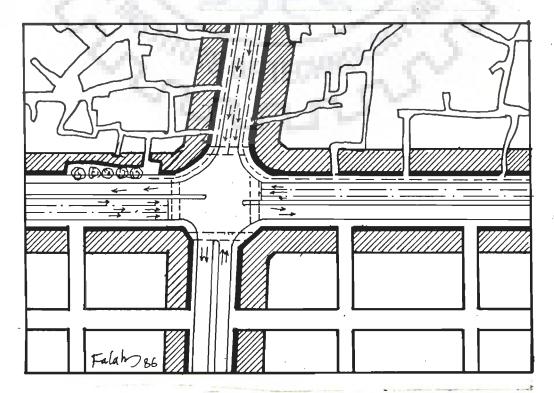


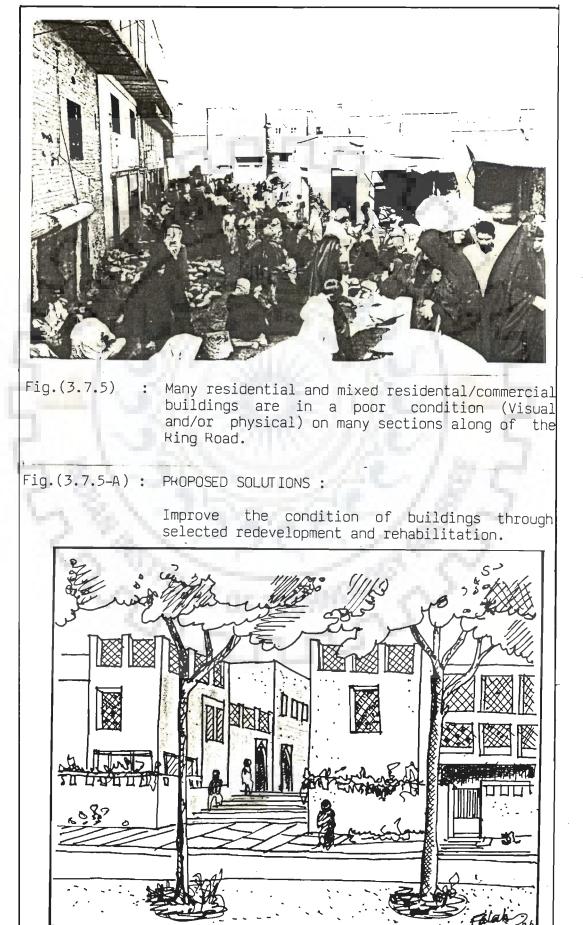
Fig.(3.7.4) : Conflict between parking and moving traffic on the South side of the King Road.

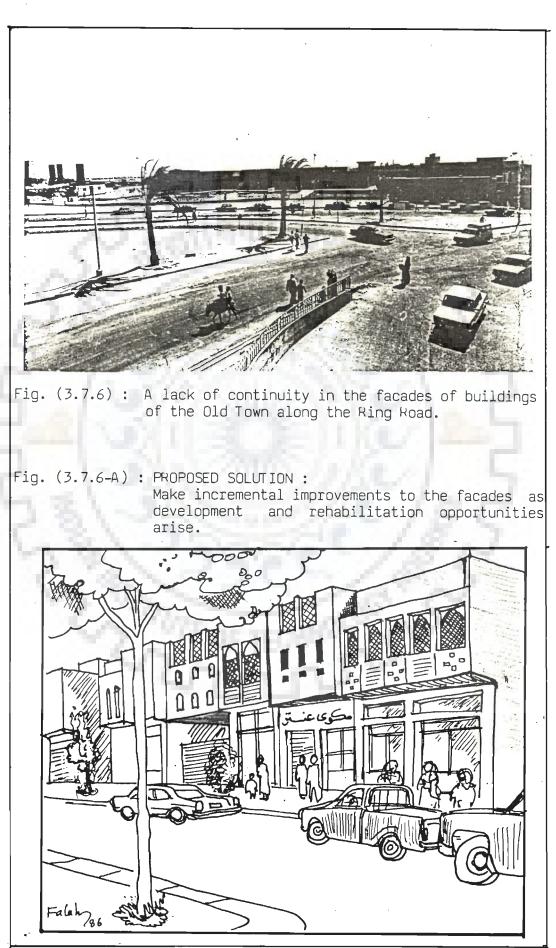
Fig.(3.7.4-A) :

PROPOSED SOLUTIONS :

- Prohibit parking on approaches to the main : junctions.
- Provide Lanes for left turning movement. Install traffic Lights at the main junctions.







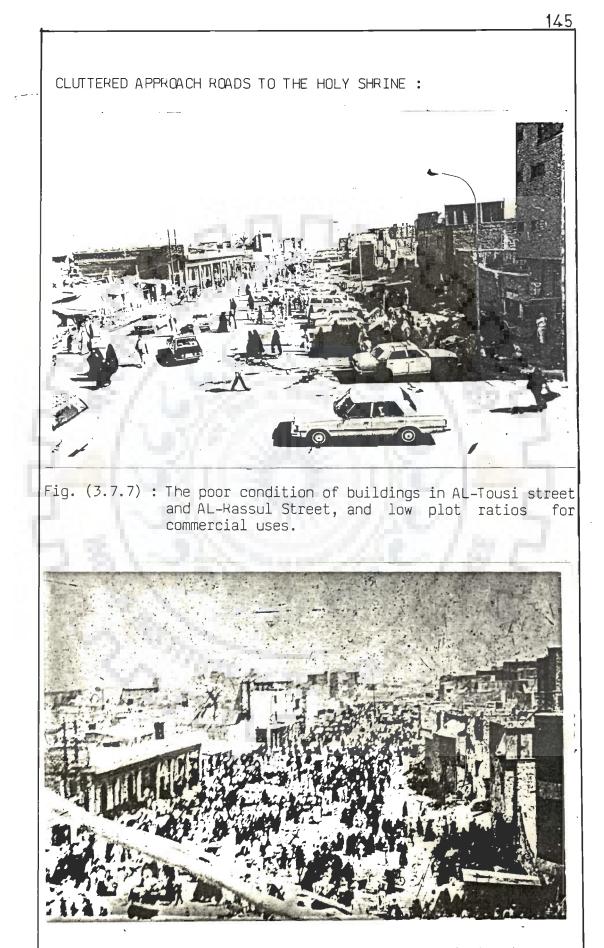
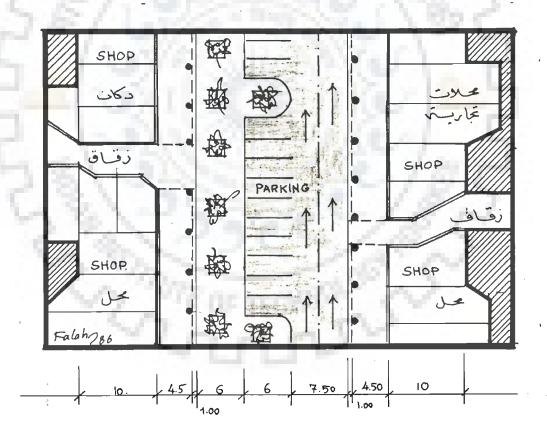


Fig.(3.7.8) : Inadequate walk widths in AL-Tousi Street.

## Fig.(3.7.8-A) : PROPOSED SOLUTION :

- Redevelopment or rehabilitate such buildings at higher commercial plot ratio. Extend the commercial floor space to a
- greater depth of the two streets. Expand footways and remove the central reservation.



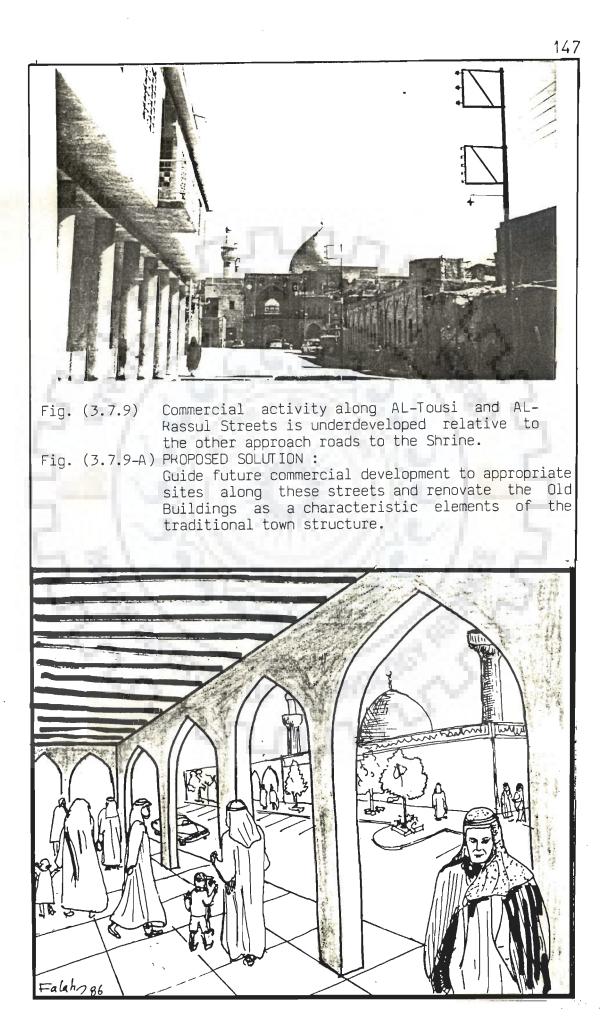
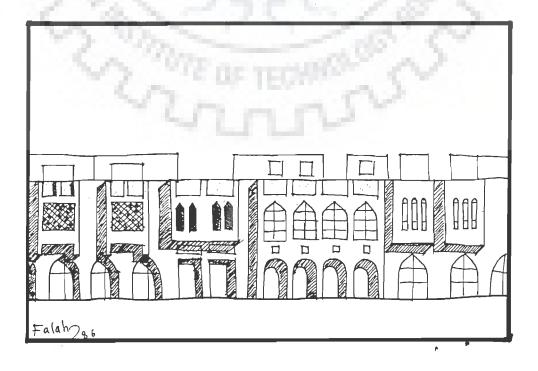




Fig. (3.7.10) : Lack of continuity in the street facades.

Fig. (3.7.10-A)

PROPOSED SOLUTION : Make incremental improvemtns to the facades as development and rehabilitation opportunities arise.



#### HOLY SHRINE AND ITS PERIMETER ROAD

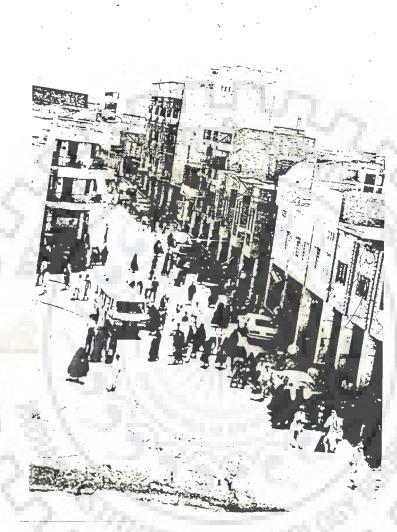
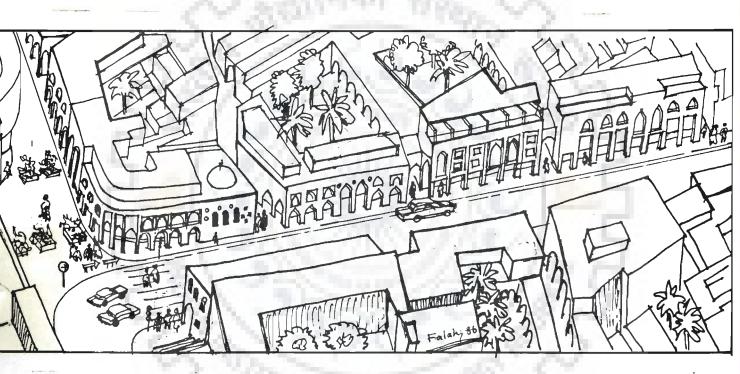


Fig. (3.7.11) :

Problems of conflict between traffic and commercial activities on the perimeter road.

The poor condition of buildings around the perimeter road, and their unsuitability for modern demands for commercial activity.

- Fig. (3.7.12) : PROPOSED SOLUTIONS :
  - Prohibit vehicle access to the North-West and South-East sectors of the perimeter road and introduce one-way traffic on the approach roads to the Shrine.
  - Demolish the buildings in poor condition and redevelop for residential/commercial uses.



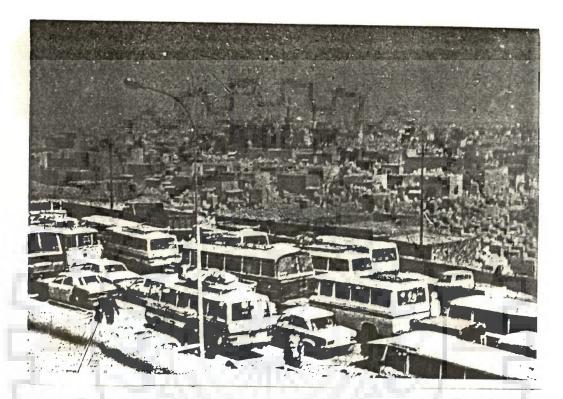


Fig. (3.7.13)

The North Sector (AL-Tousi Street), the perimeter road is subject to a substantial increase in traffic and parked vehicles on Fridays or Holy days in congestion and conflict.

PROPOSED SOLUTION :

This problem will be solved within the frame-work of the comprehensive traffic measures proposed for the Old Town.



Fig. (3.7.14):

Lack of walkways and obstruction of pedestrian movement due to North Section (Al-Tousi Street) and around the Holy Shrine.

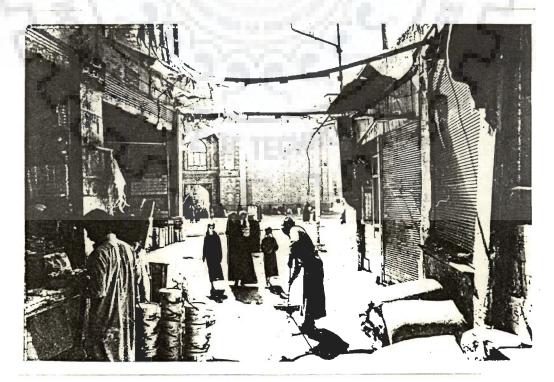
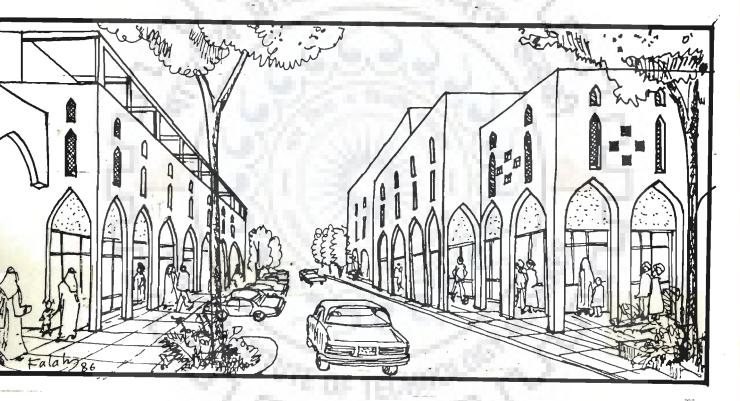


Fig. (3.7.15) : The Character of the built environment around the Shrine is not in Keeping with its architectctural and cultural significance.

- . Create an integrated network of footways serving the Shrine and other areas of pedestrian concentration.
- . Ensure that maintenance is performed to appropriate standards.
- . Alter or redevelop buildings to an appropriate design.



IMAM ALI SQUARE AREA :

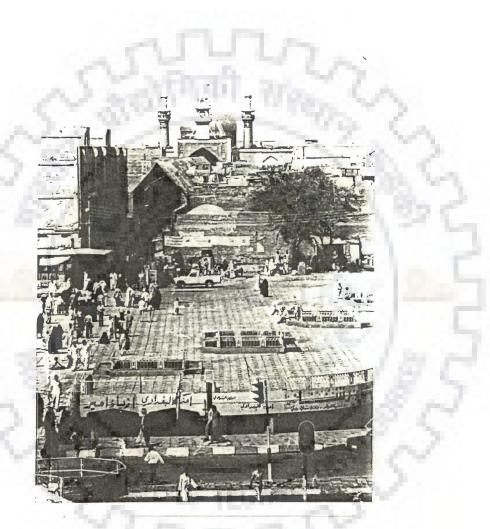


Fig. (3.7.16) :

Conflict between moving traffic, pedestrians, and commercial activities on the crossing areas toward the square.

PROPOSED SOLUTION :

This problem will be solved within the framework of the comprehensive traffic measures proposed for the Old Town.

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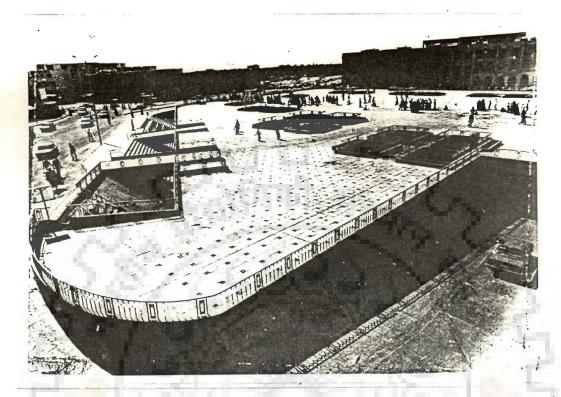
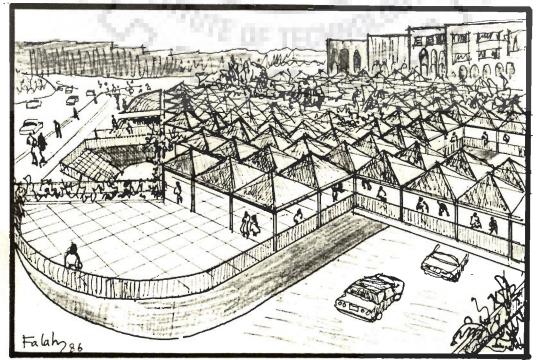


Fig. (3.7.17) : A lack of shading, plantation; and pedestrian spaces in poor state of maintenance in the square area and around it. Fig. (3.7.17-A) : PROPOSED SOLUTION :

> Create an integrated network of footways to connect the square with other major roads, with use of Landscape plant materials, and provide shade as much as possible in the area.



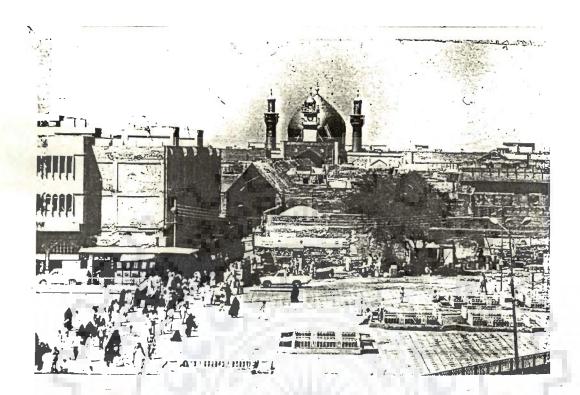
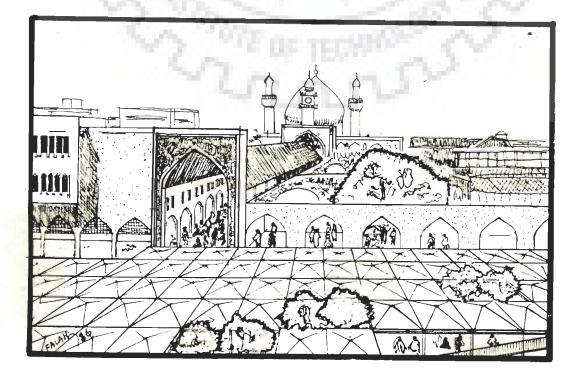


Fig. (3.7.18) Visual pollution of the main entrance to the Great Souq by criss crossing overhead wires, imporvised shades and Shelters.

Fig. (3.7.18-A) PROPOSED SOLUTION :

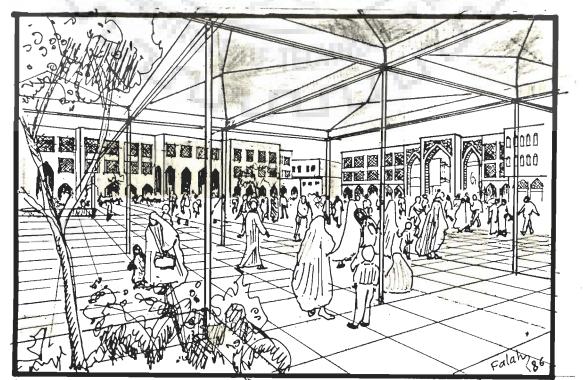
Improve the condition of buildings through selected redevelopment and rehabilitation.





- Fig. (3.7.19) : Lack of continuity in the facades of buildings along the approaching roads to the Imam Ali Square.
- Fig. (3.7.19-A) : PROPOSED SOLUTIONS :

Make incremental improvement to the facades as development and rehabilitation opportunities arise.





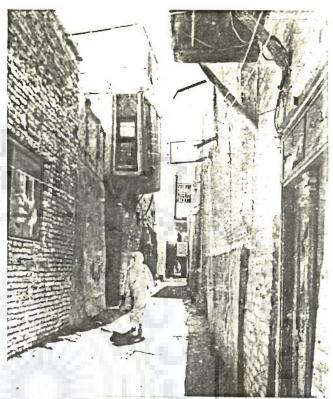


Fig. (3.7.20) : Poor housing conditions.

Fig. (3.7.20-A) :

## PROPOSED SOLUTION :

Establish housing improvement areas to direct investment for the renovation and upgrading of houses. Where appropriate pursue piecemeal development.

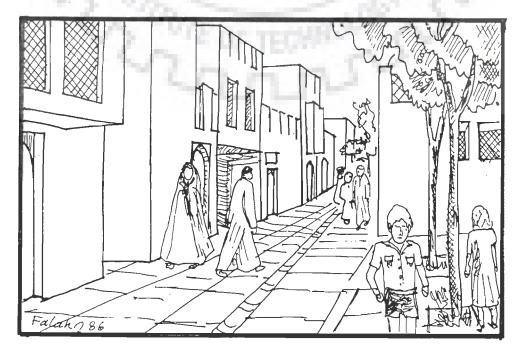




Fig. (3.7.21) :

Inadequate public utilities

Fig. (3.7.21-A) :

PROPOSED SOLUTION :

Provide facilities according to the detail plans, which could be modified where necessary to correspond to the proposed Urban Renewal Plan.

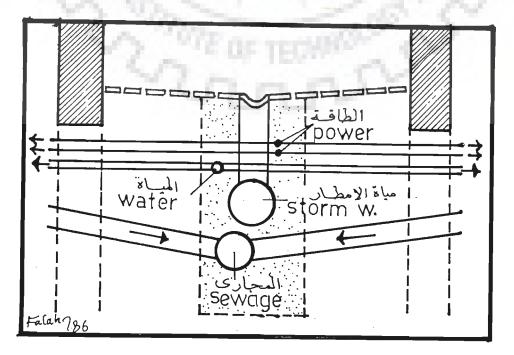


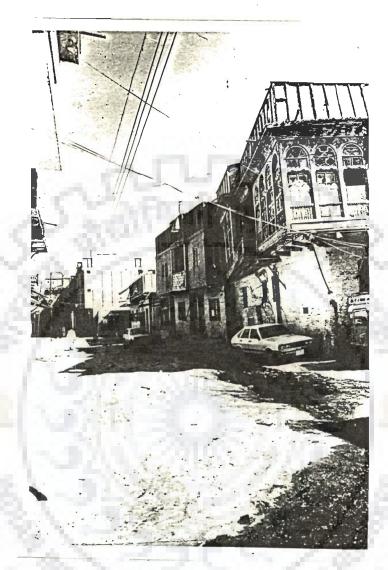


Fig. (3.7.22) : Lack of Parking Space

Fig. (3.7.22-A) :

PROPOSED SOLUTION : Provide Parking space at appropriate points inside or outside the residential areas.





## Fig. (3.7.23) Lack of Green and Open Space.

## Fig. (3.7.23-A) :

PROPOSED SOLUTION :

Provide open and planted space at appropriate points inside or at the periphery of the residential areas. In the proposed Urban Renewal Plan sufficient open space and green areas are designated. Fig. (3.7.24) :

Poor Condition of buildings which are of architectural and cultural value.

The following pictures show some examples of design elements worthy to be restored and conserved. According to the circumstances it has to be decided as a matter of policy whether whole buildings can be renovated or whether valuable elements should be integrated into new structures adapted to the traditional style and surroundings. For further discussion and policy, see (5.1)

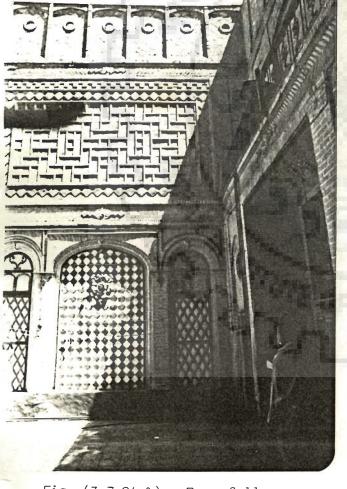


Fig. (3.7.24-A) : Powerfully patterned brickwork on the party wall



Fig. (3.7.24-B): The ceilings of the <u>Talar</u> with a <u>muqarnas</u> headed capital.

Other Problems :

The next map fig. (3.7.25) presents an overview of the problems identified in the Plan Area and their distribution. As mentioned in the introduction to this section, problems are mostly concentrated in the Old Town, where the task is one of wide-spread urban renewal. In the Outer Zone of the Planning Area, on the other hand, the task is primarily that of improving the residential environment. The main problems are the following :

- a. Rising damp and the ever-gnawing termites are the worst enemies of building in Najaf. "The capacity of the termite is virtually a death-sentence upon any structure which incorporate substantial amounts of timber." <sup>7</sup> For this reason conservation of timber may amount to total restoration, as the wood has virtually no integrity and no structural value. To copy and to replicate is then the only possible answer, and a number of buildings survive largely as replicas.
- b. One major problem is specific to the entire historic area the high water table created by water supply and drainage pipes discharging into the ground. The prevention of improper sewage treatment through septic tanks and dense urban areas, especially if associated with a high water table, can minimize the resulting damage of building foundations and walls through capillary action which is a critical factor for old historic buildings. This can be overcome on an area-by-area basis. Leaking systems should be replaced and efficient main drainage is to be made universal.

# NAJAF OLD TOWN

SCALE 1:2500



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## FIG.(3.7.25): IDENTIFICATION of the PRESENT PROBLEMS

## Legend

AREA UNDER REDEVELOPMENT

DISTURBANCE FROM SMALL\_ SCALE INDUSTRY.

DISCONTINUITY IN STREET

FOR HOLY SHRINE.

AREA NEEDING LARGE\_SCALE CONSERVATION.

POORLY DEFINED OUTLINE OF OLD TOWN.

XXX TRAFFIC DISTURBANCE.

UNDEFINED TOWN GATEWAY.

ZONE SHOWING PARTICULAR CHARACTERISTICS. When this is complete, de-watering can reduce the ground water table to natural and acceptable levels and the problem of rising damp, at present so intractable, will be brought under control.

- c. Changing styles of life present some special problems to the conserver. In the city of old the family was a nomad in its own house, migrating around the dwelling to obtain the greatest advantage of shade, shelter or winter sun, according to circumstance and seasons. Air-conditioning and the more complex modern systems of cooking, laundry and sanitation made such internal migration less desirable, necessary and convenient. Consequently rooms take no more specific and permanent functions and must be equipped accordingly. Their historic functions are thus vitiated or modified and the nature of the rooms is changed accordingly.<sup>8</sup>
- d. Despite the ingenuity which has made them so successful an answer to the climatic problem, despite their high architectural calibre and their embodiment of a traditional life style, the courtyard houses of Najaf are in danger and the destruction of the majority of them seems imminent. The problems are manifold. Primarily there are the practical problems of urban decay and the intractable problems associated with being old fashioned and therefore, unfashionable.
- e. It is important to mention that the technological and societal developments thus created change in the size, distribution and pattern of usage in urban spaces. They led to the creation of

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large open spaces between new commercial buildings in the central area, at road inter-sections and between the traditional residential area. Almost all open space was thought of as 'green' in most of the development schemes - to be shown with grass and planted with trees and shurbs. However, the scale and pace of development far exceeded the supply of water and plant material, and was thus never fully implemented.<sup>9</sup>

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CHAPTER IV - THE RESEARCH PRINCIPLES AND METHOLOGY OF THE STUDY :

- 4.1 GENERAL PRINCIPLES OF CONSERVATION.
- 4.2 GENERAL PRINCIPLES OF URBAN RENEWAL (ARAB ISLAMIC CITY)
- 4.2.1 Rehabilitation and Housing Supply
- 4.2.2 Traffic and Accessibility
- 4.2.3 Scale and Quality Standards of Renewal
- 4.2.4 Soft Renewal and New Construction
- 4.3 AIMS OBJECTIVES, LIMITATION AND METHODOLOGY OF THE STUDY
- 4.3.1 Method of Selection
- 4.3.2 Scope and Limitation of the Study
- 4.4 THE FIELD WORK ITS AIMS, METHOD, AND THE LISTED BUILDINGS.

# CHAPTER IV : THE RESEARCH PRINCIPLES AND METHODOLOGY OF THE STUDY :

This chapter starts with an outline of the general philosophy and principles behind Conservation and Urban Renewal. The situation in Iraq and particulary in Najaf are outlined including the Methodology of this study with its scope and limitations, and brief discussion on how the rehabilitation of the Old Towns can help to solve the enormous shortfall in housing supply existing in most of the traditional Arab-Islamic cities. A survey by the author was carried out in summer of 1985, which resulted in the identification of several possible conservation areas and in the selection, grading and documentation of ten traditional buildings, which can be seen in the photographs in the inventory; many with superb decorations and adornments on walls, ceilings and windows.

The inventory of ten buildings, mostly houses, is not comprehensive because limitations of time and several obstacles did not allow for more elaborate documentation. Thus, it is only a sample to show the importance of the Najafien traditional houses and their potential for conservation. It does include those houses which are best known in the area and are now owned mostly by the Municipitality of Najaf, and are in immediate danger of demolitian.

This chapter would deliberate on the impediments which are hampering the conservation and preservation of some of these important buildings and then go on to suggest ways and means to overcome these obstacles. Thus, in essence this chapter provides a methodology and procedure for dealing with the questions of servicing and sorting out buildings and areas which require to be conserved, and the manner in which conservation can be effectuated, specially in the circumstances obtaining in a town like Najaf in Iraq.

### 4.1 GENERAL PRINCIPLES OF CONSERVATION :

An awareness about the cultural value of historical monuments had steadily grown during the industrial era, just when these were most threatened. This consciousness later expanded to include the attendent environment of these monuments and at times even the whole districts in which these were located. At this juncture it had dawned on its perpetuators that it was not only the historic monuments and their surroundings but the whole `environmental labyrinth' in which they existed which was in the danger of being irremediably destroyed that required to be saved from the on-slaught of new commercialism brought about by the industrial revolution and urbanization.

Thus the new approach to conservation may include in its wake protection of a single building or a monument or a group of buildings, a whole district or even the entire town specially if its expected to enrich the lives of its current occupants and future incumbents. In innumerable situations it becomes impossible to isolate few structures from the rest and plan their conservation and protection specially if the objective is the reorganizing of historic environment and integrating it with new and emerging demands of modern day life. It is particularly true when you are dealing with the traditional Islamic *Medinas* houses where the individual buildings cluster together in such a compact and physically interdependent way that consideration of single structure is often impossible. This theme is strongly echoed in the words of Ward, P. who described conservation as :

Conservation can be regarded as a specialised form of planning which deals not only with the restoration of single buildings and spaces around them, but also involves accommodating new changes in physical and as well as visual improvements of the whole historical setting.<sup>1</sup>

It would be a mistake to assume however, that conservation means what some over - zealous amenity societies sometimes think it means that is 'an embargo on all new buildings.' A conservation plan for an area of architectural or historic interest is basically a planning proposal for the future of that area. A historic town should not be `Frozen' into a living museum. Such a plan should try not only to safeguard the historic evidence and character of that area but also to improve and enhance its physical condition.<sup>2</sup>

In other words, conservation, being a multi-disciplinary planning activity, it should, therefore, deal with amongst other things, population, housing, socio-economics, infra-structural services and traffic problems of the area under study.<sup>3</sup> The implementation of such a plan is usually carried out by a specialised governmental planning agency within the existing administrative, legal and financial framework.

The ever increasing population and the mounting shortage of housing can be a strong arguement in favour of conservation. The stock of traditional housing, even though of inferior architectural value, is indispensable to alleviate such a shortage. This housing stock, if physically improved and restored, could then be perfectly suitable for a variety of social groups.<sup>4</sup> This stock also represents a material as well as a cultural capital which is already invested and therefore, instead of being destroyed, it should be used and exploited to the best advantage of the local inhabitants.

In a study by Warren J. who described Modern Conservation philosphy states that:

"old buildings are historic material, valid in their own right and venerable for this reason alone. Therefore, any piece of the original building fabric has an intrinsic worth which depends solely upon its origin, and it follows that a simulation of that fabric with intent to deceive is misleading and can lead to distortion of historic fact in the future."<sup>5</sup>

A new dimension has entered architecture and the physical planning with this concept : "the acceptance of a scale of values based on the intrinsic worth of earlier material, thereby giving it priority over added or inserted material."<sup>6</sup>

Restoration and conservation of the traditional fabric is favourable in this context to low-income groups who are occupying these houses; and should receive serious consideration. The usual traditional house is the large one family dwelling which used to be occupied by the extended family. These old houses, today must be converted into multifamily dwellings consisting of small apartments. Such a solution would increase the number of dwelling in the old city and would provide relief from over crowding in the area. In order to permit a vigorous social life in a thriving environment in conservation areas, the city authorities have to choose some quarters of traditional housing and commerce around the great shrine. Substantial blocks of the old city can be retained, with their streetscapes and courtyard life intact.

#### 4.2 GENERAL PRINCIPLES OF URBAN RENEWAL (ARAB - ISLAMIC CITY) :

In the foregoing paragraph a foundation has been laid to explain the situation where conservation concept may have to be extended beyond a single building to a group of buildings or whole lot of districts. However, if conservation of such districts was to go beyond the limitations of maintaining these areas as 'inert museum exhibits' and were to be treated as vital areas throbbing with life and activity where past, present and future are interwoven into cohesive single entity; It is imperative that the updating and renewal of these areas to match the aspiration of its inhabitants is done on a continuing basis.

There is no reason to deprive the occupants of these areas and their progeny an access to the amenity of modern life with necessary mobility to reach their places of work and pleasure. In fact if we wish to ensure that these districts do not once again fall into disuse and a state of neglect and that the young amongst its residents do not emmigrate in undue numbers it is very crucial that the social and economic viability of these areas is continuously monitored and through continued 'renovation and urban renewal' these are made to keep pace with the emerging needs of its population.

### Utrich Schaflitzel in an article in Ekistics states that :

'The most important point is to re-integrate the *Medina* in the system of modern city. This means to create a homogeneous structure which can realize the indispensable unity between the old *Medina* with its small and shaded streets and the new town, designed only a few years ago following the principles of modern town planning. An urban fabric must be alive, without cells.....It is obvious that the level of the public services (schools, pharmacies, social services and so on) must be equal to the national average and the population density justifies the necessary investments.'<sup>7</sup>

Moreover, it has been decided to deal with various components of Urban Renewal in succeeding sub-sections, which are related to Arab-Islamic city in general and Najaf Old Town in particular. The components which shall be dealt in this section are the following :

4.2.1 Rehabilitation And Housing Supply :

Rehabilitation can help to solve the enormous shortfall in housing supply existing in most of the traditional Arab-Islamic cities. As a long term incremental process it helps to redistribute the benefits resulting from resources committed to housing more widely. There are several reasons why the housing authorities in Arab-Islamic cities could start to investigate the theory that rehabilitation could well form a preliminary role in a broad based policy approach to solving the enormous housing problem.

a. The environmental conditions of many houses is poor in traditional towns and cities. Structural stability of most houses, however, is quite sound and requires some repairs and few additional amenities.

- b. Rehabilitation is cheap. Housing authorities believe that rehabilitation in a repairable dwelling to a standard comparable with that of a new dwelling would prove to be significantly cheaper.
- c. The architectural environment and the fabric of the traditional Arab town or city can be preserved and their unique and special character would be maintained for the benefit of posterity.
- d. Saving in time and labour can be achieved and a greater impact on the housing shortage will be felt if more houses can be brought upto a suitable standard in a shorter period of time.
- e. Rehabilitation is socially acceptable. The idea of conservaton through rehabilitation is closely tied to social acceptability. Low-income groups of people are very attached to their local communities and the inherent qualities obtaining in these communities. They identify themselves closely not only with the people but also the material fabric which structures the visual environment. The old houses often based on a courtyard format with highly decorative patterns, reflect and suit perfectly their mental make up and style of living.

Moreover, rehabilitation is not a conditional system for the following reasons :

- The rehabilitation process is based on a comprehensive planning system.

- The different components of the implementation do not depend on each other.
- It is possible to implement part of the components without any dependence on other components that can not be implemented at the same stage.

The process of renewal can be effected by one of the following means :

- Renovations of and additions to the present dwelling without any need to leave the dwelling.
- 2. Temoprary accommodation in the quarter until the dwellings are renovated.
- Transfer from buildings in a bad state of repair to new buildings within the quarter.
- 4.2.2 Traffic And Accessibility :

Traffic is one of the biggest problems for the rehabilitation of a medina. Its spatial structure is not adaptable to the needs of the motor car. "A comprehensive Urban Renewal Plan should solve problems related to traffic, accessibility and pedestrian movement."<sup>8</sup> The solutions depend very much on the size of the medina, which means the acceptable distance to walk on foot from the parked car to the house, to carry the dustbins, to service a small shop or workshop. "In industrialized countries, this distance is fixed at about 80 to 100

meters,"  $\vec{}$  and it is believed that this is a valid measure for the medina too.

In rehabilitating the *Medina* new demands of vehicular traffic require to be integrated with the street life. The thematic idea in this respect is entirely plausible, which states that in an area in which open public areas are few, each street can become an area which is efficiently used during leisure time for play, recreation and gardening. The street is used for different purposes at different times of the day :

- During the morning and early afternoon hours, it is used by mothers and childern, as a playground, for infants, for the elderly and for the children of the quarter.
  - During the afternoon and evening hours it is used for parking. There is priority given to pedestrians, but driver – and the residents of the quarter – may drive through slowly and easily without harming any childern – this was tried in Holland with great success. All streets that undergo this change are to be used only for local traffic and not for through traffic and therefore, the speed of the traffic will be slow.<sup>10</sup>

Meanwhile, it will be necessary to arrange a minimum of car throughfares strictly reserved for communal services, such as buses, taxis, ambulances, fire brigade, dustbin collection and delivery vans. the distance from a house to these streets should not be more than 80 to 100 meters. Parking for the residential areas and for the commercial should be constructed on the outskirts of the *Medina*; a pedestrian distance of 200 meters from the house to the parking area seems to be reasonable.

4.2.3 Scale and Quality Standards Of Renewal :

In this connection, urban renewal must conserve as far as possible the urban form, the built substance and the resident population, even during the execution of the renovation. Repair and restoration have priority over destruction and reconstruction.

Obviously, there will always be quarters which are in such bad condition that they have to be demolished and be replaced by modern constructions, but restoration must be the general method. Restoration should be in small steps which allow the population to remain, is the appropriate method.<sup>11</sup>

Regarding the quality, standards of the urban renewal of the Arab-Islamic city; should not be fixed so high that they endanger preservation. The measures taken must not force the established population to leave their old quarters, and wait for renovation to be complete.12

Standards and regulations should not hinder private initiatives which aim at the restoration of a small sector; a house, or a broken roof. The urban rehabilitation must be a living and continuous process, giving a fair chance to private initiative. "Improvement of the urban environment must be established by the public services, but the preservation of the houses themselves can be realized through private interest and private investment."<sup>13</sup> Therefore, this can be done by renovation funds, aid in the planning and implementation of renovations and other such actions like grant or loan without interest from government.

4.2.4. Soft Renewal And New Construction :

The soft renewal presented here espouses "One must, and one can raise the standard of living of the population of distressed areas but one should not dictate or force changes in the life style of the inhabitants."<sup>14</sup>

The idea of Soft Renewal approach is not based on massive relocations, but on the premise that a sizeable number of the inhabitants will remain in the neighbourhood, it is possible "to begin actual implementation at a very early stage : Improvements of side-walks and street lighting, play areas for children and landscaping improvement of public institutions and an efficient drainage system."<sup>15</sup> All these are actions which can be implemented relatively easily by the public authorities and with limited resources. This will improve the image of the neighbourhood and the low self-image of its inhabitants, and will serve as the beginning of a dialogue between those in charge of the renewal and the inhabitants of the neighbourhood. It is most important that renewal must be carried on continuously and "all the work should carry out on neighbourhood renewal by means of local Renewal Organizations, which will integrate the planning work, the community

work and the implementation activities in the field."<sup>16</sup> This approach would be easily acceptable by the inhabitants.

Recognizing the essentiality of the Soft Penewal Approach the new building programme should be envisaged on lots where there are buildings in bad structural condition or where the plots are lying vacant, in such a way that all those occupants who wish to be integrated into the programme may do so and shift to the new buildings till such time that the renovation is complete in their houses. Newly constructed "houses should be based on low-rise, high density concept, and should reflect the traditional architectural style, with a sentimental character of that area."<sup>17</sup>

To conclude ; "One must guard against standardization of the places that are renewed,"<sup>18</sup> A correct renewal policy must strengthen whatever is unique and whatever characterizes each individual neighbourhood, whether these are social ties, traditional building patterns, specific conditions of the environment, planting fine trees or historic monuments.

# 4.3 AIM, OBJECTIVES, LIMITATION AND METHODOLOGY OF THE STUDY

The study is basically concerned with the question of protection and planning of historic environment in Iraq; but takes Najaf Old Town as a special case study to focus on conservation in more detail, and seeking to throw ideas and proposals for Urban Renewal Plan. The whole idea of the study will be based on the conservation problem of the area, and take the issue of conservation in the process of the preparation of the Urban Renewal Plan for an area of architectural and historical interest, which is basically meant to be a planning proposal for the future of that area. However, this section will focus on the aim, limitation and the methodology which has been developed and followed in this study.

Najaf Old Town represents a typical Arab-Islamic City in its layout; it was chosen not only because it contains some of the most valuable buildings and areas of cultural interest in the country, but more important, because, relative to other cities, its heritage is believed to be in greater danger of being obliterated.

Becuase conservation is a relatively recent developments in Iraq, the study also endeavours to develop an understanding of its concepts as a special form of planning and emphsises both the comprehensiveness of its approach for dealing with total environments as against single buildings, and its accommodation for change and continuity of use in contemporary society. In contrast to the Master Plan of Najaf city, the Old Town is relatively a small area. [See fig. (2.10)]. Therefore, the Urban Renewal Plan of Najaf Old Town is concerned primarily with an urban area which is already developed and under tremendous pressure of development. [For more discussion see chapter 7].

One major aim of this research was the preparation of an inventory of the traditional buildings in Najaf Old Town. Although the inventory forms an integral part of this work (See Appendices), unfortunately, it is limited to around ten building only which are being deployed as an illustration to develop the criteria and the methodology to be followed in preparation of a comprehensive inventory in future. Because of social restrictions and conservative religious beliefs; the author had faced numerous difficulties to enter other traditional houses. It is estimated that more than 200 houses possess a magnificient architectural value and should be investigated and documented. It is for the first time that such an inventory has been undertaken for Najaf Old Town. The inventory is limited to the buildings in the area within the old town, which are in particular distress or are in immediate danger of being demolished. The threat is coming from clearance programme and proposed redevelopment projects. The selection of items of interest was limited to those that were built before 1950 as the upper limit. (The reasons will be discussed in the section 4.3.1).

Essentially, therefore, the study attempts to achieve the following objectives :

- To seek the identity of an Arab-Islamic city and its urban form or core of the Arab City.
- To develop an appreciation of the philosophy of conservation and its relevance to Iraq as a country that is rich in heritage but has hitherto taken few steps towards its systematic protection.
- 3. To determine the factors which have led, and continue to affect the destruction of historic environment in Iraq and to substantiate the findings with an inventory of lost heritage in Najaf.

- 4. To examine, critically, the working and efficiency of the existing protective machinery, and to diagnose the causes that have made such loss possible.
- 5. To investigate, by means of a field survey, the state of the historic cores of Najaf; trace their morphological development, analyse their problems and constituent urban and architectural elements, and assess past and present planning attempts which affect them.
- 6. To select, grade and document sites, and areas of the collected data in one systematic way. (A comprehensive inventory of the Old City of Najaf is important and is needed to be taken in the near future.)
  - Finally, to suggest feasible measures to stop the destruction of heritage, identify those items of interest that are in particular distress or are in immediate danger of loss, and to propose policies and recommendations to document and protect this heritage.

4.3.1 Method Of Selection :

A sample of a conservation survey of Najaf Old Town, which was carried out in summer of 1985, would provide a basis for carrying out a comprehensive conservation survey in future. The aims of the conservation survey of Najaf were three fold :

- To investigate the historic cores of the City and to analyse their general characteristics and some of the individual urban and architectural elements.
- To identify their problems and the scale and different causes of destruction with the aim of preparing a documented inventory of cultural heritage.
- 3. To, select, grade, and photograph individual items of interest, and to document other relevant data which could assist others in preparing a comprehensive inventory of the existing cultural heritage in the City.

The conservation survey will be limited to the area enclosed by the Old Town of Najaf. It, therefore, would exclude even those items of interest which are located, just outside the boundaries of the Old Town.

The date of 1950 would be used as the upper limit for the selection of items, the main reason for this is that after the Second World War, people in Najaf gave up building their houses in the traditional style. In order to carry out the survey, there are four basic, yet essential, requirements. These are as follows :

- 1. Official permits.
- 2. Base maps and aerial photographs of the old core.
- 3. Standardised survey data cards.
- 4. Photographic and measuring equipment.

Usually in similar study, the official permits enable the surveyor to carry out photographic work, to interview public officials, and to obtain maps and use aerial photographs and government reports. Furthermore, they are of enormous help as far as entering private houses are concerned. The occupants of such houses feel some what more assured when they see the official letter and allow the surveyor to investigate the interior quite freely. But in the case of Najaf where people are very conservative and suspicious concerning their estate, in dealing with official bodies, because of the apprehension that their properties may not be acquired compulsorily, it was difficult for the author to enter most houses even when the author was carrying an official letter and was accommapnied by two female officers from the municipality of Najaf. Most of the traditional houses which are included in the inventory are actually owned by the municipality.

The maps, obtained from Najaf Municipality and the Directorate General of Planning, were somewhat incomplete, and had different scales and vintages. They also included several detailed planning proposals.

A prototype survey card, the size of A 4, was designed for the purpose of writing quick field notes and remarks that are relevant to the particular building under investigation. The card was laid out to include, interalia, the following data : (See copy at Appendix F)

> Serial number of item. Address details Block and Mahalla (District). Estimated or known date.

Proposed grade.

Physical condition.

Past restorations and dates.

Ownership.

Group value.

Architectural description.

Photographic references.

Location Plan.

Bibliographical notes.

The compiled date for each item was later transferred to a final card which was used for inventory. Because most streets, especially alleyways, are not named, or have lost their historic names, and because the numbers of buildings themselves have been recently changed (in 1977, and 1981), it was decided to include all shown numbers to ascertain identity. Furthermore, it was decided to include the official census numbers which are usually found fixed on the front doors. This was done to maximise the identifiability of the selected item and correlate it with official census records. (More detail in section 4.3.2.)

4.3.2 Scope and Limitation of the study :

The conservation survey undertaken by the author was limited to the area enclosed by the present municipal boundaries of Najaf Old Town. However, the current study cover the Old Town and its surrounding area which is called the Planning Area. See Fig. (2.10). Therefore, the Ring Road in Najaf Old Town built just outside the Old Town Walls, and the modern buildings which spread around the Old Town of Najaf, acted as a boundary for the purpose of this survey. The survey even excluded items of interest which are located just outside this boundary, such as the tombs in the Great Cemetery and other religious buildings outside the Old Town.

The houses selected for this study are all concentrated in the middle of the Town toward the *Souq* and the Holy Shrine; the more luxurious traditional houses invariably belong to the wealthy upper and middle classes. (See Fig. 2.48). But most of the owners of these houses have moved outside the Old Town to live in a modern house in the suburbs of Najaf.

Year 1950 was used as the upper limit for the selection of items (see the questionnaire form in the Appendix), included in this study, the reasons for this are three fold: Firstly, houses in Najaf, over fifty years of age, generally have had to be restored, or in many cases rebuilt over the ruins of the original houses: Secondly, in the 1930's, Najaf gradually started to develop outside the Old Town, without using any Plan was formulated . Finally, after the Second World War, people in Najaf gave up building their houses in the traditional style.

The later part of 1950s marked the beginning of the first Master Plan for the city of Najaf. It was prepared by a Greek firm of consulting engineers (Doxiadis Associates) and submitted to the Development Board and Ministry of Development on November 1958, under the name of 'The Future of the Cities of Najaf and Kufa'. It is important to mention

here that the methodology for the prepartion of the Master Plan which was adopted during that period had been developed radically and, therefore, the proposals as they appear in the mentioned report would require to be reconsidered. For more detail, see Fig. (2.10); which is expounding the tremendous growth of both cities of Najaf and Kufa.

The second Master Plan for both the cities was prepared by the Directorate General of Physical Planning in late 1980. The land-use proposals of the first Master Plan were modified however, the Old Town area was left as it is now; but the Plan had failed to mention anything about the preservation of traditional houses or to solve the fabric problems by proposing a conservation plan for the historical area of Najaf. Another attempts by the same authority in proposing a revised redevelopment plan for the centre of Najaf City has been made lately. See Fig.(5.9). However, these attempts were exercises in Physical Planning, devoid of serious socio-economic analysis and fiscal planning. Consequently, they were largely ignored or shelved.

Briefly, the criteria used in this study, in selecting houses of cultural interest, were based largely on factual and objective considerations. These included the age of the building, the scarcity or otherwise of its type in Najaf, its restorability, its architectural or historic interest, locational significance, group value and hygienic environment. It must be emphasised, however, that the scoring system devised for this purpose does not in any way claim to be an accurate method of representing the true qualities of the selected houses. It must only be used as general guide and regarded as a fairly crude approximation.

The scoring table, which is included in every inventory card is nevertheless, useful because it illustrates the main reasons for selecting particular items in the first place.

A total of 100 points were apportioned, for the above mentioned criteria, according to its relative significance. Age was given a maximum score of 25 points, while other criteria such as architectural and historic interest were given a maximum score of 15 points each. Some building items have a minimum of 5 points, this was the lowest score for the age, and a minimum of 5 points, for each of the categories, architectural or historic interest, in order for a house to qualify in the listings. In other words, a building which was built after 1950 was automatyically excluded even when it possessed high architectural interest; for example the Age criteria takes points as follows; for a house built before 1800, 25 points a house built between 1850-1900, 10 points, and a house built between 1900-1950, 5 points. (For more detail see the questionnaire in the Appendix, for further discussion and grading, see 4.4 ).

Houses which show their date of original construction are relatively few in Najaf and, therefore, those whith such provision deserved more attention than other similar but undated houses. Dated houses serve to testify certain arachitectural and constructional developments sand as such they are extremely helpful to historians and architectural conservationists.

# 4.4 THE FILED WORK - ITS AIMS, METHOD, AND THE LISTED BUILDINGS

Out of the ten buildings selected for inventory, eight are dwelling units and the other two are religious schools.

The field survey was carried out in summer of 1985, which covered many aspects of urban planning, pertaining to the traditional buildings. It started in the heart of the Old City of Najaf where most of the dwellings are of the traditional type. It should be noted that the external appearance of a house with high walls, may give little or no indication of the quality of the interior. The interiors of some of the more interesting buildings are profusely decorated with ceramics (Arabesque) and highly decorated in gypsum or wood work. Great care is taken of the ceilings in the main reception rooms of these buildings, as they are used as a focal point for visitors. Unfortunately, the interior decoration and the craftsmanship can not be seen through the brick walls facing the street.

Difficulty was experienced in trying to gain entry to many of the traditional type of houses which depicted the high quality of traditional decoration. This was due to such social reason as the conservative attitude of the people, or deep religious beliefs still upheld in some families, that the woman should be segregated from contact with all males outside their family.

In order to collate data, the author devised a questionnaire form (detail to be found in 4.3.2 - Method of selection). One questionnaire was completed for each house during the visit. The names of most of

the owners of the selected houses were obtained either from the occupants themselves or from the electricity and water, supply agencies, where the names of the owners are maintained for billing purposes. However, this was not always possible for the rented houses, but they could have been obtained easily if government records had been made available.

Owners and tenants, of the houses, experienced some difficulty in determining the age of the houses as there was not enough documentation available to them. They were, however, able to provide an approximate estimate of the age of the houses. From, the design of the house, its method of construction, its decoration and its situation, it was possible to give an approximate date for each house based on the personal knowledge and experience of the author. Many houses have been considerably altered and extended with the passage of time, one wing could have been built as early as the 18 th century, while the larger portion of the house was added later in the current century. For this reason, dating can only be approximate and the earlier date was the one selected.

The names of *Mahallis* were obtained from the 1957 census. The names of particular alley - ways, which are not published or documented officially, were obtained from local people. In such cases and in other enquiries, local residents who had lived for a long time in the locality, were invariably a very useful, though not a wholly reliable source of information. Each surveyed house was indicated on the 1/2500 scale map which was used for the survey.

For each house visited, the author completed the questionnaire and also photographed most of the important features depicting the traditional style of house. Each film was identified by a number and every exposure was noted in the survey form for subsequent identification and alaysis. Most of the films' were developed in Najaf to check that they were successfully exposed.\*

The question of the architectural interest of a building, which is perhaps the one criteria that is subject to more controversy than any other, was assessed in terms of design, plan, materials used, structural and constructional systems, also the richness of detail and ornamentation which is perhaps especially relevant to Islamic architecture. Some buildings, especially houses, stand out as fine examples of art and architecturee, while others exhibit a particular style or a structural innovation.

\* The author's own photographic equipment was used for the field survey. A wide angle lens (24 mm) was indispensible for recording small interiors and facades of buildings in very narrow alley-ways. Some 10 black and white films, and several colour films were used for photographing of the said 10 buildings.

Only a few houses are known to have had some association with well known historic figures. The vast majority of the private houses of historic national figures, poets and religious "ulmans" remain unknown. This is very regrettable indeed and there is a real need to initiate intensive research in this field. This theme is asserted by Fathi who described it as: "Authentication of the facts should be the prime objective of any research, after which, a list could be compiled of the houses. It can be a very effective and interesting way of enriching the nation's cultural heritage."

The question of adaptability for a new use is perhaps more relevant to larger and more important buildings, such as mosques, *hammans*, than the small traditional houses which if restored can continue to be used as houses unless adjacent uses make this undesirable.

The restorability of a building was another important consideration in its selection and grading. The restoration potential of a building is a function of its physical condition, the cost of its repair in relation to its importance, and in the case of important buildings, the availability of documentary evidence such as measured drawings and photographs; and its adaptability for new use, if no longer suitable for residential use. It follows, therefore, that a small traditional house, which is in a poor condition, would need a very large sum of money for its repair, is obviously of a low restoration potential and in this case, take a lower point in the grading of the house in the inventory.

Buildings and other items which scored between 100 to 70 points were considered to qualify for Grade A, those which scored between 65 and 35 points were considered to qualify for Grade B, and those between 30 and 10 for Grade C. However, apart from the general guidance that was obtained from the scoring system, these three grades were defined to show their relative importance as follows :

Grade A : These are of exceptional architectural and/or historic interest, and must be preserved.

- Grade B : These are of special architectural and/or historic interest, which warrant that every effort be made to preserve them. Some of these items could be, eventually, upgraded to Grade A.
- Grade C : These are of sufficient architectural and/or historic interest to be considered for protection. Some may possess a special local interest or group value. Normally, they should also be preserved and could be re-assessed regularly either for upgrading or removal from any further statutory list.

All the listed items of all three grades which would have come from a comprehensive survey in future, are distinguished by some quality or the other. Consequently, they should all be protected and defended against encroachment or loss.

Buildings of Grade C should not be dismissed lightly as being `third rate' and allowed to be demolished without a very good and unavoidable reason. It must be stressed that the three grades are used to indicate the relative importance of selected items and not to `indicate the degree of difficulty or ease of their demolition. It was precisely for this reason that some countries, such as British, decided to discontinue the use of Grade C.

The inventory prepared by the author is not a `Final' one, nor is it an official document. Any officially prepared inventory may well use only one or two grades. It is not the number of grades that is really important in this issue, but rather, whether the will and determination to protect the cultural heritage of a nation exists or not. It should be noted that the 10 buildings which were visited by the author, are a result of the consultations and directions from local experts in Najaf. This means that there are still a lot of magnificant traditional buildings that need to be discovered in the Old Town of Najaf.

This is not a comprehensive survey, but a case study to indicate the quality of the better known buildings. It is estimated by the author, that approximately 200 traditional houses are located in the Old Town of Najaf which may have similar quality. There is an urgent need for a full scale survey of these houses, to cover whole of the Old Town of Najaf. The ten buildings are an `example' to show how the Najafian traditonal buildings are important.

Details of the inventory of the ten selected traditional buildings enlisted hereunder and explained in the foregoing paragraphs is given in the appendices.

- 1. AL-Khalley School est. 1275 h. 1855 c.
- 2. AL-ZEHARRI House
- 3. MALLA House
- 4. AL-GAZARIA School est. 1316 h.
- 5. AL-MUSAWAY Graveyard.
- 6. AL-SHEIK AL-MUSWAY House
- 7. MUHSEN SISTER House
- 8. MANNAHEL House est. 1310 h.1890 c.
- 9. RASHID SALMAN House
- 10. AL-NAJEM House est. 1310 h. 1890 c.

## CHAPTER V - PLANNING ELEMENTS FOR NAJAF OLD TOWN.

- 5.1 THE PLANNING OBJECTIVES AND CONSERVATION POLICY
- 5.1.1 Objectives of the Plan
- 5.1.2 Conservation Policy for Najaf Old Town
- 5.2 PROPOSALS FOR CONSERVATION AREAS; ZONES OF SPECIAL VISUAL INTEREST; AND THE SPECIAL NEED FOR ACTION IN CONSERVATION OF BUILDINGS
- 5.2.1 Conservation Area 1.
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## 5.3 COMMERCIAL DEVELOPMENT AND TOURISM

- 5.3.1 Commerce
- 5.3.2 Tourism
- 5.4 POPULATION AND HOUSING
- 5.5 PUBLIC FACILITIES
- 5.6 TRAFFIC AND PARKING
- 5.6.1 Traffic
- 5.6.2 Pedestrian Areas
- 5.6.3 Parking
- 5.7 UTILITIES
  - Water Supply
  - Sewage and Storm water Drainage
  - Electricity Supply
  - Telecommunications.

# CHAPTER V : PLANNING ELEMENTS FOR NAJAF OLD TOWN

In this chapter, the planning objectives are determined. These relate directly to the solutions of the problems already identified in Chapter 3. They also specify the approach to be employed in dealing with the future demands on the Planning Area for more commercial space, for additional traffic and parking space, for better housing, general development, and so on. The planning objectives chosen represent an attempt to balance these various demands, accommodating modern developments while enhancing the good qualities of Old Najaf.

Several planning elements have been identified as being of particular importance for the Urban Renewal Plan. These are covered individually in this Chapter: Commerce, Tourism, Population and Urban Design. The last, however, is treated separately in the next Chapter. For each of these, the planning objectives are translated into concrete proposals regarding development over the coming years. All these proposals are coordinated and presented together in the spatial plan in Chapter 7.

The Urban Renewal Plan is aimed at strengthening the Old Town's Function as a City Centre. Expansion of commercial development should occur around the Holy Shrine and along the roads leading outwards from it. Large-scale development, such as a department store is inappropriate in the fabric of the old city and should be located (as in the Master Plan proposed in an extension of the City Centre) outside the Planning Area, immediately to the East. Although the Plan favours a large population in the Old Town, fewer people will live there in the future than at present, because the density has to be reduced in order to provide better living conditions. New schools and other public facilities are proposed to accommodate future demands in the Planning Area, primarily outside the Old Town in areas where there are more inhabitants and more space is available.

New proposals are made for the technical infrastructure, particularly for traffic. Proposed measures will prevent through-traffic, and also limit access to certain roads in the Old Town. Future parking in the Old Town will be concentrated on its fringes. Around the Holy Shrine and in the residential areas of the Old Town only service vehicles will be allowed.

Inside the Old Town, and particularly in residential areas the present street pattern and built form would be retained wherever this contributes to the traditional character. Particular areas treated as conservation areas, are selected for special treatment where all new building and renovation could be strongly controlled by architectural guidelines.

In preparing the Urban Renewal Plan certain fundamental questions emerged in determining the nature of future development in the Planning Area. These are :

- \* Criteria for designating the conservation Area ? And what is the best way to deal with a special policy for the area ?
- \* How is the need for commercial development to be accommodated?
- \* What influence will tourism have on the Old Town in the future ?
- \* What changes will be necessary in housing ?
- \* What social infrastructure and utilities will be necessary for the future inhabitants of the Planning Area ?
- \* What is the best way to deal with traffic and parking in the Old Town in the future ?
- \* How can urban design measures create a more desirable physical environment ?

These aspects are discussed individually in the following sections. In some cases the answers are rather straight-forward; in others, several alternatives presented themeselves. The various factors playing a role in these topics and the considerations leading to the solutions proposed are presented as briefly as possible, but in sufficient detail to make them understandable.

Following this: the Urban Renewal Plan may be seen as a form of synthesis between the various proposals made for the different planning elements.

# 5.1 THE PLANNING OBJECTIVES AND POLICY :

5.1.1 Objectives of the Plan :

Najaf's population is expected to double, from about 289,000 inhabitants now to some 550,000 in the next century. [See fig. (2.8.1) and fig. (2.14)]. The city centre will then probably be serving a catchment area-including the towns and villages of the surrounding region of some additional 175,000 inhabitants.<sup>1</sup>

One planning objective, derived from the new Najaf Master Plan in 1982 is that the city centre should continue to be located at least for the most part in the Old Town. [See Fig. (2.10) and Fig. (2.13)]. Serving a much larger catchment population in the future will mean, in concrete terms, that a much larger area than at present will have to be designated for central functions (shopping, administration etc.) in the Future City Centre.<sup>2</sup>

The historical and religious importance of Najaf leads to two further objectives for planning. The first must be seen as conflicting with the development of the area devoted to shopping and other central functions, and that is the retention of Najaf's particular urban character. This means the enhancing of the traditional Arabic and Islamic elements in architecture and townscape. In particular, "areas where these are still essentially intact should be properly conserved, while the old and new mosques and other important buildings should be preserved and provided with appropriate physical settings."<sup>3</sup> Very closely related to this urban heritage in Najaf is the attraction of the city for tourists. The historical and religious interest of Najaf is very considerable in Iraq and also abroad, particularly throughout Islamic world. The city's attraction in this respect should be developed as a primary objective, not just to make a stay in Najaf as enjoyable as possible for visitors, but also to provide a sound economic base for the city's growth.

It has been estimated that presently around 35,000 people live in the Old Town of Najaf, and it has therefore retained an important housing function within itself. An objective should be to ensure that this essential function remains and that the housing involved is of an appropriate standard. Living conditions for residents of the Old Town should be attractive enough to avoid a large scale movement to newer residential areas. Such depopulation would be a major loss of irreplaceable vitality and character from the Old Town.

Similarly, over-predominance of any one of these various elements in Najaf's Old Town would-as already experienced in European and North American cities-be detrimental to the general welfare of the citizens. Consequently, none of the above objectives alone should be pursued to the exclusion of the others. The overall goal of the Urban Renewal Plan will be to revitalise the Old Town of Najaf and at the same time achieve a desirable balance between the various land-use functions and between the old and the new development.

However, the present problem is to re-establish the integrity of the whole town as an urban complex, providing adequate facilities for

servicing and scope for growth in prosperity. Najaf Old Town remains one of the finest examples of a complete small concentric Islamic town. Its integrity as an urban structure is therefore of high importance.

# 5.1.2 Conservation Policy for Najaf Old Town :

It was shown earlier in this study that, if the protection of heritage is to be fully effective, it must be extended to groups of buildings, areas, and even whole towns of historic or architectural interest - as in the case of Najaf Old Town. In effect, urban conservation has now rightly become part of the planning process. It follows, therefore, that the protection of historic areas should be concerned with broadly similar objectives to those followed in urban planning, but usually on a more detailed and concentrated scale. In other words, conservation should not only be involved with buildings but also with their use, the people who occupy them, the traffic and infra-structural public services of the area.<sup>4</sup>

Conservation policies and plans should be integrated and co-ordinated with the overall development plan of the City. This integral approach is particularly relevant to the traditional Islamic *Medina* of the Near East where, it is often very difficult to preserve or restore a historic building in isolation from its surroundings. This fact was shown "to run in direct contradiction to the recent unfortunate "monument-object" approach by several official bodies in Iraq, where some very important historic monuments had their surrounding historic fabric cleared."<sup>5</sup> Because conservation is primarily concerned with

areas, it follows that, without the effective control of the total environment, individually-preserved buildings can be exposed to damage and eventual destruction, by allowing insensitively designed or incompatible modern development to surround them.

To make a conservation policy meaninglful and effective in the long term, it is essential that "the conserved area enjoys a vigorous and self-supporting economic life of its own."<sup>6</sup> Therefore, a mixture of uses in the immediate environs of the mosque, such as housing, shopping, small trading and manufacturing, professional offices and social activities, moderately-sized hotels--is to be encouraged where street trading as at present, can continue to be carried on. A few small gardens can be introduced, and there should be a number of minor open spaces where people can gather, usually close to the covered bazaars, at street junctions. The ratio of different uses varies in such circumstances, and "it is important that the design should be flexible to allow differing proportions of uses as local demand becomes apparent or varies from time to time."<sup>7</sup>

A tried and effective method of achieving the objectives in a restricted area of a city is to define and designate a conservation area, where special rules apply. If these rules offer to the local population advantages which others donot have, and "if the area becomes attractive to live in, and prosperous, the people will welcome the benefits of the arrangement rather than resenting the restrictions."<sup>8</sup> In consequence the quality of life in the area will improve.

To conserve and renovate is not in itself enough. Part of the proposals will be concerned with encouraging local people to participate in the redevelopment by improving their properties and so keeping alive the spirit of the local community. To this end "a legislative framework would be suggested which will allow for the payment of grants to the owners of the buildings"<sup>9</sup> to meet the cost, or part of the cost, of repairing historic structures, installing essential services and basic facilities.

By doing so it should be possible to ensure that all houses are brought up to a good modern standard, having full electric services, proper services of hot and cold running water, good bathroom and kitchen equipment, and air-cooling. The legislation will aim at encouraging people to help themselves but "it must also include clauses which will allow the city to take over the responsibility for bringing properties upto standard if the owners fail to do so."<sup>10</sup> The rules must have the further objective of ensuring that the intended visual character is maintained permanently. A strict planning control is therefore essential.

John Warren proposed a conservation policy in two case studies for Baghdad, which could be adopted for similar historical cores of the Iraqi towns as well as for Najaf Old Town. The following summary indicates the main Conservation and Redevelopment proposals modified to suit the integrated conservation requirement of Najaf.

- 1. a. That a Conservation Area be declared and its boundary established.
  - b. That all owners of property within the Conservation Area be notified of their rights and obligations.

- a. That within the Conservation Area (C.A.) development or repair of any property be subject to strict - system of planning approvals, governing alteration, extension, demolition or change of use.
  - b. That the City Authorities purchase and repair all historic buildings in the C.A. whose owners are not prepared to put them into a satisfactory state of repair.
  - c. That owners of historic buildings within the C.A. be entitled to receive grants towards the cost of approved schemes of improvement to houses, including the costs of piped hot and cold water; water-borne sewerage, electric wiring, bathrooms, lavoratories, kitchens and aircooling.
  - d. That all owners of houses within the C.A. whose properties are not approved for the giving of improvement grants be entitled to receive a grant towards the cost of redeveloping their property to an approved design.
  - e. That where a property is tenanted, and the tenant wishes to see improments effected, the City shall be entitled to buy the property from the owner and arrange that the works are carried out. If, however, the owner is prepared to carry out the repairs or improvements, the City shall allow him to do so and shall not exercise its power of purchase.
- 3. a. That all buildings of historic value be scheduled and recorded for the purposes of grant aid, and conservation.
- 4. a. That the [Four] links between the [Four] main routes leading to the Shrine should be controlled and made available primarily to pedestrians.
  - b. That buildings be placed across the axial routes to the Shrine and that a system of covered pedestrian routes be designed around it.
  - c. That additional car parks be provided by utilizing openspaces or be selective demolitions.
- 5. a. That gaps in the urban fabric be made good with new building sympathetic to the scale and character of traditional buildings [in Najaf].
  - b. That some of the recent commercial facades be refaced.
- 6. a. That the new streets of the C.A. are designed on a scale similar to that of the existing streets, on irregular alignments, including shaded areas and planting.<sup>11</sup>

# 5.2 PROPOSALS FOR CONSERVATION AREAS, ZONES OF SPECIAL VISUAL INTEREST AND THE SPECIAL NEED FOR ACTION IN CONSERVING BUILDING :

Conservation areas are those areas which possess special architectural or historic interest. It is a recognised fact that the quality of heritage lies not just in buildings themselves but in building groups and even entire environments.

The broad aim of designating Conservation Areas is to make their special character subject to special legal planning control thereby ensuring both its protection and its enhancement. As was mentioned earlier, the basic concept of conservation is that of a mixture of planned change and continuity and, similarly, a Conservation Area should involve a flexible arrangement of the old and new. By the concentration of planning within these relatively small areas, it is hoped that they will be able to assimilate the necessary changes while maintaining their essential overall character.

By definition, therefore, these areas are to be the responsibility of planning authorities and not preservation authorities, i.e. Najaf Municipality and not the Directorate of Antiquities. Consequently, the legal provisions that are required for these areas should be incorporated within the legal framework of planning. These legal provisions should not only deal with the relevant administrative and financial aspects of urban conservation but "also with specific aspects such as development control, conservation plans, permitted development for non-listed buildings."<sup>12</sup> Listed building control should cover, demolition and alterations, infill, and enhancement

including landscaping, provision of street furniture and removal of unsightly poles and overhead electricity and telephone wires as well as certain types of advertisements.

The proposed areas vary in size and character, both functionally and architecturally, and in the number of selected houses within them. Conservation Areas will perhaps always be centred on listed buildings, but exceptions should be allowed. For instance, an area which includes only a few or possibly no listed buildings could have an interesting historical street pattern or some other features of archaeological value. Such an area should also be considered for designation.

It should be emphasised that the ten building items, including eight residences and two Madrassas selected by the author, should only be taken as general indicators and not as "absolute" facts. [See the App. A]. There are many more than these eight houses which were selected for this study in every individual proposed Conservation Area in Najaf Old Town, whose aim is to show the importance of the traditional house and the need to include these houses when Najafian а professional study of conservation area takes place. Observation from outside the traditional houses, show that more than (200) house of high traditional value require preservation. [See fig. (5.1)]. In fact a comprehensive survey of the historic core of Najaf should reveal many more. This reservation is due to two reasons, firstly, the figures are arrived at by treating equally, all selected items of all grades and secondly, the selection of the items was done by the author alone and not by an official team. Such a team is quite likely to select a different number of items, especially of the lower grade,

thereby arriving at different incidence number and ratios of traditional houses.

A limited survey was carried out in 1982 by a team from the State Organization of Antiquities and Heritage, in the areas which are going to be effected by the two projects, that is Visitors Town and the Tourist Facilities project. according to this team some (100) buildings were found to possess an interesting and distinguished architectural and historical character. Most of these buildings are located in EL-Ammara *Mahalla* and some of them inside the Great *Souq*. While the author observed more than (200) buildings in his survey, which are marked in map Fig. (2.48) and Fig. (5.1) as the dark spots. These buildings could get as much as grade A, by using the same criteria and method of selection as has been done for the 10 buildings selected for detailed evaluation in this study.

These areas have been invaded by all types of modern land uses and, as a consequence, have suffered considerable physical loss and visual intrusion. However, some still posses certain nodes and landmarks which have managed to maintain some of their former visual interest and contribute to the historic skyline of the parts of the Old Town. Such areas have been identified as Zones of Visual Interest, like the Holy Shrine. Fig. (2.17), and the Great *Souq* Figs. (2.26) and (2.27), see also map in Fig. (5.1). It is not realistic, nor perhaps desirable, to ensure a standard specification for the definition and protection of Conservation Areas and Visual Zones. However, while it should be quite legitimate to allow a certain amount of modern development to take place within the former, it should not normally be allowed within the latter. In this connection, "such activities as removal of accretions and eyesores and other enhancement schemes should not be regarded as forms of modern development, and therefore, must be encouraged."<sup>13</sup> The survival chances of listed buildings, Areas and Zones, are heightened if the environment in which they stand provides attractive living conditions. Enhancement provides the incentive for continued care and investment in maintenance by the owners and occupants.

There are three large projects recommended by the Municipality of Najaf in the planning area, which are in a process of being approved by the Government. These projects are important and effective elements of Najaf Old Town, which have been accepted as a matter of fact in the preparation of the proposed Urban Renewal Plan [for more discussion see (2.4.3)].

It is strongly recommended that one project must either be revoked or radically re-assessed. This includes a proposal for a "Tourist Facilities and Services" in the South West of the Holy Shrine, and is greatly affecting the historic core of Najaf. [See Fig. (2.36)]. If this large scale project is implemented as it is now proposed, it will very seriously alter the historic character of the town's core by demolishing many fine houses and other buildings. A Conservation Area should not be treated as a "line on a map", its designation is only a

necessary preliminary measure to ensure that suitable steps are taken and policies formulated to retain its special character by a conservation plan of action within the larger frame work of the City's Urban Renewal Plan.<sup>14</sup>

The seven Zones of Conservation which are proposed in this study cover a large area of the Najaf Old Town. [See fig. (5.1)]. They vary in size of area and the number of buildings which possess distinguished architectural features. To summerize, these are the following :

5.2.1 Conservation Area 1 :

The first conservation area is located in the North West of Najaf Old Town, in EL-Ammara *Mahallah*, this area contains five important buildings of historical and architectural value. The first building is Sheik AL-Tousi Mosque, (the second important mosque after the Main Mosque, also one major street in Najaf Old Town is named after the same personality). The area has another two important religious schools (*Madrassa*) each of them has a special building, architecturally interesting, with a central courtyard and elaborate decorative elements.

There are two graveyard buildings adjacent to one religious school, and belong to important religious personalities in Najaf; these buildings have two domes which are elaborated by Islamic decorative ceremic work, and they are a landmark for the area. The area also contains several magnificant traditional houses.

### 5.2.2 Conservation Area 2 :

The second conservation area is located at the North side of the Old Town of Najaf, in EL-Meshrak *Mahallah*. This area contains one of the largest *Husseiniya* in Najaf Old Town, [See fig. (2.4.2.1)] plus a large number of magnificent traditional houses having significant architectural character. The area's location permits easy access from thoroughfares like Imam Zin street and AL-Tousi street.

# 5.2.3 Conservation Area 3 :

The third conservation area is located at the East side of the D[0]Town of Najaf in EL-Baraak Mahallah, near the East Gate of the Old Town. This area is comparatively small and contains two important buildings of historical and architectural value. The first building is the Indian Guest House (Khan AL-Hinod), which was built at the beginning of this century to accommodate the Indian pilgrims. The second building is a Commercial Khan (regional shop,) see (2.4.2.2), presently being used as carpentary factory. Both buildings are large in area and are considered to be of high architectural value. The first building is in a sound structural state, while the later has deteriorated as far as its structural condition is concerned. However, these are both worth preserving. The area contains some of the traditional houses which have an interesting historical street pattern alongside AL-Kawarnag Street.

#### 5.2.4 Conservation Area 4 :

The fourth conservation area is located at the East of Najaf Old Town, in the middle of EL-Baraak *Mahallah* not far from AL-Sadek Street. The area includes a few magnificient traditional houses. It also possesses the historically important interlacing street network--a unique character of traditional Arab-Islamic City.

### 5.2.5 Conservation Area 5 :

The fifth conservation area is located at the South of Najaf Old Town near the Ring Road on the southern side of EL-Huesh *Mahallah*. This area contains four important buildings of historical and architectural value. There are two religious schools, one mosque, and a graveyard building, plus a large number of magnificient traditional houses. The area has an advantage of being near the Ring Road hence has better accessibility, which would be a plus point in preparation of the Urban Renewal Plan. [See fig. (7.4)].

# 5.2.6 Conservation Area 6 :

The sixth conservation area is the largest one and located in the heart of the Old Town, south of the Holy Shrine. The area has the largest number of architectural and historical buildings such as, religious schools, mosques, *husseiniyes* libraries, *bazaar*, and a large number of magnificient traditional houses. See map fig. (5.1).

These were built near the Holy Shrine because Najaf Old Town, beside its considerable religious and cultural focus in Iraq, used to be the main commercial centre in Iraqi desert, and all the activities related to trade took place in the Old *Souqs* of Najaf. For this reason, most of the wealthy Najafians built their houses near the Holy Shrine and the *Souqs*.

This observation has been shared with the next area. The area has a longitudinal *Souq* which is the second largest *Souq* in Najaf Old Town after the Great *Souq* its specialty being the daily necessities and confectionery.

### 5.2.7 Conservation Area 7 :

The last conservation area which is proposed in this study, covers most of the area between Imam Zin Street and AL-Sadek Street; the area is located on the western side of the Holy Shrine. [See map fig. (5.1)]. The municipality of Najaf is the landowner of this area which has a large number of architectural and historical buildings such as religious schools, libraries, graveyards, *Souq*, and a large number of magnicient traditional houses.

Municipality of Najaf had acquired this area in 1981 by paying heavy compensation to the private landowners, but no immediate action had been taken towards conservation or redevelopment of this area. This has led to lack of care and maintenance of many interesting buildings and traditional houses; which have deteriorated both structurally and otherwise thereby making a negative impact on the surrounding environment. See map fig. (2.34).

A clearance programme proposed for the area, envisages new development of a "Visitor Town Project". The master plan for this project has been approved in October 1985, For more discussion see (2.4.3), and fig. (2.35). It is strongly recommended that this project must either be revoked or radically re-assessed to meet the objectives of the Conservation for the whole area of Najaf Old Town and should be done within the framework of the over all Urban Renewal Plan.

#### 5.2.8 Design Guidelines :

The proposed seven conservation areas in Najaf Old Town are characterised by historical buildings of architectural value and/or possess features typical for the traditional urban character of the Old Town. Restoration and redevelopment of these areas has to follow guidelines which secure their historical continuity.

As it has been mentioned earlier the segregation of public and private spaces constitutes a dominat character of the traditional Arab-Muslim City. Therefore, definition of public and private spaces is essential to be recognized. High walls or the facades of buildings form the boundary of public spaces. The traditional house is not orientated towards the street, but towards an inner courtyard. In the ground storey are doors and narrow openings for ventilation or light; only in the upper storey do the windows open towards the street. This results in a strong distinction between public and private spaces and is going to be a guiding factor in all renewal, renovation and redevelopment work.

In the following are proposed certain guidelines for renewal or renovation in consonance with the aforesaid principles.

#### Height :

Since, one or two storeys with a parapet is universal, leading to heights varying between 4.5 and 9. meter; any renewal or even new development near or in the vicinity of old buildings will have to take special cognizance of this fact.

#### Facades :

Facades for the ground storey will have to be simple with few openings, in contrast with the richness of detail for the second storey and/or parapet. Bay windows, balconies, arches, filigree work and other elements should be incorporated in new buildings and retained in the old.

#### Materials :

New materials will have to be used in harmony with traditional materials of baked bricks, burnt bricks, lime plastering in ochre, yellow or ash coloured sand-tones.

#### 5.3 COMMERCIAL DEVELOPMENT AND TOURISM :

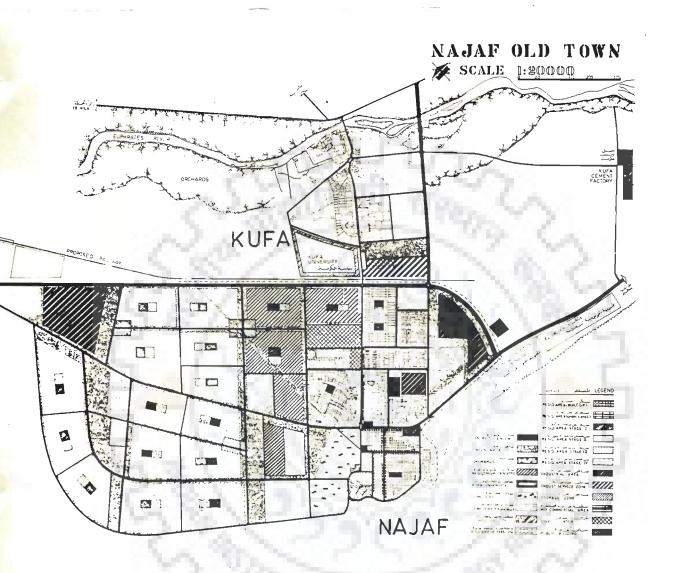
Major current functions of Najaf Old Town, which are expected to prevail in the future also, are those resulting from the religious significance of the town; the Holy Shrine of Imam Ali, the Great Cemetery of Najaf, and the famous religious schools which attract hundreds of thousands of people who, either as pilgrims or as students, affect the economy of the town. As a result of the religious functions secondary "functions have also developed mainly concerning commerce and general services for the large number of visitors."<sup>15</sup>

It should be noted that Najaf also serves as the administrative centre of the province bearing the same name. Kufa is the adjacent town to Najaf City; there is no doubt that the two towns meet and unite, because the availability of large areas of suitable land, mostly Government owned, between the two towns helps this tendency, particularly for the administrative buildings and the Civic Centre. [See fig. (5.2)].

The present commercial and business areas in Najaf and Kufa are congested, especially during peak business hours and pilgrimage periods. Further, "these areas are intermingled with residential ones in many cases."<sup>16</sup>

As it has been mentioned earlier that one of the objective established in the Najaf Master Plan is the retention of the Old Town as location for the City Centre, which means, essentially, for commercial activities serving the whole of Najaf and surrounding rural distincts as catchment area.

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# FIG.(5.2): MASTER PLAN of KUFA & NAJAF. SOURCE: DIRECTOR GENERAL of PHYSICAL PLANNING, BAGHDAD, 1982. (REDRAW BY THE AUTHOR, 1985)

#### 5.3.1 Commerce :

The Najaf Master Plan foresees a future catchment area with a population of more than half a million. See (2.4.1), and the need for 30 ha. of Commercial Land in the City Centre.<sup>17</sup>The existing commercial area is about 5.75 ha. only in Najaf Old Town. See (2.4.2.2) and fig. (2.15). Therefore, to add the proposed commercial centre at the East of Old Town within the Planning Area is really difficult. The site has an area of about 9.5 ha., and a total built up area of all the nine three storeyed blocks is (128,000 sq. m.), this includes all sort of commercial activities like department stores, offices, clinics, and retail stores. For more detail see (2.4.3).

If even the present standards of provision were to be applied to the catchment area population, the commercial area in Najaf's central area would have to be about 30 ha. i.e., nearly six times the actual level of provision.<sup>18</sup> There is indeed evidence that the present commercial area is already insufficient to cope with demand. "Land prices there have reached a level more than ten times higher than that in the new residential areas.<sup>19</sup> Since present residents of the central area are commonly seeking the opportunity of moving out into newer residential areas (clearly indicated during a survey by the author in 1985), it would appear that demand for commercial development must be primarily responsible for pushing up land prices.

Department stores, large scale developments, and those requiring direct access between shop and customers vehicles can not be suitably accommodated in the Old Town without destroying the existing urban fabric. Therefore, the proposed commercial centre is located outside the Old Town which will take care of about 40% of the total land requirements of the future commercial area of the city centre. From a simple calculation, the Najaf's centre will have a 185000 sq.m. of commercial area in the short term, while 115000 sq.m. have to be provided for long term. The Old Town could accommodate about 4.5 ha. of commercial land within its confines, however, 7 ha. of commercial land must be accommodated outside the Old Town, either at the fringe of the Ring Road or in the verge of the southern part of the Old Town.

In future, parking spaces can still not realistically be provided on commercial land in the Old Town, but must be on public car parks and in the streets. The amount of land to be allocated to commercial plots in the City Centre, will, therefore, be less than the 11.5 ha. after the corresponding space required for parking have been subtracted.

Based on European experience and standards, parking requirements are assumed to be 22% of the total 4.5 ha. needed for commercial uses in the Old City. This is based on the assumption that 75% of the remaining commercial plots are built over and that, on an average, an area equivalent to 75% of their ground floors is retail floor space. "Applying then the standard of 2 parking spaces per 100 m retail floor space "<sup>20</sup> a total requirement of 900 parking spaces to serve 8 ha. of land devoted to commerce (45000 sq.m. retail floor space). A simple diagram can be used to illustrate this. [See the next fig. (5.3)].

For the allocation of 300,000 sq.m. of commercial development in the Old Town, areas were identified which display some characteristics

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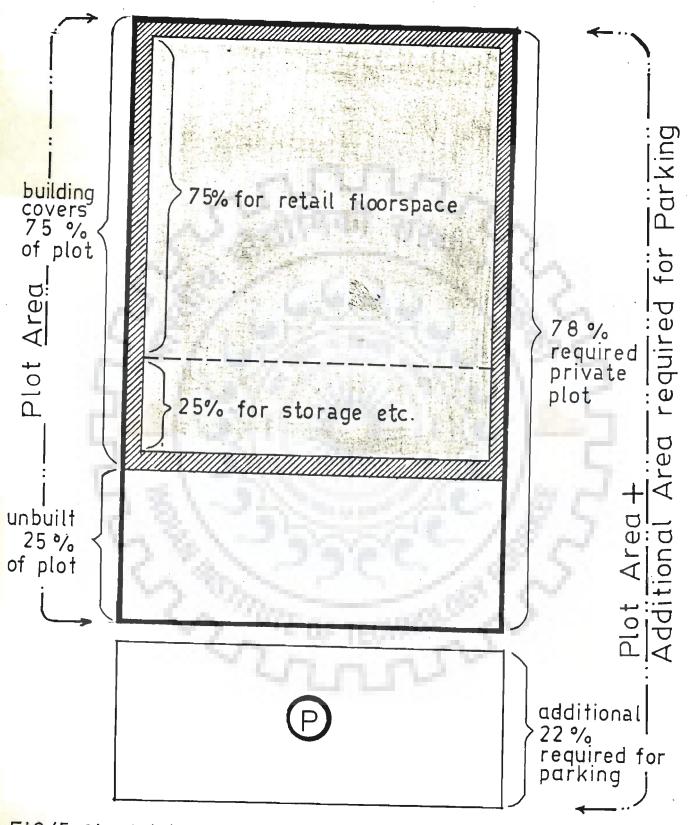


FIG.(5.3):Division of Land Requirements for Commerce.

Source:Weidleplan, "TIKRIT AND SAMARRA REDEVELOPMENT PROJECT." Final Report. SAMARRA. P.51. indicating potential for commercial development, location with regard to present central functions and related pedestrian movements, good access for delivery vehicles, and/or undeveloped land. The next map fig. (5.4) shows these suitable areas, divided between two degrees of suitability.

Basic alaternatives for distributing the 80,000 sq.m. of commercial development between these suitable areas were examined and evaluated.<sup>21</sup> It is important to note that the existing commercial areas (the Great *Souq*), and the proposed Commercial Centre are included in the three alternatives, also the same legends have been used in the four next figures. It is worth mentioning that the procedure carried out by Weidleplan previously was adopted and modified for purpose of the present study. The following figures will clarify this.

On the basis of the following evaluation, the third alternative is chosen as the most appropriate for guiding future commercial development in Najaf Old Town. In last map fig. (5.8), the areas are identified which should be developed for commerce.

A second category of areas is also indicated. These indicate locations where commerce could additionally be allowed to develop, particularly if demand becomes greater than envisaged in the Plan.

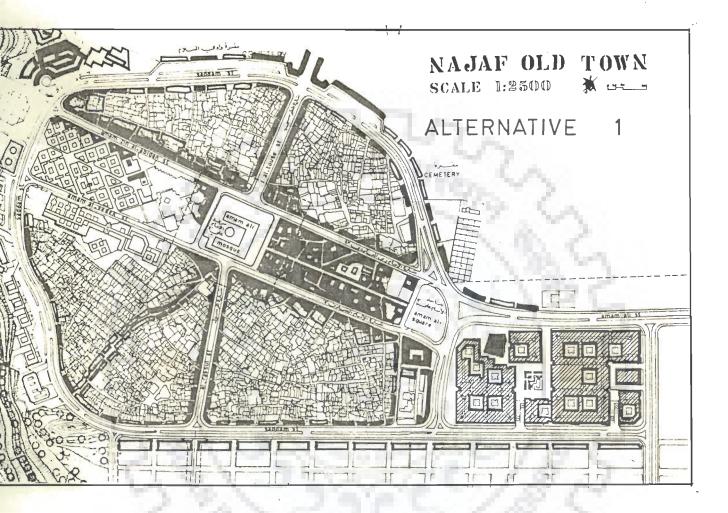


Fig. (5-5) : Commercial Development. Alternative 1.

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#### Major Chraracteristics :

- \* projection of existing trend to dispersal, particularly west-wards.
- \* even distribution of development around the Ring Road.
- \* no filling in of blocks between shopping streets.
- \* development of shopping along the proposed footpath connection between Holy Shrine and the commercial centre toward the East and the proposed Tourist Town toward the West (Bahir AL- Najaf).

Assessment :

- \* favours commerce depending upon vehicular access and parking in extending development along the primary road network.
- \* does not allow an intensity of lively commercial activity in the heart of the Old Town or elsewhere.
- \* long distances are involved for shoppers on foot in visiting all parts of the commercial areas.

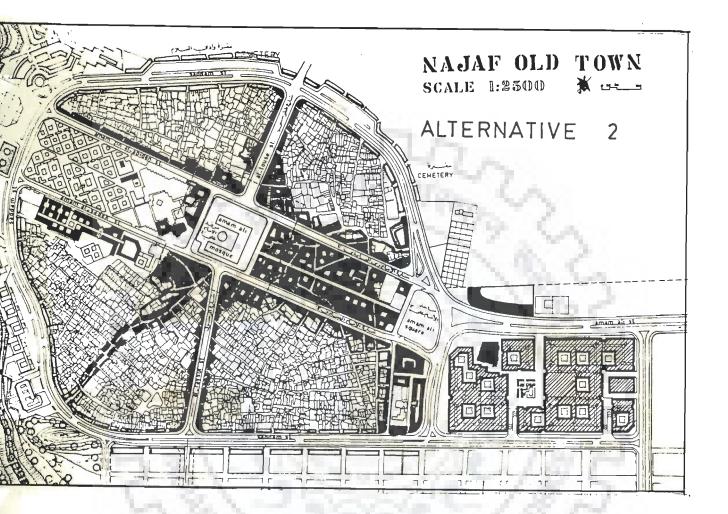


Fig. (5-6) : Commercial Development, Alternative 2.

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#### Major Characteristics :

- \* reflects the new orientation of the City Centre eastwards to the new development areas and towards the complementary centre.
- \* a strong accent is placed on concentration along a single eastwest axis, and particularly around the Holy Shrine.
- \* Commercial development attains a much greater depth away from the roads, and involves the infilling of some blocks.

Assessment :

- \* achieves an intensity of commercial life in the heart of the town which might, however, be not in keeping with the religious significance of the Holy Shrine.
- \* reduces the potential of north-south axis.
- \* concentration of commerce and development away from the main roads could create problems with deliveries.

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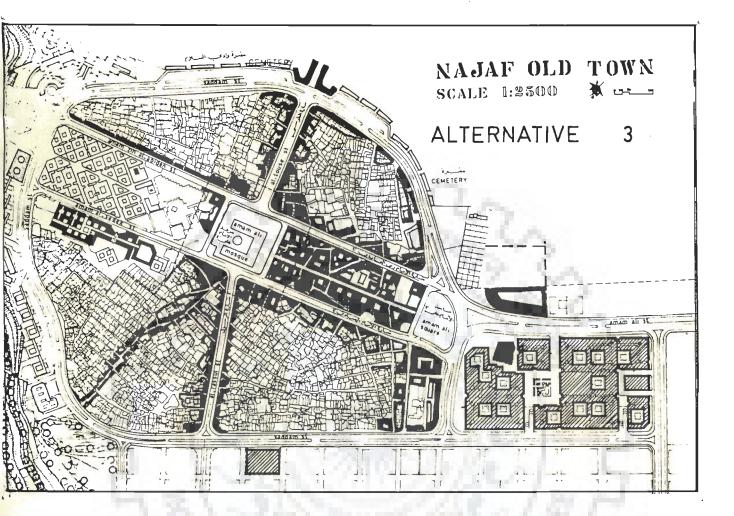


Fig. (5-7) : Commercial Development. alternative 3.

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# Major Characteristics :

- \* emphasis is on the pedestrian routes leading from the Holy Shrine and on the area around the Shrine itself.
- \* development is spread along, rather than away from the street fronts.
- \* depth in the pattern of development is achieved by the creation of pedestrian squares within blocks rather than whole sale infilling.

Assessment :

- \* Concentration on the approach roads and on internal squares in the central blocks allows an emphasis on the shrine area as core of the Old Town without disturbing the religious atmosphere with too much commercial activity.
- \* Fully utilises the attraction of pedestrian streams between the main parking areas on the fringe of the Old Town and its heart.

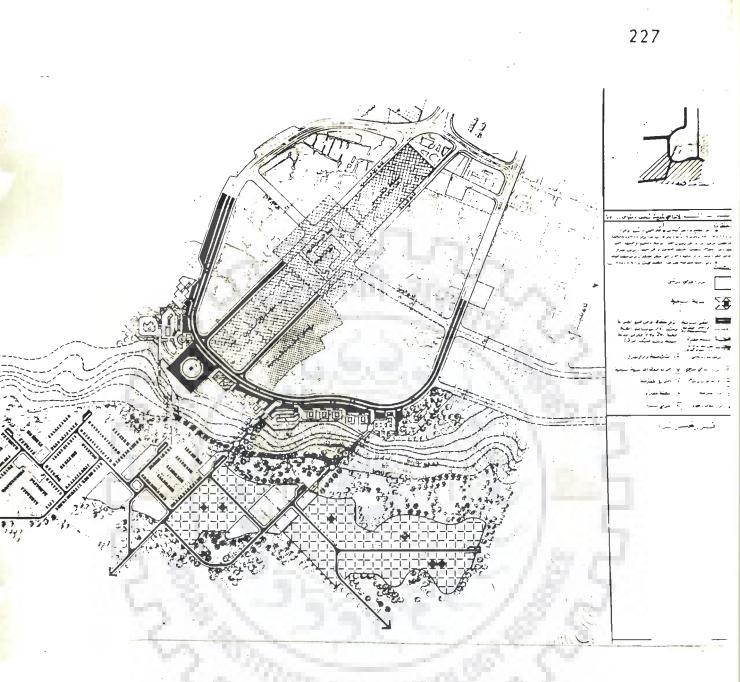
#### 5.3.2 Tourism :

Tourism is expected to play a very important role in Najaf Old Town in the future. Besides the pilgramage activities, the tourist attraction of the *Medina* can not be neglected. "Their disappearance would greatly diminish the tourist industry." <sup>22</sup> Therefore, it is necessary to conserve their touristic values. "The embellishement of facades and the arrangement of tours of touristic interest are the most usual methods. But if the *Medina* loses its characater as a living town and becomes a museum, it will cease to be interesting for tourism."<sup>23</sup>

Pilgrims and sightseeing visits to the Holy Shrine are expected to increase considerably, particularly if the trend observed during the last fifteen years as noted by the Municipality of Najaf and the Shrine Authority is going to continue. [See (2.4.5)]. Even more dramatic development will be that of the proposed tourist complex which is planned against the valley (Bahir AL-Najaf).

Extending the trend of the past fifteen years, 4 millions visitors to the Shrine are expected annually at the end of the century, with a peak of 70,000 on memorial days, and an average number of 10,000 visitors per day.<sup>24</sup>The provision of hotel beds can not be contemplated in the Planning Area, since there is no available land of the scale required at Najaf Old Town, nor is the scale or type of building involved appropriate in the area, particularly not in the Old Town. Therefore, visitors for more than 3 days visit, could be accommodated outside the Planning Area, at the tourist complex of Najaf (Bahir AL-Najaf). [See fig. (5.9)].

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# FIG.(5.9): THE PROPOSED TOURIST TOWN of BAHIR AL\_NAJAF

SOURCE: DIRECTOR GENERAL of PHYSICAL PLANNING COMMISSION. BAGHDAD, 1985. The larger number of people gathering around the Shrine would also create major problems if normal traffic were still to be allowed into this area. This is good reason for creating a Vehicle-Free Zone around the Holy Shrine. As discussed later, the vehicles bringing the pilgrims, themselves will create problems, since the numbers will be so great at peak hours that parking accommodation in the Old Town is out of the question. [See fig. (3.7.13)].

#### 5.4 POPULATION AND HOUSING :

The future number of residents in the Planning Area are expected to be significantly lower than at present. This is partly because of a probable decline in average household size (from 9.25 to 5.5 in the Old Town),<sup>25</sup> and also as a result of a reduction in the number of available dwellings which are either coverted to more profitable use which is mostly to commercial activities, or have been left vacant because of their decay and deterioration. [See (2.4.1)].

That smaller household sizes are to be expected in the future was confirmed by a survey in 1973, which indicated a strong wish among young parents in the Old Town to leave their ancestoral home and establish their own elsewhere.<sup>26</sup> The availability of building plots in the areas of new residential development, together with the support from government housing finanace policies, have ensured that wishes of people would have materialised by 1979-80.

In the Old Town the future number of available dwellings would be reduced due to the following factors :-

- Dwellings which are too small and/or poorly connected to the technical infrastructure must be brought into line with modern housing standards. This will inevitably mean alterations or redevelopment leading to a lower density.
- The expansion of the City Centre's commercial area from 5.75 ha. to 11.5 ha. will take land away from housing, even when the two uses can, to a certain extent, be combined on the same plot.
  - Further present land under housing will be lost to the public facilities required in the Old Town (nurseries, kindergardens, play-grounds etc.).
- A certain additional area must be taken for parking and for access for service vehicles.

As a basis for forecasting the future population in the Old Town, a density of 330 persons/ha. is assumed, corresponding to an average plot of 165 m. $^{27}$ 

Following the above assumptions, the population of the Planning Area is forecast to fall to about 25,000 in the next fifteen years. Assuming further that one family will occupy each residential plot in the Planning Area, the distribution of this population would then be as shown in the next map see Fig. (5-10).

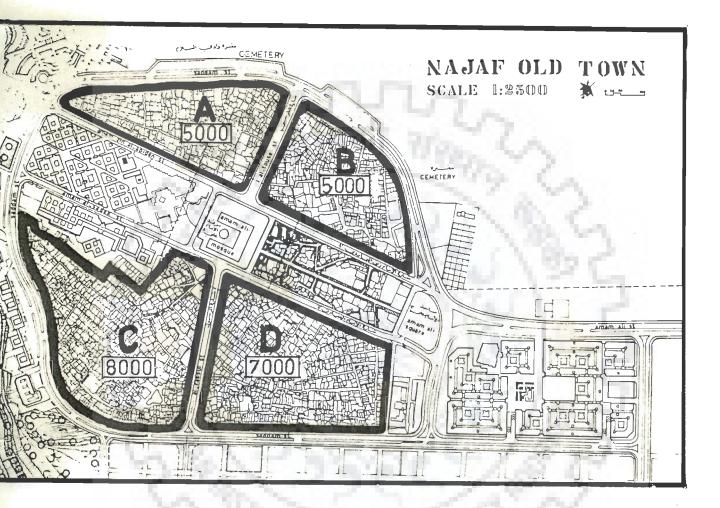


Fig. (5-10) : Catchment Areas for Public Facilities

### 5.5 PUBLIC FACILITIES

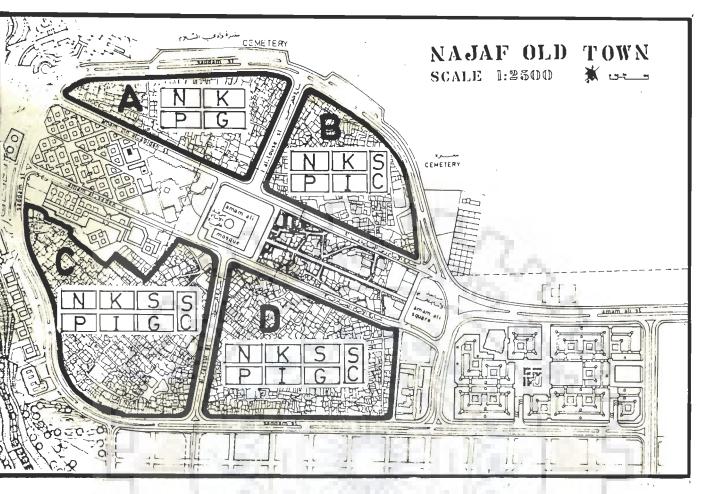
The population of the four catchment areas of the Planning Area in the future will require fewer public facilities than calculated earlier for the current, larger population. Nonetheless, present provision will be insufficient as shown in the following table.

Type of	No. of Facilities					
Facility						
	A	В	С	D	Future need.	Future shortfall
Nursery	62					
Kindergarten	1	- 1	-	1	4	3
Primary school	-	1	1	1	6	3
Intermetiate	-	1	-	1	3	1
school						1
Secondary school	-	L	-	1	2	1
Health Centre	4	1	1	1	4	1
Community Mosque	4	3	6	6	19	0
Play ground	6		3	-	4	4
Sport Centre	634		-	-	3	3

Present Provision and Future Shortfall in the Number of Public Facilities.

Fortunately, there are facilities lying outside the Planning Area which can provide for some of the future requirements. For the rest, new facilities must be planned at locations within suitable accessibility for the catchment populations. The shortfall in provision in the four catchment areas is shown in the next map fig. (5.11).

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Nursery P Primary school I Intermadiate school. Kindergarten G Play ground S Scondrary school K Sport centre 5 C

> Fig. (5-11) : Allocation of Additional Facilities to the Four Catchment Areas.

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It is not very difficult to provide suitable locations for the necessary new facilities in the four catchment areas of Old Town, where undeveloped land is available immediately outside the zone itself. For the Old Town, however, very little open land is available and provision of facilities requiring other than very small areas must be made from locations in the Outer Zone of the Old Town.

next map fig. (5.12) is indicating the sites proposed for new The facilities to cover the future requirements in the Planning public Area.

#### 5.6 TRAFFIC AND PARKING :

To look into the Arab-Islamic cities that the internal road system, designed primarily for pedestarian and animal purposes, did not conform to any pre-set geometric pattern but grew, in stages, forming out and artisan streets. De Montequin in a paper described "the Medina as a traditional island of pedestrian circulation in the heart of the city [which] can be an excellent source of inspiration for urban centres of the future."<sup>28</sup> Following its example, parts of the central city could become places for the enjoyment of peacefulness and silence, or for the discreet strolling through picturesque and lively streets. In fact, this idea is beginning to materialize, albeit very modestly, in those few progressive cities where malls have been created by closing up streets in the down town area. In addition, another characteristic of the traditional Muslim City can be a source of learning for future urban planning. This is the "darb", the semiprivate thoroughfare of residential areas.<sup>29</sup>

Actually, the cul-de-sac concept is already appearing in a few modern urbanistic enterprises, particularly of the northern European citygarden type. That is, in locations where, like in Islam, there is a strong cultural sense of domestic and private existence.<sup>30</sup>

In regard to Najaf Old Town, therefore, one could seek to do no more in this study than to consider the broad principles upon which the traffic and planning problmes of a historic area might be tackled. "The main principle is abundantly clear-if the environment is sacrosanct, and if no major reconstruction can be undertaken, then accessibility "must" be limited.<sup>31</sup>There can be no question about this. Once this simple truth is recognised for areas of this kind, and futile attempts to cater for the whole future demands of traffic are put aside, then planning can be started on a realistic basis. It becomes a matter of deciding what level of accessibility can be provided and how it can be arranged, and then on it is only a question of management to maintain that level.

The problems could be considered to be an exercise in environmental management on a big scale, with the whole of the old city forming one potential environmental area. The steps required to establish an environmental area could be as follows :<sup>32</sup>

- (i) Numbers, types and speeds of vehicles to be kept down to a level compatible with environmental standards.
- (ii) Circulation of essential traffic to destinations to be contrived, but not necessarily by the shortest route nor even with any choice of route.
- (iii) Streets and areas which are used predominantly by pedestrians to be converted for pedestrian use only.
- (iv) All through movements to be prevented.
- (v) Internal movements to be reorganised to eliminate the conflict of criss-cross journeys.

5.6.1 Traffic :

The street network in Najaf Old Town has evolved over centuries in which movement was essentially on foot. Its nature reflects this; and with narrow street widths, absence of suitably-designed areas for parking, and confined junctions, vehicular traffic is likely to bring tremendous problems for drivers, pedestrains and inhabitants alike. Many problems related to traffic are already strongly evident in the Planning Area and particularly the Old Town, as explained earlier. In attempting to solve these problems, emphasis must inevitably be on those areas which are most disturbed, either because of the intensity of the traffic or its inappropriateness in those areas and where the human scale must have priority: in residential areas and where pedestrians concentrate for shopping or other purposes.

In dealing with traffic, therefore, an acceptable balance must be found between, on the one hand, providing the advantages of vehicular accessibility, and on the other, minimising the disturbance that is inevitably created by the traffic.

Several factors will undoubtedly lead to a considerably increased demand for vehicle movements and parking spaces in the Old City; such as :<sup>33</sup>

- more visitors for sightseeing and on pilgrimage.
- growth of employment and shopping and service activity in the City Centre.
- higher car ownership.
- higher rates of car usage by those coming into the City
   Centre.

Normally it would not be a good practice to consider the central area of a town in isolation from the rest of the built-up area. In a case such as the present one, however, the centre is so distinctive, so clearly demarcated from the rest of the city, and the environmental requirements so exacting that separate consideration of its distribution system is permissible.

The future primary road network proposed in Najaf Master Plan for the Planning Area has been determined on the basis of traffic distribution within the whole of Najaf; and is consequently not the subject for planning here. The network should be in any case, as shown in next map. Fig. (5.13); essentially a completion of the present network. The minor road network within the blocks formed by the arterials of the primary network is, however, to be considered here. In the Outer Zone the network is effectively complete, although many roads will need a hard surface or repair. Traffic problems here are insignificant, and so it is intended to concentrate on the developing traffic situation in the Old Town.

The Ring Road will provide an easy route around the Old Town, specially for all those who have no bussiness to transact inside the town. In order to ensure that such through, traffic does not enter the town, it is preferable to introduce measures which will discourage such entry.

There will be, nonetheless, a strong demand for access to locations within the Old Town itself, from visitors and, of course, from the residents. Various methods of providing access but preventing through traffic are considered in the four alternatives in the following pages.

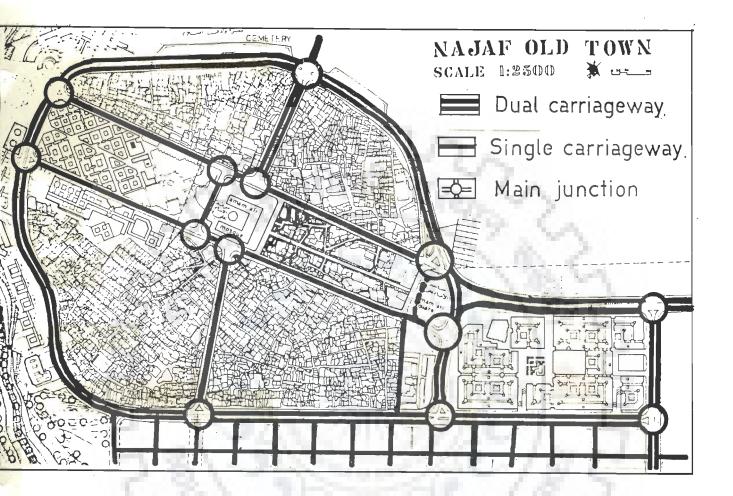
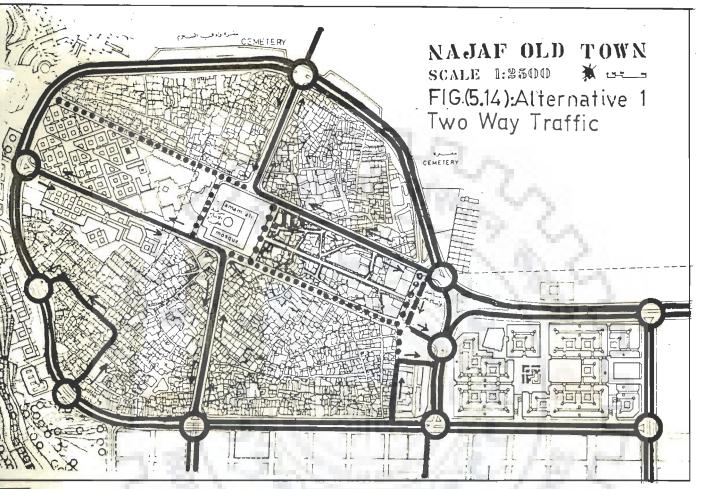


Fig. (5–13) : Primary Road Network





Dual Carriageway. 🚔 Internal Road with Direction of Traffic. Pedestrians & Access for Delivery Vehicles.

Access through the Existing Tunnel, under (Amam Ali Square).

Fig. (5-14) : Alternative 1 : Two Way Traffic .

- Two major loops with two-way traffic; two driving lanes with single parking lane on one sides.
- Two small loops with one-way traffic; one driving lane with single parking lane on one side.

Advantages :

- \* 4 major entrance possibilities for those entering the Old Town; plus 2 secondry entrances in the South of the 0ld Town.
- \* Parking possible on the right in one direction only.

Disadvantages :

- \* Delivery vehicles likely to double-park, disturbing the two-way flow of traffic.
- \* Footways remain narrow in busy commercial streets.

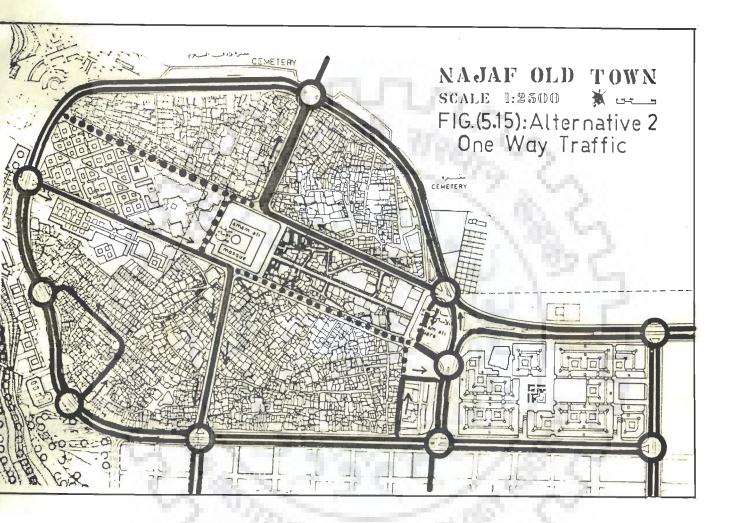


Fig (5-15) : Alternative 2 : One way traffic :

- Two major loops with one-way traffic as shown, two driving lanes with diagonal parking on one side.
- Two small loops with one-way traffic; one driving lane with single parking lane on one side.

Advantages :

- \* Double-parking by delivery vehicles does not seriously hinder traffic.
- \* Widening of the footways is possible.

#### Disadvantages :

\* Only two major entrances and two secondary entrances to the Old Town, with the possibility of errors where no entry is allowed.

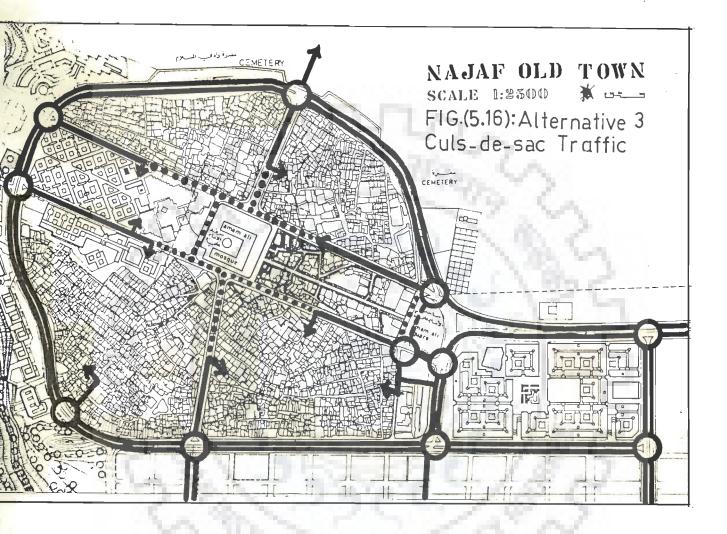


Fig. (5–16) : Alternative 3 : Culs-de-sac Traffic :

- Six culs-de-sac3, leading to car parks by the four major streets as shown.
- Two secondary culs-de-sacs, leading to multi-storey parks.

Advantages :

\* Extensive pedestrian Zone created.

Disadvantages :

- \* Area of street-parking very much reduced.
- \* Problem of goods delivery to shops in the pedestrian zone.
- \* Very wide pedestrian streets will possibly be sparesly used except for on holy days when there is an above-average number of visitors.

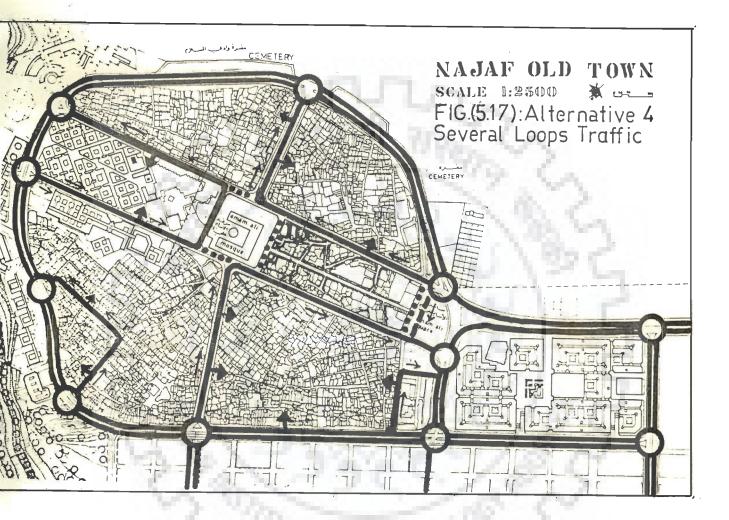


Fig. (5-17) : Alternative 4 : Several Loops Traffic

- Several loops into residential areas as well as the core area with connection to car parks.

Advantage :

## Disadvantage :

- \* Loss of buildings in the residential areas.
- \* Increased noise and danger for residents.

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None of these alternatives were free from lacunae, therefore, fifth solution is developed in an attempt to combine positive elements from different alternatives in order to minimise the disadvantages.

In doing this, the question of pedestrian areas and parking provision was brought into consideration. Space for parking is of course an essential factor in the street network in that it both contributes to the amount of traffic and access roads and often takes up space on the roads themselves. Parking will, therefore, be discussed later, in the following pages before the proposal for the future traffic network is presented.

#### 5.6.2 Pedestrian Areas :

It should be possible, to reduce the volume of traffic on the existing streets to levels that would give a reasonable standard of environment. Certain shopping streets and places where people congregate should, however, be completely free of traffic.

Therefore, it would be desirable with the traffic circulation pattern which are suggested in this study, to remove traffic completely or at least partially from the Holy Shrine Zone. Though, the Great *Souq* area is completely pedestrian, it is also thinkable, that AL-Sadek Street and other principal shopping streets in the neighbourhood should be closed to traffic during certain times of the day; as is now the practice on holy and memorial days as well as in many continental cities, and that this procedure might form part of the scheme for breaking the east-west traffic flows. The introduction of service trolleys might play a useful part in helping shops to meet the problems arising from a policy of this kind.

Antonia, James discussed a number of essential features, some of which are recommended in this work for pedestrianization of the down town. The following are some important points :

- a. It is important that a number of essential features, based on expected flow patterns within the nodes and adjacent private areas, should be provided primarily on the network. These include public conveniences (preferably located about 600 yards from each other), public telephones and mail boxes (the latter located relatively close to vehicular access for easy collection), first-aid facilities etc. Shopping areas may also include perambulator parks, suprvised play areas, baggage-checking facilities, and certainly free transit service from shops to car parks.
- b. The overall system should provide two kinds of walk-way information. One should be a standardized information guide applied throughout the system and the other should be concerned with the requirements of individual frontages, in the latter case ample opportunity should be given to local people to contribute to the spirit of the scheme (e.g. shop signs, canopies, color, etc.)
- c. Once the vehicular traffic is removed, the problem of lighting is simplified, and so emphasis can be laid on the requirements of the pedestrian movement. What is required here is a system of lighting which complements the slow pace and maneuverability of the pedestrian in motion. The lighting pattern should therefore, express the form and function of the pedestrians setting. In shopping areas for example the main source of lighting can be from the display windows and shop premises. Additional lighting can be provided at low positions emphasizing the floor space (including changes in level) and the general alignment of the walkway.
- d. Close cooperation is obviously required between the shopowners and the authority to ensure a viable scheme in other areas, it may be beneficial to exploit the form of the walkway in relation to the particular frontages. The source can be placed high on adjoining buildings so that the walls define the space. Similarly, certain historic buildings may be emphasized by flood lighing for the enjoyment of the pedestrains, as well as for their orientation to the system. However, regard should also be given to adjoining frontages to ensure a high degree of privacy and comfort to residents.<sup>34</sup>

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#### 5.6.3 Parking :

As a first step in determining parking provision in the Old Town, the future demand should be calculated. This is assumed to consist of several elements. The demand is relating to the following activities :

- . Residential
- . Commercial
- . Public facilities
- . Tourism and pilgrimage

Assumptions based on European standards would be possible to use for calculating demand included in the standard of 1 parking space for every :

- . 2 dwellings (+ 10% for a visitor), and
- . 50 Sq.m of commercial floor space.

A minimal amount should be added for demand from the few public facilities in the Old Town. These allow a specific demand for parking in each quarter of the Old Town to be calculated. It would be essential to reduce to a minimum the amount of parking space (especially for car commuters) served directly off the old street network within the Old Town.

The major car parks should be on the fringe of the old town served directly off the primary network, and could be connected by overpass bridges for pedestrians use only. Whether it would be possible to meet the whole ultimate demand for parking space (estimated at 11691 spaces by the year 1995), would, of course, depend on the ability of any primary whole-town network to handle the flows.

Although parking spaces provided for commercial or other purposes may be used on fridays and holidays, the scale of demand from visitors to the Shrine is so high that no significant additional provision is made for it within the Old Town. That meant directing tourist parking to suitable sites outside the Old Town. The next map fig. (5.18) shows the possible future parking spaces that could be allowed within the Planning Area.

The map fig. (5.19) shows the breakdown of the Old Town into four main areas or "rooms". There would be freedom for pedestrians and cyclists and some bus services to move from one area to another area, but for other traffic the approach to the areas would be via the primary network (the Ring Road). In practice the siting of athe 'barries' would require much detailed consideration.

#### 5.7 UTILITIES

The question of whether the major elements of utility networks-water treatment plant, primary sewers, etc. - have sufficient capacities for the future and can only be considered within the context of overall growth of the city, and would consequently be a subject for the Najaf Master Plan. With regard to the role of the individual utilities in the Urban Renewal Plan, the following comments may be made : Water Supply :

The standards and other values used in dealng with future water requirement would be found in the report which was prepared by the consultants of the water supply authorities who have prepared a complete scheme for Najaf City as a whole. Once the new treatment plant and storage towers are completed, which is called "The Great Najaf Water Supply Project", and "any necessary pipeline repairs or upgrading carried out, the existing supply system will be adequate for meeting future demand in the Planning Area."<sup>36</sup>

No comprehensive action is, therefore, required in the foreseeable future. It will, however, be necessary to ensure that the missing plot connections and links in the secondary network be provided,<sup>37</sup> particularly at the fringe of the Ring Road, and the new development areas, so as to ensure the supply to all buildings.

Sewage and Storm Water Drainage :

The execution of the plans for complete new sewerage networks in the Planning Area will ensure the adequate disposal of all waste water in the future.<sup>38</sup> Regarding the problem of high water table created by the water supply and drainage pipes discharging into the ground, it has been recommended that, leaking systems should be replaced and efficient main drainage be made universal. When this is complete, dewatering can reduce the ground water table to natural and acceptable levels and the problem of rising damp, at present so intractable, will be brought under control.

#### Electrical Supply :

Renovation is necessary for both the primary and the secondary network in order to assure reliability and security of supply. "The radial primary network of the Old Town should be completed in order to form two or more ring systems extending from one transformer station to the other, and operated normally."<sup>39</sup>

In a comprehensive scheme prepared by the municipality of Najaf, that, "4-core XLPE cables are planned as supply cables for the 0.4 KV network."<sup>40</sup> As far as the existing 0.4 KV overhead lines are concerned they should be retained as long as underground cables are not laid for low-voltage transmission,<sup>41</sup> however, all connections to the primary and secondary distribution cabinets as well as to buildings should be replaced so as to avoid crossing the streets with wires. Overhead lines being located at both sides of a street should be replaced by only one transmission line, the other side of the street being supplied by cables. The remaining poles supporting the transmission lines should also serve as street lighting masts so far as they are presently not more than 40 metres apart.

#### Telecommunications :

The existing telephone network should be completed and adapted to the technology which complies with the international recommendations. Therefore, the following steps of planning work are proposed.<sup>42</sup>

- Preparation of the basic layout for the primary and secondary telephone networks according to the demand for telecommunications in the Old Town.
- 2. Proposals for the physical renewal of existing overhead and underground telephone cables, under consideration of resistance and attenuation conditions, as well as cable lengths and sizess required by the Iraqi PTT. (State Organisation of Post, Telephone & Telecommunication).
- 3. Proposals for the adaptaion of local exchange's capacity to suit the number of residential, industrial and commercial subscribers to be provided with telephone connections.

#### CHAPTER VI : URBAN DESIGN CONCEPT FOR NAJAF OLD TOWN :

6.1 THE PRINCIPAL MEASURE FOR URBAN DESIGN 6.2 URBAN DESIGN CONCEPT FOR PLANNING AREA 6.2.1 Zone 1 : Area around the Holy Shrine 6.2.1.1 Urban Design for Zone 1 6.2.1.2 Design Guidelines for Zone 1 6.2.2 Zone 2 : Pedestrian Link between the Holy Shrine and the Tourist Town 6.2.2.1 Pedestrian Link : Detail of Section B1 Pedestrian Link : Detail of Section B2 6.2.2.2 Pedestrian Link : Detail of Section B3 6.2.2.3 6.2.3 Zone 3 : Conservation and Protection Areas 6.2.4 Zone 4 : Approach Roads to the Holy Shirne 6.2.4.1 Guidelines for Zone 4 6.2.5 Zone 5 : Fringe of the Old Town 6.2.6 Zone 6 : Residential Areas

CHAPTER VI : URBAN DESIGN CONCEPT FOR NAJAF OLD TOWN.

In the urban design concept of Najaf in this chapter, an image is offered of how the townscape in the centre of Najaf should develop over the coming years. It laysdown an overall concept for physical development, providing a design for the Old Town as a whole, but not for individual buildings. Each new building or external alteration should then be designed in accordance with the framework of provisions in the Urban Renewal Plan; within this framework, however, the architect will be free to take full account of the needs of the time and the particular form of development in producing his detailed design.

The urban design should have the primary goal of preserving and enhancing the character of the Old Town as a distinct historical unit. Additionally, it is intended to make the environment in the Old Town as attractive as possible, but without detracting from its historical character.

#### 6.1 THE PRINCIPAL MEASURE FOR URBAN DESIGN :

This section provides a brief description of urban design measures proposed for Najaf Old Town. These are illustrated in the two maps fig. (6.1) and fig. (6.2). The principal measures proposed are as follows :

- 1. The outline of the Old Town i.e. defined by the line of the former town wall-should be recreated by forming a continuous building facade wherever possible of 2-3 storeys flanked by a tree-shaded walk. The points at which this "wall" is penetrated by roads should then be appropriately developed in a manner representative of a gateway.
- 2. The central area around the Holy Shrine must be designed in detail as a single entity. It will be important to emphasise the character of this location as a meeting point. A sensitive issue is the conflict between the bustle of commercial activity and the peacefulness of the religious complex. So as to ensure harmony between these functions on either side of the open space, the shops should be set back behind a pedestrian arcade. This arcade will bring the added advantage of providing shade and shelter from the weather.
- 3. Leading from these "gateways", strong facades along the approach roads should direct the eye and interest directly to the heart of the town around the Holy Shrine. Shaded walks should be provided for pedestrians along these and other routes. Buildings with two or three storeys should replace existing single-storey buildings.

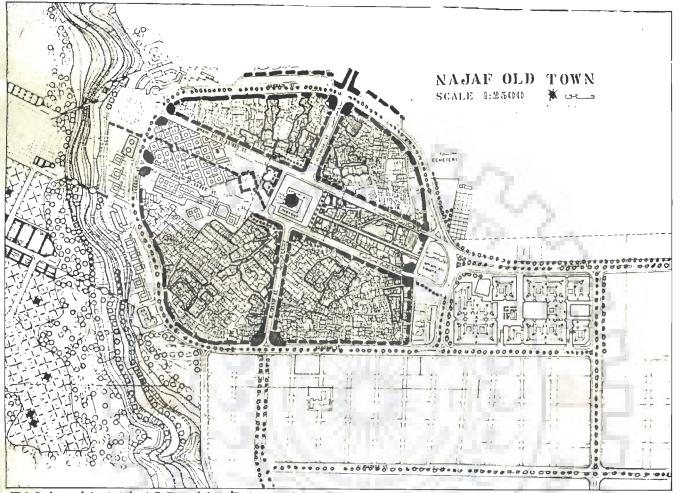
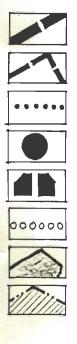


FIG.(6-1): MAJOR URBAN DESIGN ELEMENTS.



CONTINUOUS STREET FACADES OF 2\_3 STOREYS. CONTINUOUS STREET FACADES OF 1\_2 STOREYS. ARCADES. BUILDING OF HIGH CULTURAL AND ARCHITECTURAL VALUE. ACCENTUATED CITY GATEWAYS. TREE\_SHADED WALK CONSERVATION AREAS

ZONE OF SPECIAL VISUL INTEREST.

- 4. A pedestrian route should be introduced leading from the Shrine in the Old Town out to the Tourist Town of (Bahir AL-Najaf). This will use the historical footpath system, avoid roads as much as possible and be interspersed with open spaces and interesting buildings.
- All development should be controlled through specific building and design regulations relating to elements such as building height (everywhere a maximum 12 M.), plot ratio, materials, and so on.
- 6. Conservation and protection areas have been proposed, where the special character of the narrow streets should be maintained as much as possible. Elsewhere, the local environment should be improved through the introduction of suitable open spaces. These areas are the most coherent examples of traditional urban architecture and townscape in Najaf. Especially strong regulations have been formulated to be applied in controlling development in these areas. [For more detail of Design Guidelines, see (5.2.8)].

#### 6.2 URBAN DESIGN CONCEPT FOR PLANNING AREA :

The maps in the previous section gave a two-dimensional over-view of the urban design for the Planning Area and the Old Town as a whole. As can be seen in these maps, a considerable degree of variety is foreseen in the design treatment of different parts of the Planning Area. In Najaf Old Town, six Zones have been identified to be dealt with individually. These are :

- 1. Area around the Holy Shrine.
- 2. Pedestrian link to the Tourist Town.
- 3. Conservation and protection areas.
- 4. Approach roads to the Shrine.
- 5. Fringe of the Old Town.
- 6. Residential Areas.

These six Zones have been further divided into two categories each.

Zones 1+2 : Areas covered by compulsory design :

In these zones are proposals for urgent large-scale changes in the urban fabric which imply comprehensive redevelopment schemes. Required, therefore, is a single, integrated design dealing with all aspects of the physical development of these zones. It will then be compulsory for all buildings to follow this design.

In depth studies will be necessary in the preparation of the detailed plans for these zones. As a first step, conceptual designs and guidelines are provided in this chapter.

Zones 3-6: Areas covered by regulations :

No need is foreseen for large-scale comprehensive redevelopment outside the first two zones, and renewal there will take the form of building alterations or new buildings and building complexes. Development here is already subject to existing building regulations, but these alone are insufficient to ensure that the valuable elements already recognised in the Najaf townscape-and the traditional elements in particular-should be preserved and enhanced as intended in the Urban Renewal Plan.

The solution is, however, not to be found in the universal application of design regulations, even on a zonal basis, since this would lead to the loss of the rich variety in the details of built form which is an essential characteristic of the townscape. Design guidelines are therefore offered here for each zone: these are not to be applied rigidly as regulations; but, in conjunction with the Urban Renewal Plan. They provide a framework for dealing with the designs for individual buildings or groups of buildings.

By sensibly following the guidelines it will be possible to create variety and interest through differentiation in design, while at the same time ensuring the conformity of buildings with both their immediate surroundings and the overall townscape.

Zones 1+2 : Area around the Holy Shrine and the Pedestrian Link to the Tourist Town.

These two zones are of crucial importance in the urban design, and for this reason they have been the subject of a comprehensive design in detail which treats all components as parts of a cohesive whole : the heart of the City. The intention here is that strict implementation of the built forms prescribed in the design will lead, in these sensitive zones, to the realisation of the unifying concepts underlying it. As a starting point, the historical trend of development in the area around the Shrine was examined. This is shown in the two sketches. [Fig. (6.3) and (6.4)]. The evident tendency for the widening of the open-space around the walls of the Shrine has been continued in the alternative development concepts considered on the next pages.

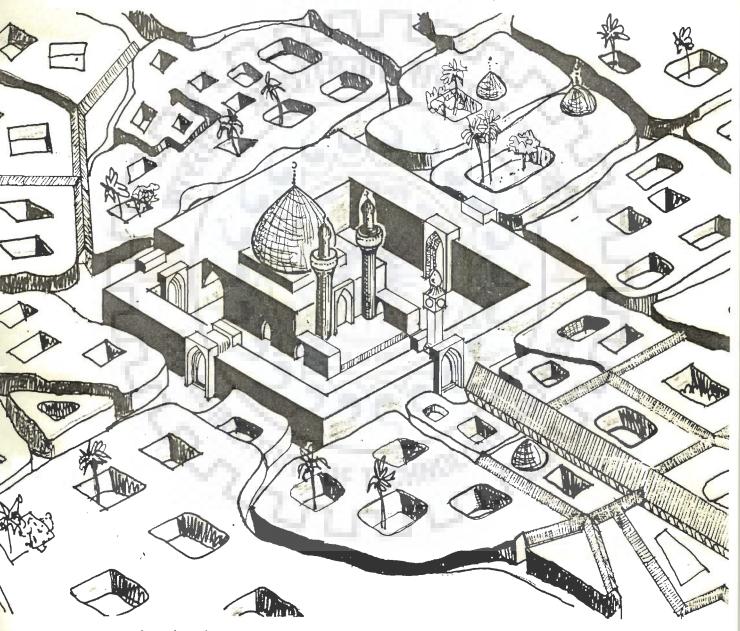


Fig. (6-3) : The Historical Situation of the Main Mosque.

Residential buildings reach almost to the walls of the Shrine, leaving at most a narrow open space outside the walls. The gates of the Shrine are not spatially accentuated.

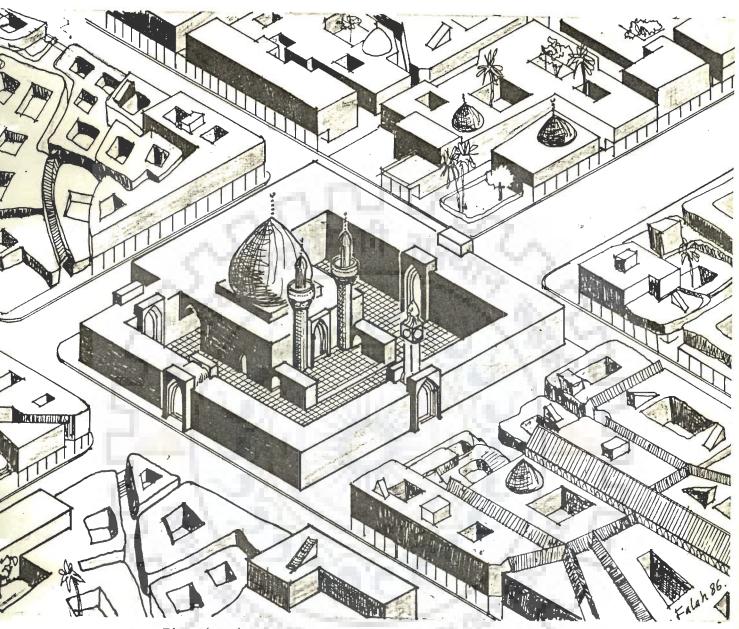


Fig. (6-4) : Present Situation of the Main Mosque

All buildings within approx. 20 m. of the walls of the Shrine have been demolished, and in front of the western gate a small square has been created. Within 60 m. of the walls of the Shrine all land has been purchased by the Municipality of Najaf for redevelopment.

On plots left vacant by demolition, problems arise due to the construction of (sometimes temporary) buildings, erected without taking account of the environment. No concept or design regulations underly these private building initiatives.

## 6.2.1 Zone 1 : Area around the Holy Shrine.

Three alternatives for the square in front of the western gate of the Shrine have been suggested.

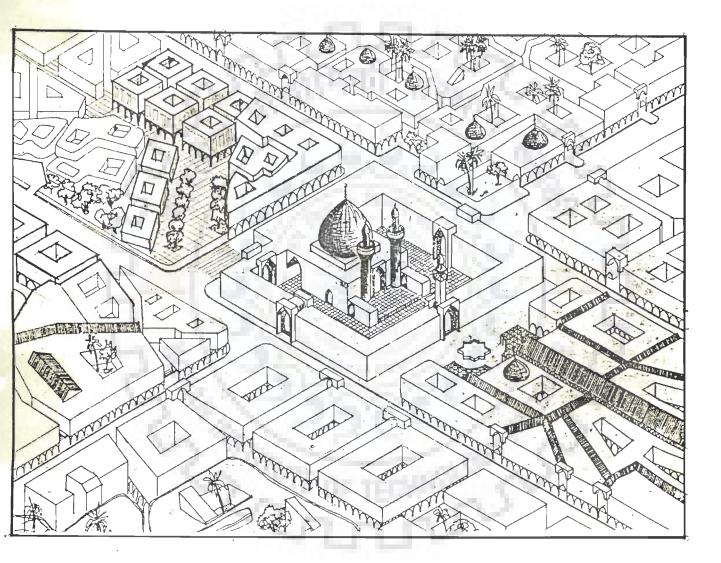


Fig. (6-5) : Zone 1 : Alternative 1.

The present structure of the area is maintained. Buildings in poor condition will be replaced by a group of buildings with an open ground floor and inner courtyards.

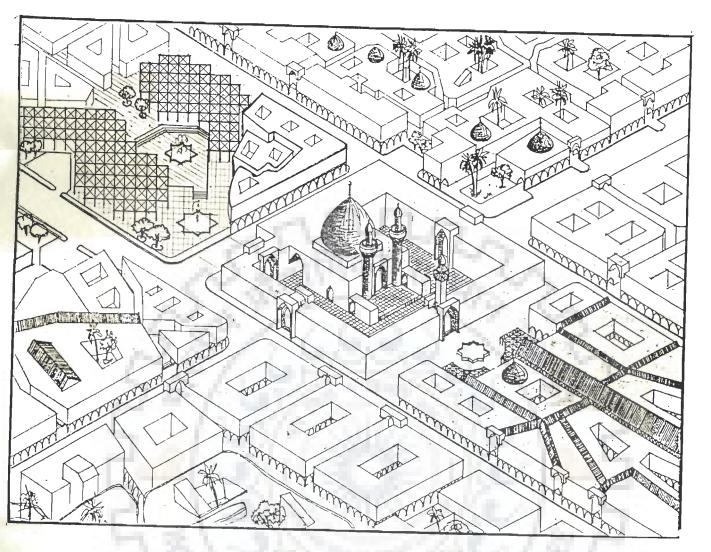


Fig. (6-6) : Zone 1 : Alternative 2.

The square in front of the gate is enlarged to a size of approx. 50 m.  $\times$  60 m. Covered area is created to provide a shaded area for the pedestrians, thereby enhancing the visual importance of the Shrine.

New buildings containing courtyards are located on the southern fringe.

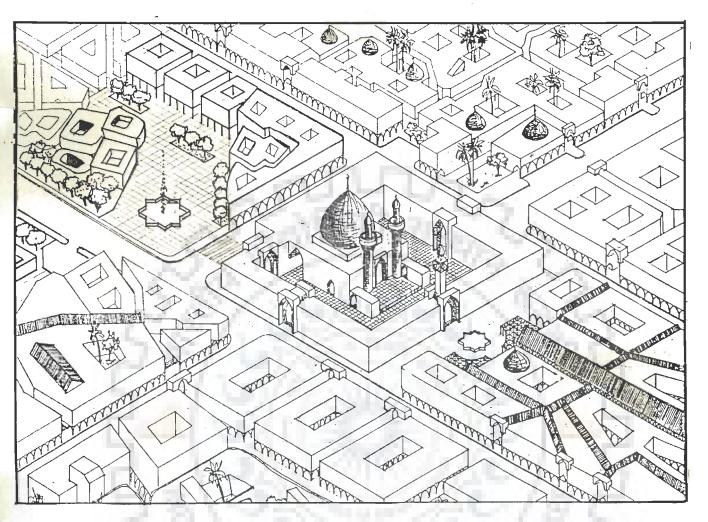


Fig. (6-7) : Zone 1 : Alternative 3.

- A square of approx. 60 m. x 80 m. is created :
- enhancing the visual importance of the Shrine.
- presenting a contrast to the adjacent, densely built up quarters.
- allowing easy circulation on special occasions when the Shrine is visited by thousands of people.

#### 6.2.1.1 Urban Design for Zone 1 :

Other than providing additional buildings, alternative 1 and 2 show only disadvantages in comparison with the third alternative. This concept has than developed further into the design illustrated on

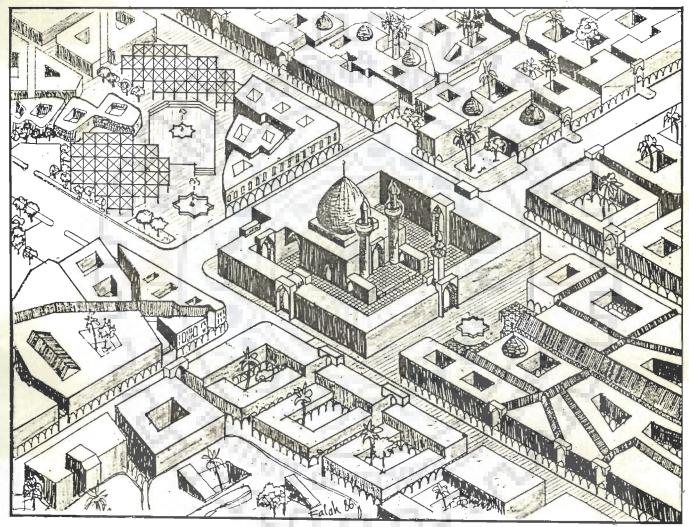


Fig. (6-8) : Zone 1 : Urban Design.

The design has the following characteristic assets :

- A differentiated spatial organisation of alleys, streets and squares is established.
- Access for the public to inner courtyards will be provided on ground level through the public and commercial buildings.
- Facade design matching with the traditional style, e.g.pointed arches and arcades.
- Buildings height is limited to 12 M., which is less than the height of the walls of the Shrine.

#### 6.2.1.2 : Design Guidelines for Zone 1:

(the area around the Holy Shrine).

This area should be designed and developed as an integrated whole, with the Holy Shrine at the focal point. The design should be extended beyond the line of redevelopment which is limited to the area of 60 m. from the exterior walls of the complex formed by the Holy Shrine.

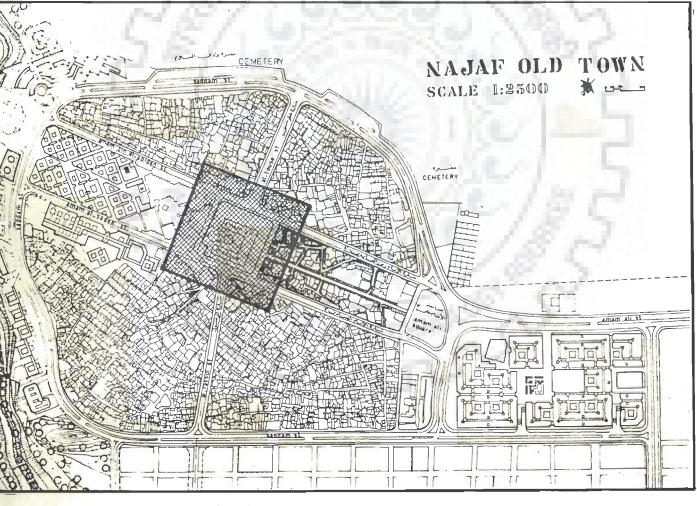


Fig. (6-9) : Zone 1 : Area Around the Holy Shrine.

Although commercial activity is to be allowed in all buildings facing on to the Shrine, such activity is to be kept physically in the background by the creation of pedestrian arcades behind pillars which will form an almost continuous walk around the Shrine. The buildings concerned should allow public access through the courtyards behind them so that commercial activities could also develop simultaneously. [See fig. (6.10), and (6.11)].

#### Building height :

Maximum 12 m., i.e. ground storey of 4.5 m.,2 others of 3.5 m. each, and 0.5 m. as a parapet.

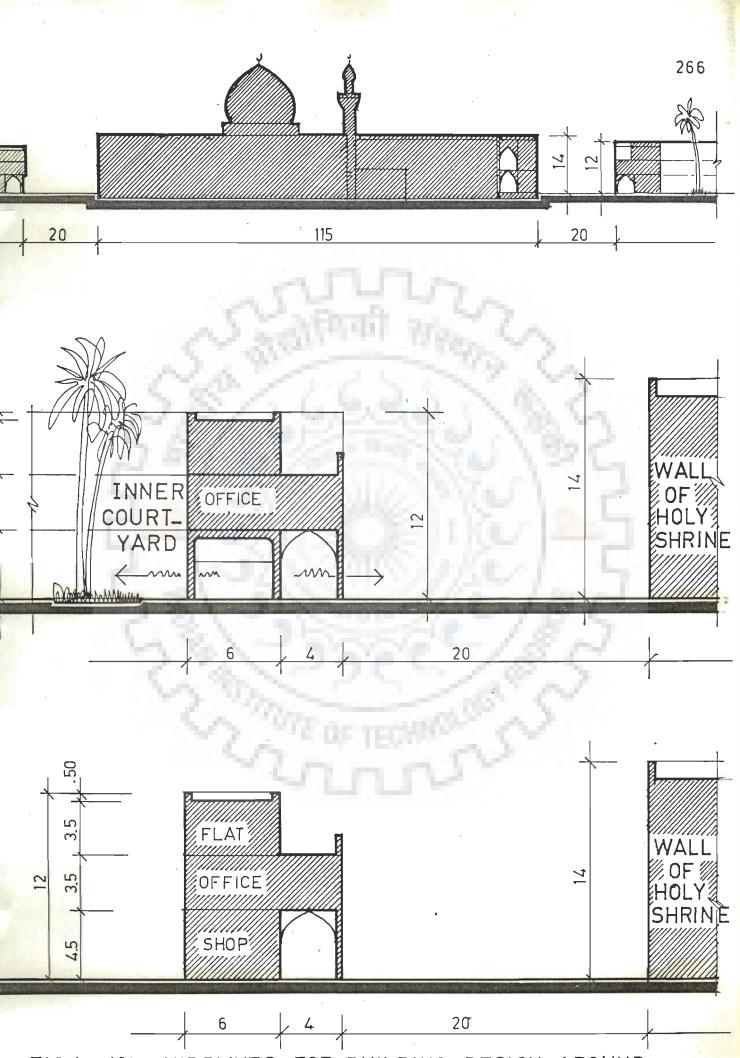
#### Facades :

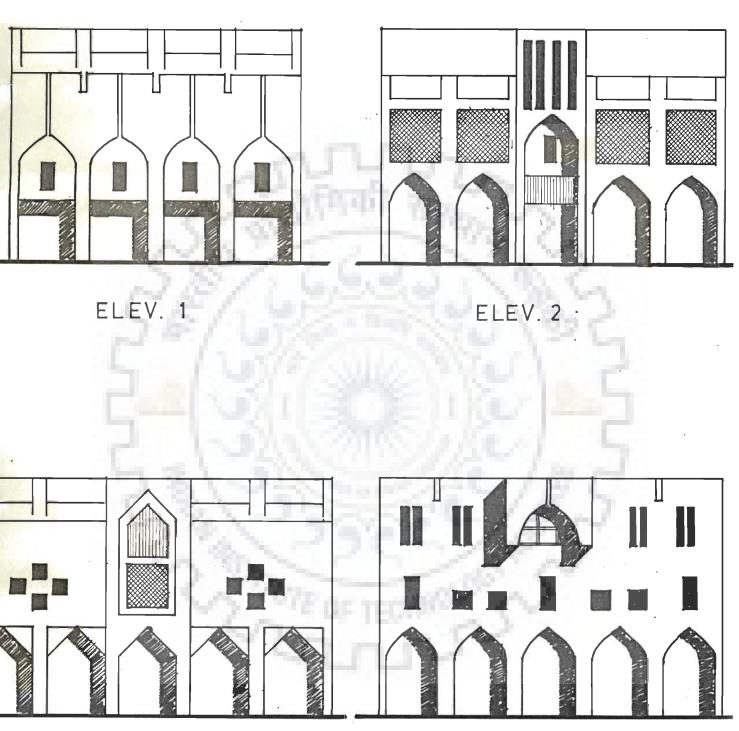
Ground storey mainly pointed arches. Proportions of other elements (windows, doors, bays, etc.) to follow traditional patterns.

TOTE OF

Materials :

Burnt brick used for wall construction, normally left exposed, but stucco on individual parts of facades for variation. Doors and windows made from wood or metal, bays also, shop installations in metal filigree. Decorations in glazed ceramics.





ELEV.3

ELEV.4

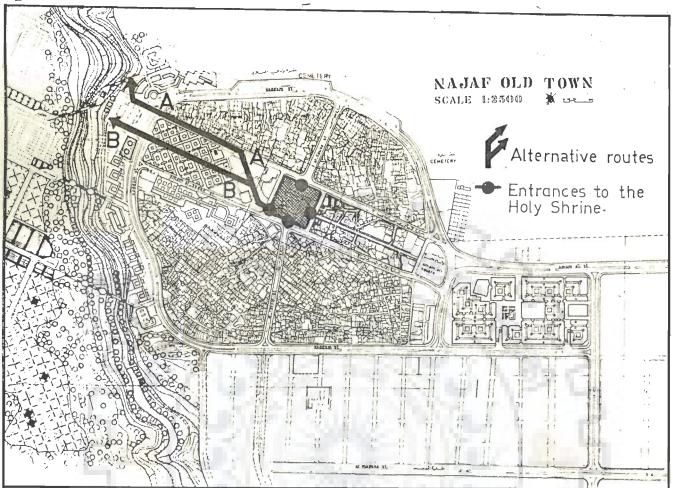
FIG.(6.11): GUIDELINES FOR BUILDING DESIGN AROUND THE HOLY SHRINE \_ELEVATIONS.

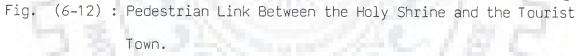
# 6.2.2 Zone 2 : Pedestrian link between the Holy Shrine and the Tourist Town.

Two possible routes were identified for the pedestrian link, between the Holy Shrine and the Tourist Tówn in Bahir AL-Najaf, as shown on the next map fig. (6.12). The alternative are :-

- A From the western gate of the Holy Shrine following the proposed open square described in the previous section, passing the small traditional residential street on the right side through Imam Zin AL-Abideen Street, and to cross the Ring Road to the Tourist Town in Bahir AL-Najaf.
- B From the western gate of the Holy Shrine following the proposed open square and along a footway to be established inside a newly proposed buildings of the proposed visitors Town project. [See fig. (6.13)], where a shaded area is going to be created. Then, to another new area is going to be created. Then, to another new pedestrian walk built over plots on which buildings are in poor condition; underneath the Ring Road via a tunnel to the Tourist Town of Bahir AL-Najaf.

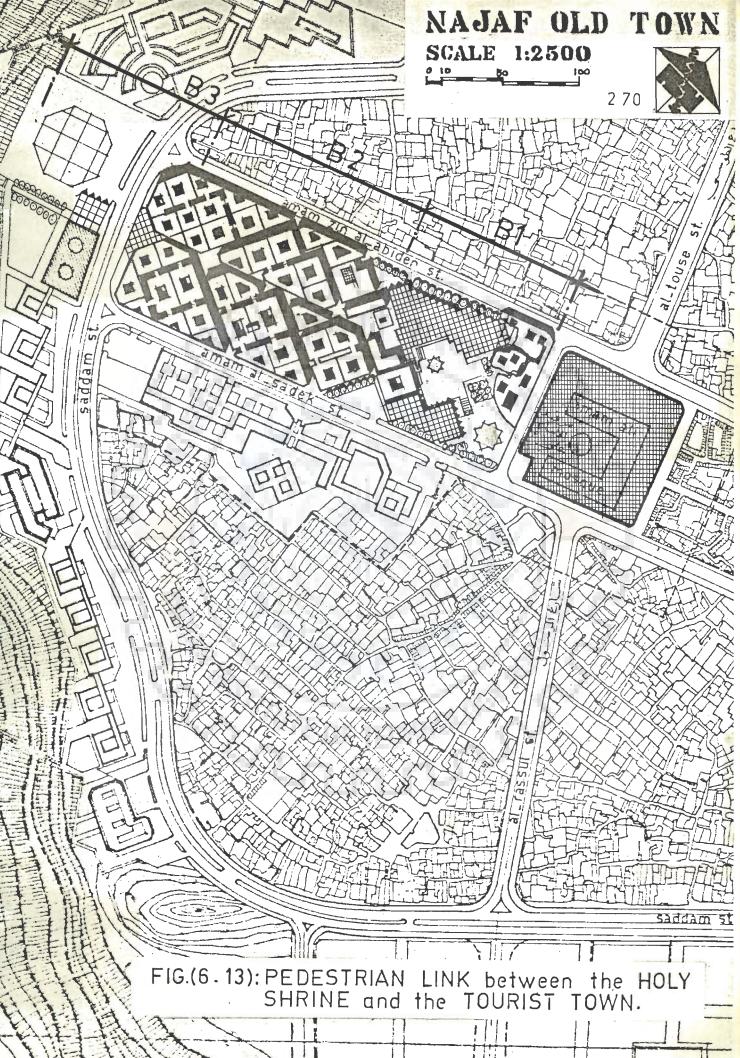
Preference is given to Alternative B, illustrated in detail in fig. (6.13) and the subsequent pages.





A conceptual design is prepared for route B as illustrated on next map fig. (6.13). This provide the basis for the detailed design of the comprehensive redevelopment required for the creation of the pedestrian link. Some parts of this proposed Urban Design have been modified and/or extracted from the proposed project of the Visitors Town, which has been discussed previously. [See (2.4.3) and (5.2.7), and fig. (2.35)].

The link is divided into three sections (B1-B3). [See fig. (6.14)]. More detailed illustrations and design guidelines for each of these are given in the following pages.



6.2.2.1 Pedestrian Link : Detail of Section B1 :

The first section stretches from the western gate of the Holy Shrine to the edge of the Old Town, and necessitates the complete preservation of the central part of an existing housing block of the proposed-conservation area 7. [See (5.2.7)].

The pedestrian axis leads through the middle of the new development, formed by an alternation between footpaths and differentiated squares. The first and the largest of these is a squared plaza in two levels connected by a short passage, and steps, as a gateway, to the open space in front of the Holy Shrine. [See figs. (6.14) and (6.15)]. Lower part of this square would house an underground shopping centre which would incidently have a covered walkway for pedestrians crossing the square to visit the Holy Shrine. From northern and southern sides of the square a massive shaded area complete with fountains and flowers beds has been established for the benefit of pedestrians. On both sides of the axis, the use and design of the buildings would be as in Zone 1, but with only one or two storeys. Only a footway and not a courtyard can be provided behind most buildings.

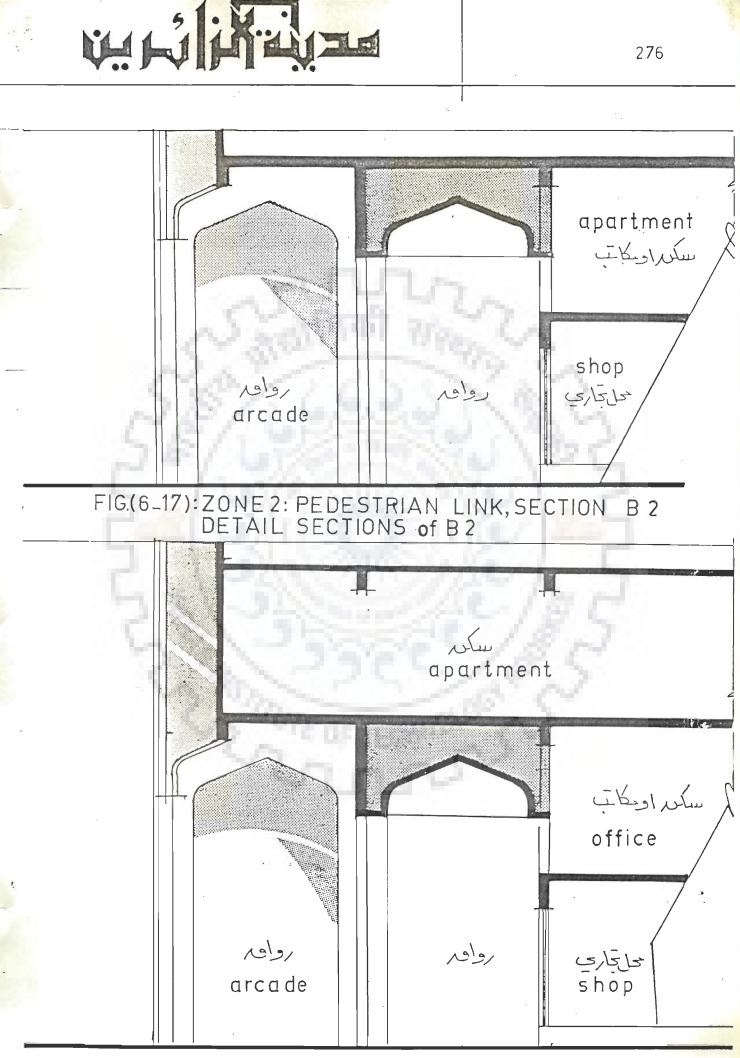
At the outer end of this section, the buildings could be so designed as to create the impression of a gateway leading in and out of the Old Town.

#### 6.2.2.2 Pedestrian Link : Detail of Section B2 :

The middle section of the link is less open and diversified in its functions, than the other two. The pedestrian way is narrow but opens up at the junctions with the other side walk ways or alleys: where a public open space provides a strong contrast to the intimate atmosphere in the area. Trees will provide shade for those crossing this open space on their route to the Holy Shrine and for those who are going out to the Tourist Town. [See figs. (6.16), (6.17)].

Other than providing additional buildings for different sort of functions in this part of the pedestrian link, like hotels, post office, shops, etc., this section has further characteristics which are similar to the characteristics of Zone 1. [See (6.3.1.1)].





## 6.2.2.3 Pedestrian Link : Detail of Section B3 :

The last section will be similar to the previous section in the form of its buildings and open spaces. Immediately in front of the gateway to the Old Town, a shaded public open space is created which provides a strong contrast with the area across the Ring Road, [See fig. (6.18)]. This provides a clear point of distinction for those coming in from the Ring Road or from other side of the ring road.

The strong break created by the Ring Road and its relatively heavy traffic presents a design problem which has been solved by introducing a tunnel-with shops on both sides underneath the Ring Road and two massive shaded areas on both sides of the Ring Road. Within these, the level of the pedestrian link is lowered so that it can pass naturally underneath the Ring Road by using the natural levels of the area.

The end of this section is marked by the mass of the shaded area, located at the edge of the Old Town, where a large mosque exists with its splendid two domes of blue mosaic. This mass provides the turning point where the pedestrian route changes direction to lead in a straight line to the complex buildings of the Tourist Town, a wide tree-lined walk leads through the low-density development housing.

6.2.3 Zone 3 : Conservation and Protection Areas :

These areas are characterised by historical buildings of architectural value and/or show features typical for the traditional urban character of the Old Town. Restoration and redevelopment in these areas has to follow guidelines which secure their historical continuity. All this has been discussed in more detail in previous section of this study. [See (5.2), and fig. (5.1)].

6.2.4 Zone 4 : Approach Roads to the Holy Shrine :

This zone comprises the streets formed by the four approach roads from six accentuated town gateways, and the buildings facing onto them. They play an important role as the main thoroughfares for pedestrian and vehicular traffic into and out of the Old Town. [See fig. (6.19)].

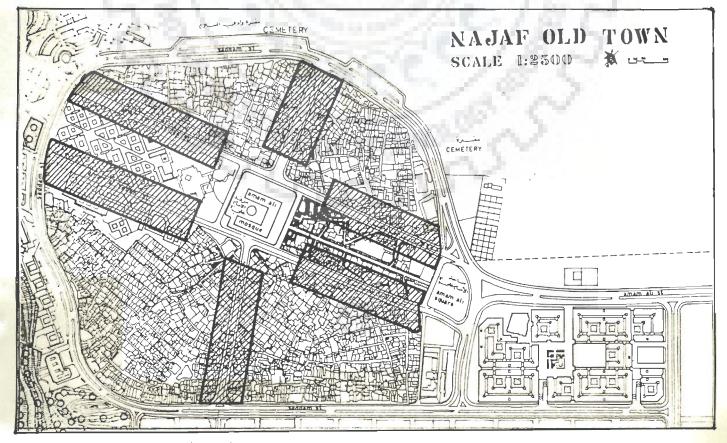


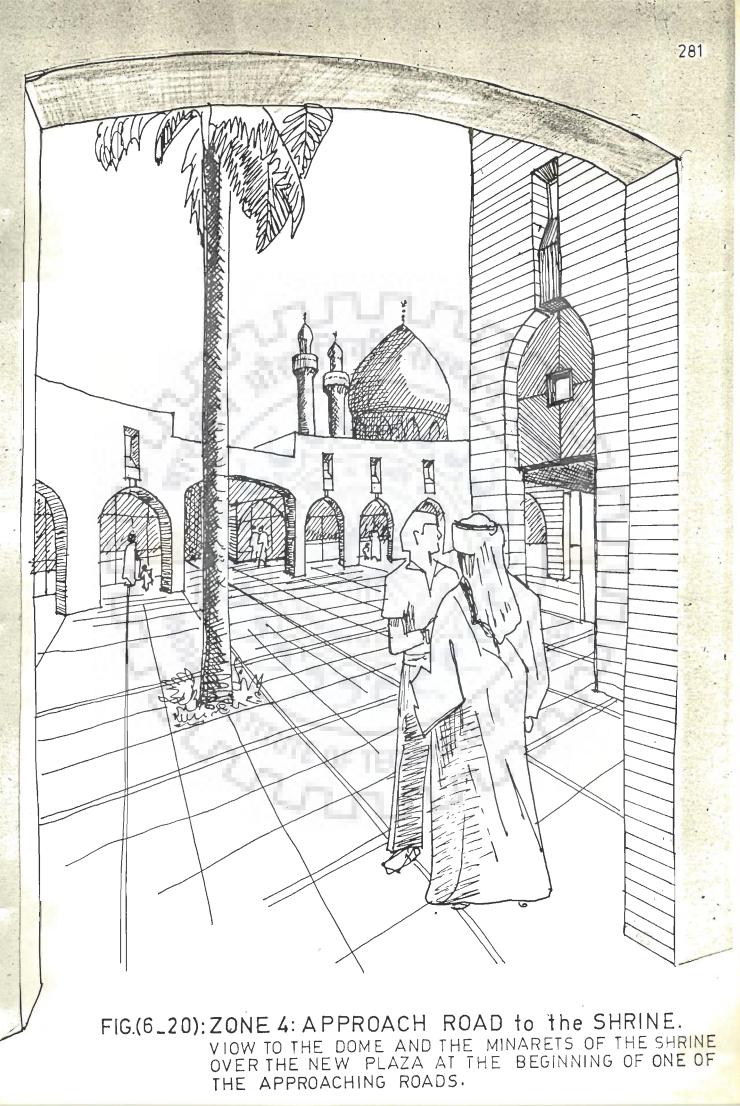
Fig. (6-19) : Zone 4 : Approach Koads to the Shrine.

These areas are characterised by commerical activity in the buildings adjacent to the street: shop and private services on the ground floor, offices, hotels and apartments on the first and second floors.

## 6.2.4.1 Guidelines for Zone 4 :

The four streets are all slightly different in width and characterexcept AL-Touse street is 30 M.- and should remain so in future. The different treatment of each street may be seen clearly in the Urban Renewal Plan Map. Certain features, however, may be seen as common to all.

- The aim should be to strengthen the feeling of sight and movement being channelled onward to the Holy Shrine, at the heart of the Old Town. Uninterrupted facades should be created to enclose the streets laterally and thereby emphasise the opening at the open space around the shrine. [See fig. (6.20)].
- Consequently, wherever the existing houses stand parallel to the street, this should be retained as the building line and plot boundary. Elsewhere, new buildings should be built up to the continuation of this building line. Only at the points where the four streets enter the Old Town should the street width be deliberately reduced so as to contribute to the impression of a gateway.



Height :

Buildings should, however, not exceed 12 M. which is less than the height of the walls of the Shrine : 4.50 M. for the ground storey 3.5 M. for second and third storeys and 0.5 M. as a parapet.

#### Facades :

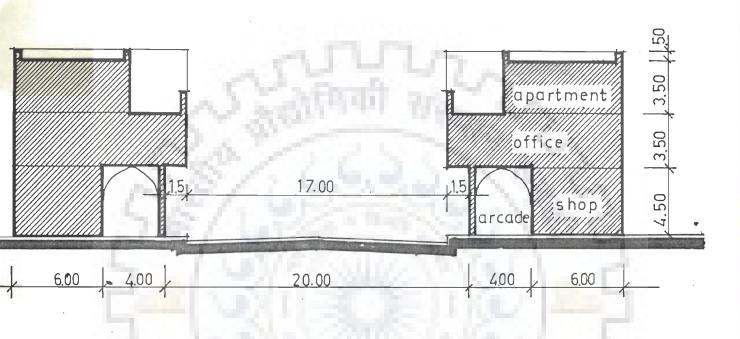
Facade design matching with traditional style, e.g. pointed arches and arcades. The first storey may protrude by 1.5 M, the second storey can be set back when it is necessary. Vertical segmentation should be accentuated. Surfaces can be of yellow, ochre or sand - coloured stucco, or white, unplastered bricks, but not fairfaced concrets.

Division between Public and Private Spaces :

The walls of the buildings mark the boundary between public side walks and private property. Regulations on these four streets should allow the Landowners to utilize the space over the four meter width of the walkways by building the two storeys above by protruding 1.5 M. of the first storey as balcony. [See fig. (6.21)], however, the owner shall be required to provide 4 M. arcade for public use.

Street Furniture and planting :

No trees or buildings should be introduced into the street since these would disturb the view toward the Holy Shrine. Overhead cables should be replaced with underground lines.



Street furniture should be restricted to lamps at pedestrian height.

Fig. (6-21) : Zone 4 : Section of Approach Road

Pavement :

The widened footways should be paved with concrete slabs, whose uniform surface appearance can be reduced by lines of smaller concrete blocks. Such blocks should also be used to pave the parking spaces. Roadway and footway are to be separated by a kerb except in the immediate vicinity of the shrine. 6.2.5.2 Zone 5 : Fringe of the Old Town.

The area delimits the Old Town with respect to other parts of the town. No imitation of the historic city wall is intended, but simply a clear distinction between the Old Town and the other areas.

In fig. (6.22), the north-western (area 5A) and the south-eastern part (area 5b) of this zone have to be differentiated because of their different land use patterns and types of buildings. Area 5b is characterised by buildings with mixed use shops and private services on the ground floor, flats and apartments on the first and second floors. In areas 5A, 5B, residential buildings dominate. Here also, shops may occupy part of the ground floor. [See fig. (6.22)].

Definition of public and private space :

- Area 5a and 5b : it may have a similar guidelines as for Zone 4. [See (6.3.4.1)].
- Area 5A and 5B : Building may be placed directly bordering the street or set back to allow for a front garden. [See fig. (6.23) and (6.24)].

Height : 2 to 3 storeys in both areas.

Facades :

Areas 5a and 5b : Similar to the Zone 4. Closed facades with protruding bays on the first floor. Second storey can be set back. Accentuated vertical

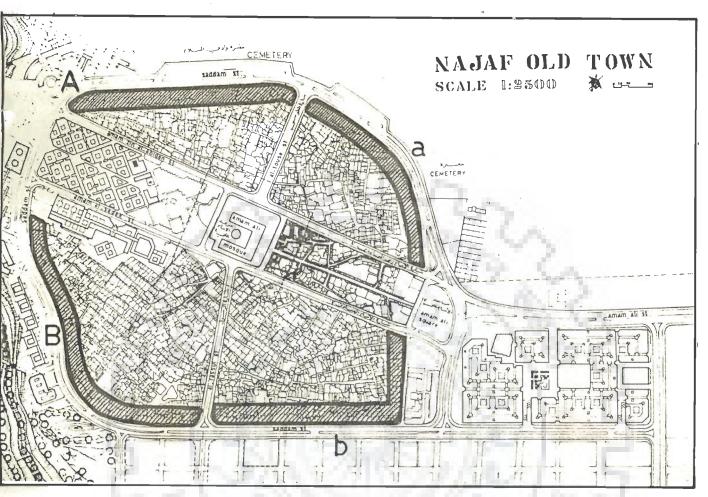


Fig. (6-22) : Zone 5 : Fringe of the Old Town

segmentation. Facade design matching with traditional style e.g. pointed arches and arcades.

- Areas 5A and 5B : Alteration between buildings directly bordering the street and buildings with a front garden if it is possible. Walls between streets and front garden not higher than 2 M. Perforations in the upper parts of the walls. Accentuation of vertical elements. [See fig. (6.25)].
- Material : Plastered or unplastered bricks in ochre and sand tone.

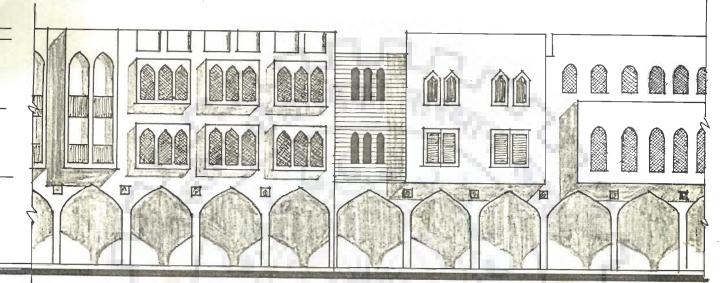


FIG.(6\_23):ZONE 5: FRINGE of the OLD TOWN: Areas 5a& 5b.

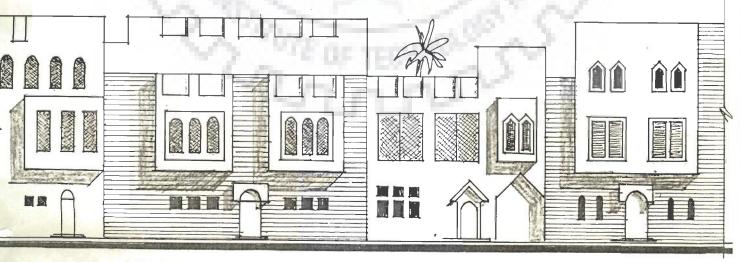
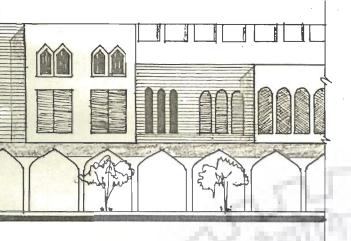
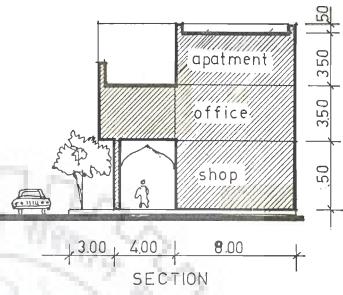


FIG.(6\_24):ZONE 5:FRINGE of the OLD TOWN:Areas 5A & 5B.

ZONE 5: FRINGE of the OLD TOWN.

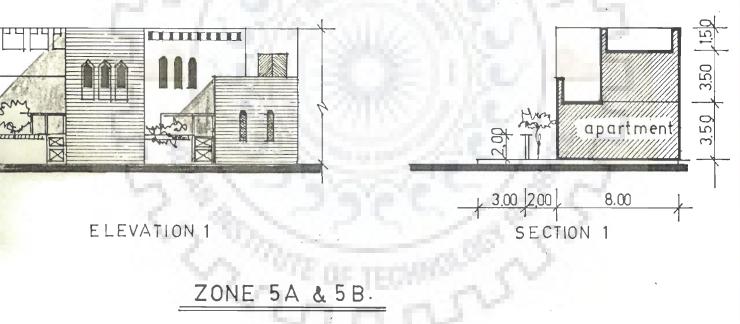
FIG(6\_25): ZONE 5: FRINGE of the OLD TOWN.

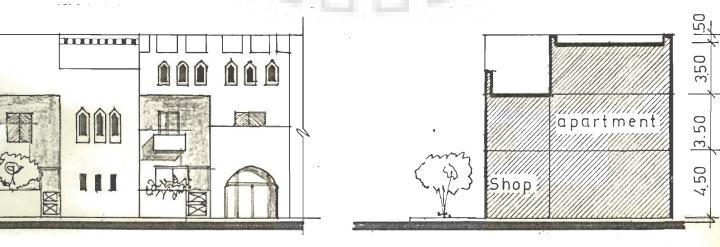




ELEVATION

ZONE 5a & 5b.





400

400 L

8.00

### 6.2.6 Zone 6 : Residential Areas :

In general the same guidelines have to be applied here as in the conservation areas with regard to the compactness of streets and to the materials and design of facades according to historic patterns. Here, however, the realisation and adaptation of the historical design elements can be dealt with much less restraint. [See fig. (6.25)].

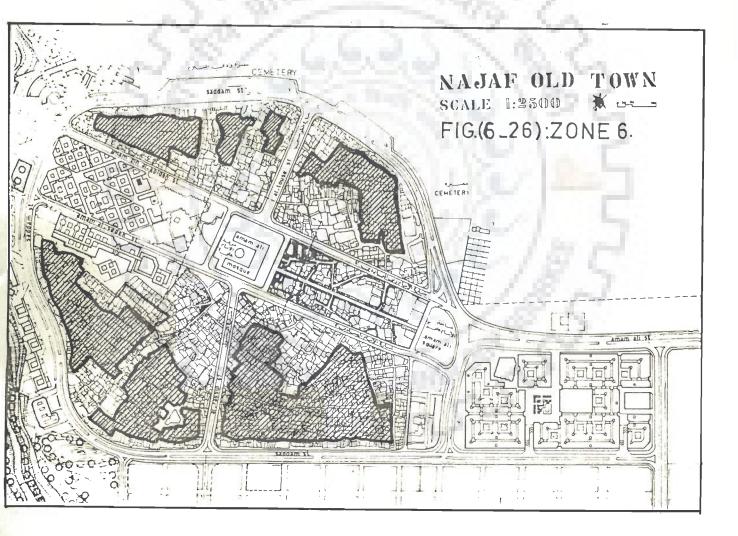


Fig. (6-26) : Zone 6 : Residential Area

### Definition of Public and Private Space :

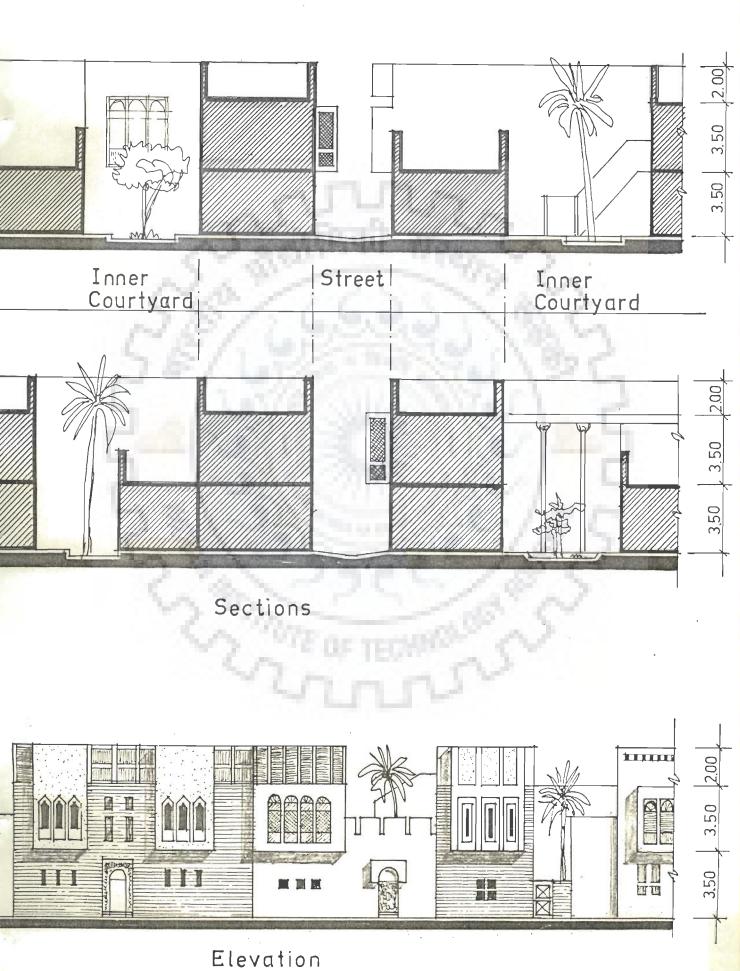
Streets are narrow and with a few exceptions only used by pedestrians. They should be surfaced with slabs or blocks made from concrete or stone and bounded by facades of buildings or walls of about 3 m. height. The front walls of the buildings mark the border between public and private space.

Guidelines for Zone 6 :

Height : Altering 1 or 2 storeys with roof terraces.

- Facades : At least half of the plot boundaries should be marked by buildings, the others by walls in front of a courtyard. Proportions of doors, openings and windows should follow the traditional pattern. In the first storey, bays are possible. For the design of the roof parapets and the above mentioned elements. [See fig. (6.27) on the next page].
- Materials : Plastered or unplastered bricks in ochre or sand tones.

IG (6\_27): GUIDELINES for ZONE 6: RESIDENTIAL AREAS. 290



## CHAPTER VII : URBAN RENEWAL PLAN.

7.1 PROPOSED URBAN RENEWAL PLAN

#### 7.2 DEVELOPMENT POLICY AND REHABILITATION MEASURES

#### 7.3 URBAN RENEWAL PLAN ALTERNATIVES

- 7.3.1 Alternative 1 : Irrecoverable Plan
- 7.3.2 Alternative 2 : Conservation Plan
- 7.3.3 Alternative 3 : Gradual Change Plan
- 7.3.4 Alternative 4 : Comprehensive Plan
- Movement System : Traffic, Parking and Pedestrians Preservation of Architectural Heritage 7.3.4.1 7.3.4.2
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#### 7.4 IMPLEMENTATION : ACTION AREAS AND PRIORITIES

- 7.4.1 Priority 1
- 7.4.2 Priority 2
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#### 7.5 RECOMMENDATION

- Power, Legal, Administration, and financial Mobilising Public Opinion for Conservation : 7.5.1
- 7.5.2
- 7.5.3 Mobilising Assistance from U.N. & UNESCO :
- 7.5.4 Tourism :

CONCLUSIONS

### CHAPTER VII : URBAN RENEWAL PLAN :

This chapter is dealing mostly with a proposal of the Urban Renewal Plan for Najaf Old Town, which has been developed from few alternatives, covering development until the end of the century and perhaps could extend its plan to the first two decades of the next century. The plan has been prepared within the context and the framework of the Najaf Master Plan, covering a smaller area in more detail. The area lies within the Ring Road, including Old City and a zone immediately around it.

In contrast to the Master Plan of Najaf, the Urban Renewal Plan is concerned primarily with an urban area which is already developed. The objectives of the Urban Renewal Plan are correspondingly different : the improvement of the existing living conditions, the preservation of valuable elements of the urban fabric, and the appropriate adaptation of the Old City Centre to the future conditions in agreatly expanded Najaf.

The Urban Renewal Plan is aimed at strengthening the Old City's function as City Centre. Expansion of commercial development should occur around the Holy Shrine and along the roads leading outwards from this spot. However, large scale joints such as a department stores are inappropriate to be located within the labyrinth of the city and should be located outside the Planning Area, immediately to the East.

One proposed project is the Commercial Centre located outside the Old Town which will have about 40% of the total land requirements of the

future commercial area of the City Centre. Therefore, this proposed project has been accepted as a matter of irrevocable fact in preparation of the proposed Urban Renewal Plan. Development here would be complementary to - i.e. not in competition with - that of the Old Town, and will also encompass functions as a district centre within Najaf.

The future primary road network proposed in Najaf Master Plan for the Planning Area has been determined on the basis of traffic distribution within the whole of Najaf. The network of the Old Town should be in any case; essentially a completion of the present network; which has been under consideration in the four alternatives of the Urban Renewal Plan.

The retention of old historic areas of special architectural interest is dependent upon the maintenance of satisfactory environmental standards. These areas can be retained in the age of the motor vehicle provided a reduced standard of accessibility is accepted, including a strict discipline of vehicular movement.

There will be, nonetheless, a strong demand for access to locations within the Old Town itself, from visitors, and, of course, from the residents. Various methods of providing access and parking spaces as much as possible are undertaken and considered in the four alternatives of this chapter. The proposed Urban Renewal Plan alternatives have designated several conservation areas which are different from one another in the size of areas and the number of interesting buildings which are consisting of high architectural and historical value. It is important to mention that the designation of the conservation areas in Najaf Old Town would play a major role in the process of the Urban Renewal Plan, which are considered in the four alternatives. The urban Renewal Plan may be seen as a form of synthesis between the various proposals made for the different planning elements.

It is important to note that the existant commercial areas (the Great **Souq**), and the proposed commercial centre are taken for granted and essential in the four alternatives of Urban Renewal Plan. The same legend also has been used in the four figures.

# 7.1 PROPOSED URBAN RENEWAL PLAN

Six important functions have been considered in the preparation of the Urban Renewal Plan which were discussed earlier in detail in various parts of this study, these are reiterated hereunder.

# 7.1.1 Central Area :

The dominant position of the area devoted to the Holy Shrine in the centre of the Old Town is maintained through the retention of surrounding open space. This open space has, however, a double function not only of serving pilgrims, but also other worshippers and tourists, it also supports lively commercial activity associated with adjacent shops. It is proposed that commercial land use should be extended to cover all land immediately surrounding the Shrine, and creating arcade surrounding these buildings is essential to the movement of the pedestrians. Upper two floors are being proposed for lodging purposes to accommodate the enormous numbers of pilgrims.

### 7.1.2 Commercial Areas :

Strengthening of the Old Town's commercial activities should be extended along all approach roads to the Shrine. At the moment this is already true of Zin and Sadek streets. The poor condition of temporary buildings in Tousi and Rassul streets and the predominance of singlestorey buildings suggests that redevelopment with more intensive use would be most appropriate here.

In addition to the four main shopping streets, further focuses of commercial activity will be in association with new car park near the junctions of the Ring Road in the East-South Zone. Al-Huash *Souq* in South West area of the Holy Shrine should be maintained and developed to serve the local area.

### 7.1.3 Traffic and Parking :

Solutions are developed from different alternatives for traffic movement. One way traffic solution is, therefore, developed in an attempt to combine elements-and therefore advantages-and thus minimising the disadvantages.

The question of pedestrian areas and parking provision is brought into consideration. Space of parking is of course an essential factor in the street network in that it both contributes to the amount of traffic and off-street access to various activity areas. The major car parks are on the fringe of the Old Town served directly off the primary network (the Ring Road). In practice the siting of the barriers would require much detailed consideration.

#### 7.1.4 Social Infrastructure :

Locations for new educational facilities have been proposed as shown in the plan. These are located so as to create the best possible coverage for, this, presently under-provided area. The standards and other values to be used in dealing with utilities requirements should have sufficient capacities for the future within the context of overall growth of the city-the detailed design of which has been considered to be beyond the scope of current work.

## 7.1.5 Housing :

The loss of housing to new commercial activities follows automatically from the decision to expand commercial activities in the Old Town. A significant residential population is, however, a necessity if the City Centre is not to lose all its vitality outside the periods of shopping and cultural activities.

New dwellings are therefore integrated as much as practicable into new commercial development, typically as apartments in the upper storeys. In the purely residential areas, the plan is to include environmental improvement and the provision of the amenities which are now lacking, thus removing many of the draw-backs encouraging residents to move away. [See (7.2) and (7.3.4)] and the Urban Renewal Plan, alternative 4. A reduction of household size in the Old Town to a level much closer to the norm must, however, be expected as a natural accompaniment of the physical upgrading of the housing areas. This and the net loss of dwellings are expected to halve the present population

at around 12,500; but this is sufficient to ensure that the old town retains its vitality.

The movement of households out of the Old Town will to a large extent follow a normal course as a consequence of the construction of homes in the new residential areas to the east. Where this is not the case, and notably in association with comprehensive redevelopment around the Holy Shrine and the pedestrian route to the Tourist Town to the West of the Old Town; the authority responsible for redevelopment will need to ensure that new accommodation and/or appropriate compensation are provided.

# 7.1.6 Conservation and Preservation Areas :

The Urban Renewal Plan aims at the retention of the general structure of the Old Town in the form of its present streets and alleys. In certain areas, designated as conservation and preservation areas, as it has been suggested in chaper 5, it is proposed that further steps be taken in prescribing detailed standards for the conservation of all essential features of the built environment: that is renovation and preservation of existing buildings, replacement by new buildings with the same traditional features, and the removal of any objects which do not fit into the traditional urban environment which has survived in these particular areas.

### 7.2 DEVELOPMENT POLICY AND REHABILITATION MEASURES

The situation in the Old Town is mostly critical for different reasons, as it was shown earlier in this study that many short-term projects have been proposed by the authority without considering their overall effect on the Old Town as a whole. At this stage, it is important to review the situation and to recommend appropriate rehabilitation measures and policies for the area. Therefore, this study and the preparation of the Urban Renewal Plan inparticular with few alternatives would allow to convince the authorities about the dangerous implications of the initial projects-the clearance programmes, and the opening of the four major roads through the traditional fabric-and to propose alternative development policies for ensuring both the needs for growth of the modern city and the needs for conservation and appropriate renewal of the Old Town, thus replacing competition by complementarity between old and new.

The suggested general policies include :

- a. the improvement of circular road patterns to relieve the old city from transit traffic and to counteract the previous trends towards cutting new roads into the historic fabric;
- b. to intercept east-west traffic and to channel it into north and south arterials;
- c. to divert the present expansion of the centre into available open spaces to the east, instead of allowing progressive erosion of the old town;

d. to articulate transition zones between the new commercial centre and the pedestrian area of the old town, as to scale down the traffic impact and to mediate between opposed movement patterns.

In view of investigating appropriate rehabilitation measures; for the Urban Renewal Problems of the old town, several alternative solutions have been worked out-keeping in mind, that the local authority would accept and support it, because the same are based on the following rationable :

- a. The primacy of public transport (as the most efficient method for increasing accessibility in the historic cities).
- b. The principle of creating appropriate transition zones between "outside" and "inside" of the historic fabric, and
- c. The attempt to satisfy new needs by using and interpreting the traditional principles of space articulation.

As a result, possibilities of upgrading of the historic fabric by proper integration of modern tools are exemplified on the last three alternatives of the Urban Renewal Plan. [See figs. (7.2) - (7.4)].

### 7.3 URBAN RENEWAL PLAN ALTERNATIVES

Four alternative have been proposed in this study for preparation of the Urban Renewal Plan of Najaf Old Town. Three alternatives have been discussed briefly by outlining their major characteristics, however the last alternative proposed for adoption has been discussed in detail. The four alternatives have the same legend in its figures, description of each one of these alternatives is given hereunder.

7.3.1 Alternative 1 : Irrecoverable Plan :

To begin with, Saleh Al-Hathloul in a study has perceived the development of the traditional Arab-Muslim city and has conceived its model as :

The different models with which the traditional Arab-Muslim City started have been transformed into the basically typical model which we know as the traditional Arab-Muslim city. This typical model and the process of its transformation are the result of certain conceptions and beliefs held by the residents of these cities. These conceptions and beliefs produced certain social coventions or rules of conduct which were accepted and followed by the city's inhabitants. A variety of urban forms were employed within the city and innovations were continuously introduced so long as they did not defy the accepted rules of conduct.

Al-Hathloul is quite right in his observation of the establishment and development of the contemporary environment in the Islamic city. A certain physical pattern had developed over times, and the villa as a dwelling type, was introduced into the traditional cities due to European influence.

Most interestingly, however, the plan of Najaf at the beginning of this century came to be completely transformed to the point where the city pattern resembled that of the *Amsar*<sup>2</sup> towns of the medieval period. This of course, leads us to speculate as to what would have happened to Najaf's highly disordered plan if the city would have remained in the traditional shape and kept as such for another century from now ? Thus, the first Urban Renewal Plan alternative is answering these questions by imitating a proposition which is mostly imaginative and unrealist for the time being. [See fig. (7.1)].

# Characteristics :

- 1 the improvement of circular road patterns by implementing a ring road adjacent to the town's wall from outside.
- 2 to counteract any trends towards cutting new roads into the historic fabric.
- 3 to recommend appropriate rehabilitation measures and comprehensive conservation policy for the old town as a whole. (designated the old town as conservation area-and seven conservation Areas have been proposed.)
- 4 to provide sufficient utilities for the future within the context of overall growth of the city.
- 5 to create an open space behind the main gateway of the old town as a transit zone. (a piazza type space would be created with an accentuated town Gateway.)
- 6 Briefly, the Old Town is converted into a complete pedestrian area, which is isolated from traffic movement and prohibits vehicular traffic.



LEGEND of the ALTERNATIVES

# Proposed Development Schemes

VISITORS TOWN. See Fig.(2\_35).

3

4

TOURIST FACILITIES. See Fig.(2\_36).

COMMERCIAL CENTRE See Fig.(2\_37).

TOURIST TOWN OF BAHIR AL\_NAJAF See Fig.(5\_9).



(Mixed uses,commerc,hotels,..etc.) Building of High Cultural and

Architectural Value(holyshrine).

AREA for REDEVELOPMENT.



Accentuated Town Gateways.



Old Town Wall.



Zone of Special Visul Interest (holy shrine & great soug).



Buildings of Architectural Interest. GRADE A.



Buildings of Architectural Interest. GRADE B.



Buildings of Architectural Interest. GRADE C.



Tree\_Green Area\_Shaded Walk



Shaded Area.



Nursery & Kindergarten.



Primary School.



Secondry School.



Route of the Funerals ceremony



Pedestrians.

- this alternative is out of date, which is mostly imaginative approach and therefore, it can not be implemented because certain developments have already taken place. The most crucial being the four cross roads.
- 7.3.2 Alternative 2 : Conservation Plan.

# Characteristics :

- 1. Two major loops with one-way traffic, each includes two driving lanes with diagonal parking on one side, which are enough - (the two loops) - to relieve the old town from transit traffic and intercept east-west traffic and channel it into north and south arterials. In addition there are two small loops with one-way traffic at the East-South Zone of the old town to serve the busy area and they link the proposed multi-storey car park with the network. [See fig. (7.2)].
- 2. To create a pedestrian area to link the Bus Terminal and the proposed commercial centre from one side and the Great Souq toward the Holy Shrine on the other side, it is important to divert the traffic from the east to south direction by using the existing tunnel under the Imam Ali Square; this square might be shaded to protect pilgrims who are crossing the square toward the Holy Shrine. Other shaded walks would be provided for pedestrians along other routes. (maximum pedestrians movement).

- 3. To revoke the two proposed projects i.e. number 1 and 2, and instead of implementing the two projects, it is proposed to adopt a comprehensive policy toward conservation of the involved areas.
- 4. To abate the left side of Imam Zin Al-Abiden street by preventing through-traffic to the south of the Old Town; a pedestrian route has been introduced leading from the Holy Shrine out to the proposed Tourist Town of (Bahir Al-Najaf), this will use the historical footpath system; and avoid road; as much as possible and shall be interspersed with open spaces and interesting buildings. The same treatment has been proposed for the right side of Imam Al-Sadek street, but with establishment of more commercial activities along the pedestrian Mall.
- 5. A conceptual design is prepared for the area around the Holy Shrine as illustrated in chapter 6. This would include a massive development for commercial and mixed uses in the core area in addition to the Great *Souq*.
- 6. The route of the ceremonial funerals have been treated in a modest way by providing a parking area close to the Holy Shrine along Imam Al-Tousi street especially for that function, and to create appropriate facilities for visitors who accompany the dead-body and are attending the funeral ceremony.

Assessment :

 Only two major entrances and one secondary entrance to the Old Town are allowed for vehiculars traffic with a disadvantage that the possibility of errors where no entry is allowed.

- Double-parking by delivery vehicles does not seriously hinder traffic.
- Advantages of widening of the footways is possible for pedestrians.
- 4. A maximum of proposed conservation areas have been provided.
- 7.3.3 Alternative 3 : Gradual Change Plan.

Characteristics :

- One way traffic for all street in the Old Town except two way traffic on Al-Tousi street, each includes two driving lanes with longitudinal parking on one side. A free crossing of the Old Town is introduced by transit traffic-through all existing streets, which are cutting the old town with no intercepter or barriers. [See fig. (7.3)].
- After creating an open space a covered area is created in front of the western gate of the holy shrine to relieve the overcrowding of the Shrine's courtyard (*Al-Sahen*), especially on the holy and memorial days. This would also enhance the visual importance of the Shrine.
- Gradual change in the land use is introduced by acceptance of the two proposed development schemes inside the old town. [See fig. (2.35) and fig. (2.36)].
- 4. Maximum development along the four approach roads from six accentuated town gateways, and the building facing onto them. These areas characterised by commercial activity in the buildings adjacent to the street; shops and private services on the ground

floor, offices, hotels and apartment on the two top floors. Commercial development attains a much greater depth away from the roads, and involves the infilling of some blocks.

Assessment :

- Less conservation area compared to the first and second alternatives, because the acceptance of the two development schemes.
- 2. There will be a strong demand for access to locations within the Old Town itself, from visitors and, of course, from the residents, therefore, sizeable through-traffic would actually use these routes and will generate vehicles and vehicular traffic within the area. In consequence, more parking spaces would be needed inside the Old Town.
- 3. The two proposed development schemes (Project No. 1 and 2), are inadequate to meet the numerous demands of large number of pilgrims. Sustaining these projects on a long term basis is suspect.
- 4. Increased accessibility into residential areas, but a simultaneous increase in the noise levels and exposure of residents to the traffic hazards would be inevitable.

### 7.3.4 Alternative 4 : Comprehensive Plan :

The three alternatives discussed earlier suffer from one or the other infirmities. A fourth and a final solution is hereby conceptualised in an attempt to combine the various good points of the earlier alternatives and erredicating or minimizing the disadvantages inherent in them. Simultaneously, ensuring that the final solution proposed is practical and amenable to implementation.

This comprehensive plan has four important components around which the proposals converage. These refer to the uninterrupted and safe movement of both vehicles and pedestrians; preservation of architectural heritage; integration of proposed development projects with conservation areas, and an urban design concept to act as a link denominator for any structural and visual changes that would occur in the planning area. The detailed description of these plan components would be following in the succeeding paragraphs, however, a brief outline of the manner in which these basic components are disposed in creating the proposed plan is given hereunder.

Flow of movement of vehicles and pedestrians is resolved by creating four super blocks, free of vehicular traffic, adequate parking and generally a one way traffic movement.

Important areas and individual buildings and building complexes of historical and architectural merit have been proposed to be conserved and restored to their original glory.

Governments proposals to have four development projects in the planning area have been screened and necessary modifications proposed to integrate these with the over all plan proposals.

To integrate all developments visually the urban design concept visualizes the shrine as a focal point and a dominant element of the townscape. Inherited design elements, use of materials and colours are proposed to be deployed in new developments to harmonize and blend with existing structures.

7.3.4.1 Movement Systems : Traffic, Parking and Pedestrians

In dealing with the problem of traffic in Najaf it is most essential to strike a balance between, on the one hand, providing the advantages of vehicular accessibility, and on the other, minimizing the disturbance that is inevitably created by the traffic, specially if the intimate and cohesive structure of the old town is not to be unduly ruptured. Of course, not withstanding the damage which has already been done by cutting across four thoroughfares mentioned earlier. In effect an attempt has been made to retrieve the situation by partially closing two of these (thoroughfares) and converting these into pedestrian malls, and integrating these into the four super blocks free of any vehicular traffic (refer fig. (7.4)].

Resolution of the various traffic issues of the area within the frame work of aforesaid concept is characterized by the following propositions.

# (a) Creation of Super Blocks : (Rooms) :

The planning area is divided into four parts each part would act as a super block or (a room) within which the movement will essentially be on foot. Because the distance across each super block is approximately 1/2 km. except the one on east end which is 3/4 km. on longer side, the same would be easily negotiable on foot. [See fig. (7.4.1)]. This would greatly help in preserving the serene environment of the old town without unduly jeopardizing the requirements of accessibility. Limited parking has been provided within the super blocks to cater for the urgent and immediate requirements. Additional parking would be accommodated outside the peripheral ring road.

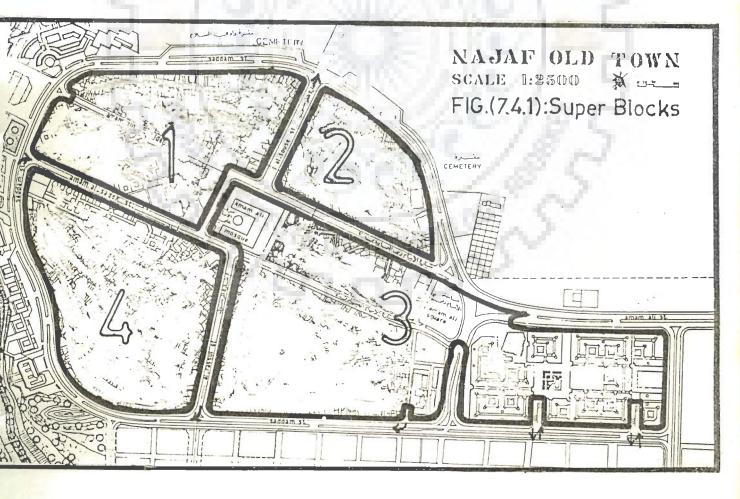


Fig. (7.4.1) : Super Blocks (Rooms).

### (b) Network for Vehicular Traffic .:

The area is encircled with a two way ring road having a total of six lanes. One of the lanes at different important places would be deployed for off-street parking. Link to the area from the ring road is provided by four entries and four exists out of which only two exists and two entries, which serve the underground parking under the commercial centre marked  $\bigcirc$  in figure no. (7.4), are having two-way movement rest of the four roads serving the area carry only one way traffic and have a 10 meter width.

To discourage through traffic the two thoroughfares on the west side of the Zin street and East side of Sadek street have been deliberately closed to traffic and converted to pedestrian malls as stated earlier.

(c) 'Movement of Vehicular Traffic :

As mentioned before the main ring road has two-way traffic with provision of six lanes of traffic. Access to the area is provided by two major loops having one-way movement with a provision of two lanes and longitudinal parking within a width of 10 meters. This would relieve the old town from transit traffic and interscept East-West traffic and channel it into North and South arterials joining the ring road and connecting with the rest of the city.

Two small loops with one-way traffic; the first one is to divert the direction of flow from North to South by using the existing tunnel under Imam Ali-Square. Detailed description of this is given in the

next figure. Fig. (7.4.2). This would make a large free zone of pedestrian area at the East side of the Old Town. The second small loop at the south zone of the old town is to serve the busy area and links the proposed multi-storey car park with the network.

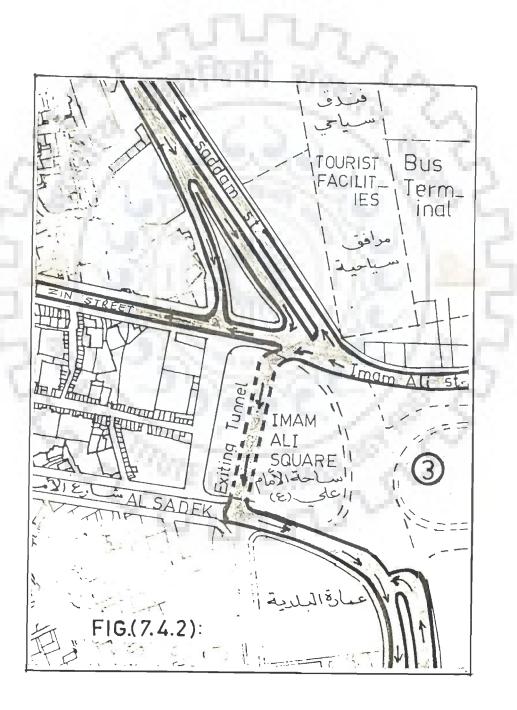


Fig. (7.4.2) : Small Loop with one-way traffic : Imam Ali Square

The overground connections of existing ring road between the East side of the Imam Ali Square and the proposed commercial centre marked as (3) in the map has been deliberately closed to enlarge the ring road loop and to include the commercial centre as a continguous part of the South-East Super Block. Thus allowing free and uninterrupted movement of pedestrians within the Super Block, and simultaneously improving the flow of vehicular traffic and grade seperating the movement of people on foot coming from commercial centre to the Great-*Souq* and the Holy Shrine and vice-versa. [See fig. (7.4.3)].

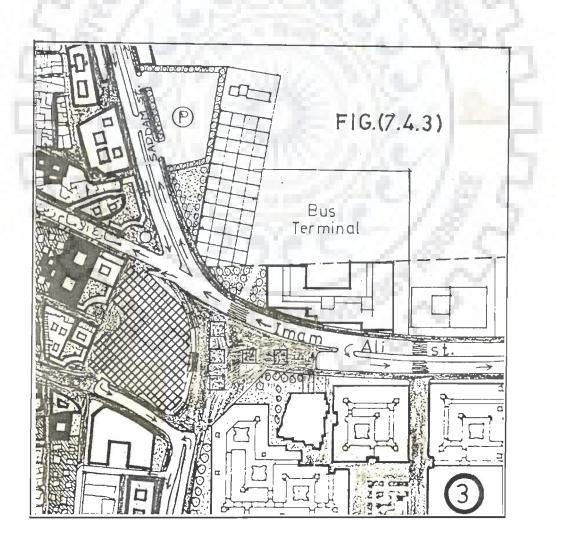


Fig. (7.4.3) : Iman Ali Square

# (d) Parking Facilities :

To cater for the needs of parking motor vehicles and buses serving the planning area; limited parking for 540 motor vehicles overground and 1380 underground are provided within the super blocks as a matter of deliberate policy to preserve the characteristic environment of the old town and not cramp and pollute it with undue number of vehicles. This number at best is what the author considered to be the limiting factor as far as the carrying capacity of the area in terms of parked motor vehicles is concerned.

For additional vehicualr parking of 150 buses and nearly 930 motor vehicles the provision is made alongside the main ring road, essentially for short term parking (for actual location of parking areas, see mark  $(\mathsf{P})$  in figure (7.4). Thus the major parking areas are on the fringe of the old town, served directly off the primary network, detailed description of this was given previously in Fig. (5.18). To connect crucial parking areas outside the main ring road overpass have been proposed for the convenience bridges of pedestrians. It is important to mention, that the scale of demand for parking from visitors to shrine is so high (especially on fridays and holidays), that no significant additional provision can be made for it within the old town. This tentamounts to directing tourist parking to suitable sites outside the old town, as was shown in Fig. (5.19) which shows the availability of the future parking spaces and their location.

In chapter 2, demand for parking motor vehicles was quoted from a study done in 1985 according to which 11,700 parking spaces would be needed if there were no constraints on the use of motor cars by the visitors coming to the central area. It is the considered opinion of the author that to go beyond the provision of the parking proposed herein, that is 2850 motor cars and 550 buses anywhere near the central area would be not without risking visual contamination if it is above ground and would be very costly if taken underground. The best solution recommended is to have additional parking at convenient spots within 1 km. of the Holy Shrine from where quick and efficient mini buses could ply at high frequency to drop and pick up the visitors on the ring road.

(e) Pedestrian Movement :

Safe pedestrian movement is intimately linked with the manner in which the vehicular traffic and the primary road network is organized. The creation of 4 Super Blocks has ensured safe and leisurly movement on foot within these areas.

Major generation of pedestrian movement is of visitors alighting from buses at the bus terminal on the North East End of the old town and seeking to go to the Holy Shrine or the commercial centre. After they go across the Imam Ali street they are secure within the super block to leisurly go to the commercial centre or reach the Holy Shrine through the covered main spine of the Great *Souq* or the newly created pedestrian mall converted by blocking traffic on the East side of Sadek Street. Another important through pedestrian link has been created between the Holy Shrine and the tourist village across the proposed Visitors Town, details of which follow in the paragraph (7.3.4.4) under Urban Design Concept.

7.3.4.2 Preservation of Architectural Heritage :

Various implications of conserving old heritage of Najaf Old Town were deliberated upon in sub-paras of Chapter 5 bearing serials Nos. 5.2 in a fair amount of detail.

Under the current head, reference is limited to the actual proposition pertaining to preservation of old heritage of Najaf Old Town that are practically feasible and essential for conserving in an integrated manner the balancing of densities, commercial influxes, visual environment, accessibility and their socio-economic implications-which are inevitably intertwined and influence each other.

In chapter 5, seven conservation areas marked in fig. (5.4) were identified which were considered desirable for maintaining and restoring to their original physical disposition for preserving the characteristic old heritage of Najaf Old Town.

However, because conservation area No. 7 is definitely going to be cleared as process of acquisition etc. has already been completed and new project of `Visitor Town' is expected to be executed, therefore as a modification, only a crucial portion opposite the Western side of the Holy Shrine is being recommended for retention at any cost in the area [fig. (7.4.4)]. In the conservation area No. 6 the strip along the Al-Sadek street for installation of new project, of "Tourist Facilities and Services", has also been accepted and would be integrated with the conservation area in terms of its scale and physical configurtion. Other five conservation areas detailed in Chaper 5,(5.2) would be maintained and it is recommended that efforts be directed to restore these to their original state of repair and environmental quality. In doing so special efforts be made to ensure that accretions and eyesores are removed and historical continuity maintained. In furthering the cause of conservation it is recommended that efforts may go beyond the stage of restoration, and amenities of modern utilities and services be extended to all properties within the said conservation areas.

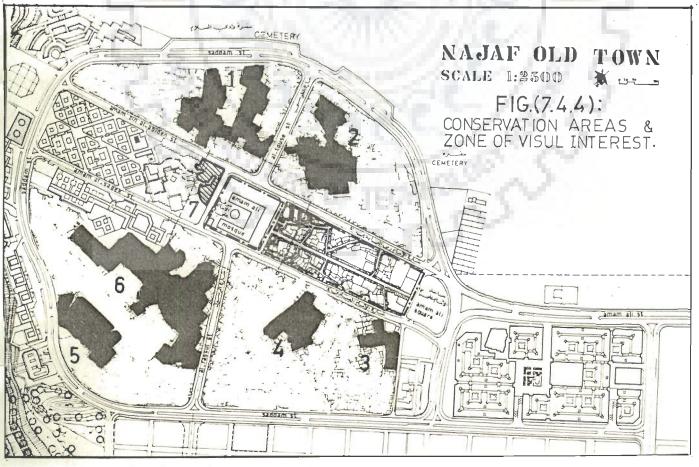


Fig. (7.4.4) : Conservation Area and Zone of Visual Interest

# 7.3.4.3 Integration of Development projects with the Conservation Areas :

A passing reference has been made in the foregoing paragraph about the integration of development projects proposed by the Government with the suggested conservation area. These development projects were described in some detail in Chapter two para 2.4.3.

About project No. 1 the 'Visitors Town' and project No. 3 the 'Commercial Centre' the author has to mention that their designs appear to be in fair harmony with the existing structures in their vicinity without at the same time, loosing their flare of modernity. However, the author has strong reservations about the project No. 2 that of tourist facilities and services. Both its pattern in plan and the linking of the project with the adjacent development appears to be at variance with each other. The 'grain' of its development is also not in consonance with that of the historic fabric prevailing in the old town. Instead of integrating the project with the existing development a strong division has been created by inserting parking areas between the two sets of developments and sprawling open spaces which are likely to degenerate into rubbish dumps with passage of time. Therefore, it is recommended that this project be either completely overhauled or designed anew to be in sympathy with its surroundings.

Development project No. 4 also suffers from such infirmities as the building blocks in its south strip neither match the sloping ground on which these are located nor conform to the character of development

facing it across the ring road within the old town. Once again in this development also the parking is stretched in a linear fashion along the building blocks parallel to the ring road thereby spoiling the visual quality of this large stretch. This could be easily accommodated behind the buildings on a different grade or sandwitched between the structural blocks. This project also need to be modified to remove the aforesaid objections. Only the portion in North could be retained in the manner it is disposed now.

7.3.4.4 Urban Design Concept :

To achieve fruitful results for either developing a viable movement system or undertaking any conservation or redevelopment in the old town it is most imperative that a consistant urban design theme directed at enhancing the character of the old town as distinct historic entity is kept as link denominator for any future action. In chapter six contents of the components of such thematic urban design concept were identified which pertained to scale, colour, texture, deployment of materials, fanestration etc. However, the test of actual realization of this thematic urban design concept has to manifest itself into a set or sets of physical entities. Since the whole area under the urban renewal plan tentamounts to such a physical set, for the sake of expediency only few examples of sub-sets in the whole area have been taken for closer scrutiny and to demonstrate as to how the thematic concept advocated above operates in actuality.

a - Area Around the Holy Shrine :

The core area of the Old Town around the Holy Shrine has been redesigned to emphasize its role as the heart of Najaf and to reflect the religious and cultural importance of the Shrine. The area is designed and developed as an integrated whole, with the Holy Shrine (the main mosque) at the focal point. The design is to extend beyond the line of redevelopment, which is limited to the area of 60 meters from the exterior walls of the complex formed by the Holy Shrine.

The space outside its walls will be a differentiated mixture of streets, small and larger squares, and arcades under the new building fronts facing the Shrine. Although commercial activity is to be allowed in all buildings facing onto the Shrine, such activity is to be kept physically in the background by the creation of pedestrian arcades behind pillars which will form an almost continuous walk around the Shrine. The buildings concerned would allow public access through the courtyards behind them, so that commercial activities could also develop here. Detailed description of this was given in (6.3.1) and figures (6.10), (6.11) and (6.20).

b. Ring Road (Fringe of the Old Town).

Measures are taken on the periphery of the Old Town, which are aimed at enhancing the unique character of the Old Town. Through the development of both a strong facade looking onto the Ring Road and Gateways features at its main entrances, the physical definition of the Old Town has been emphasized. (The manner in which these gates

should be disposed-to be in line with this idea-is given in (7.3.5). In order to retain the valuable dominance of the golden domes on the Najaf Skyline, all new buildings are recommended to be restricted to a maximum height of 12 meters.

c. Approach Roads to the Holy Shrine :

This area includes the streets formed by the four approach roads from six accentuated town gateways, and the buildings facing onto them. These roads have a considerable emphsis in this alternative, because, they play an important role as the main thoroughfares for pedestrians and for vehicular traffic into and out of the Old Town. Three accentuated gateways are shown in fig. (6.4.5). The aim of this consideration is to strengthen the feeling of sight and movement being channelled onward to the Holy Shrine, at the heart of the Old Town. Uninterrupted facades along the street create a lateral enclosure thereby emphasizing the opening at the open space around the shrine.

The area is characterised by commercial activity in the buildings adjacent to the street: shops and private services on the ground floor; offices, hotels and apartments on the first and second floor as has been described in (6.3.4) and its figures (6.19), (6.20) and (6.21).



Fig. (7.4.5) : Accentuated Gateways

d. Pedestrian link between the Holy Shrine and the Tourist Town:

A conceptual design has been proposed for the pedestrian link between the Holy Shrine and the Tourist Town in Bahir Al-Najaf. The Pedestrian Link starts from the western gate of the Holy Shrine following the proposed open space and along a footway to be established inside the new buildings of the proposed Visitor Town (Project No. 1). [See next fig. (7.4.6)]. Shaded areas would be created in patches along this Pedestrian Link.

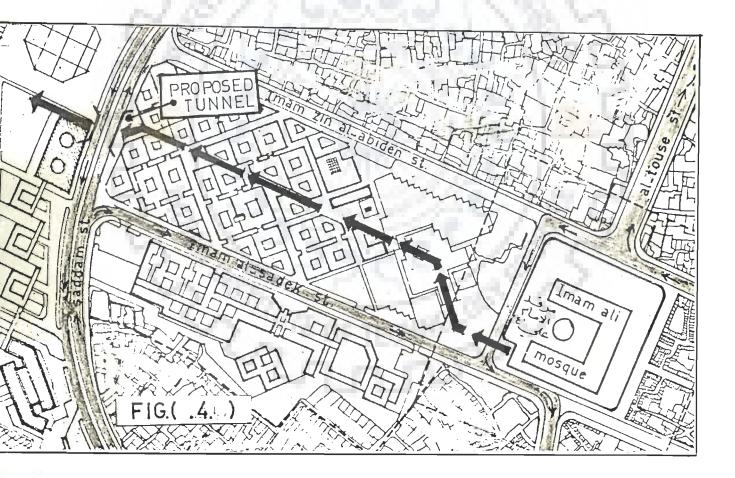


Fig. (7.4.6) : Pedestrian link between the Holy Shrine and the

There are buildings in poor condition and a small vacant plot, at the West of the proposed Visitor Town, which belong to the Municipality of Najaf, however, a new pedestrian walk could be built over these areas, and by getting the advantage of the topography of the area, - a tunnel for padestrians could be created underneath the Ring Road in order to connect the Tourist Town of Bahir Al-Najaf with the Holy Shrine and the rest of the Old Town.

### Assessment :

- 1. A maximum of buildings and areas are identified, which are characterised due to their historic importance or architectural value and/or show features typical for the traditional urban character of the Old Town. These areas have been considered as conservation areas, the quantum of which is quite realistic for the present and the years to come. Policy and guidelines have been provided for conservation of old buildings and areas to secure their historical continuity.
- 2. Regarding traffic and accessibility, this alternative shows a compromised approach, and acceptable balance has been found between vehicular accessibility the pedestrian movement and conservation.
- 3. The scale of the commercial developments in the core area are complementary to the scale of the Old Town, but not in competition with it, which could cause disturbance to the religious and cultural functions of the Old Town.

# 7.4 IMPLEMENTATION : ACTION AREAS AND PRIORITIES :

The process of redevelopment in the Old Town - and consequently the application of the Urban Renewal Plan - will continue over many years, and possibly be subject to considerable changes. Since all 'proposals here can not be implemented at once, priorities for execution must be set.

Action areas are those where immediate action is desirable, this being recognised in :

areas which are very important in the functioning of the Old Town (i.e. as commercial, religious, cultural, or tourist attractions).
areas with a concentration of buildings in very poor conditions or which are already vacant.

On the basis of these criteria, several action areas have been recognised in the Old Town and awarded various degrees of priority. They are shown in the following plan. [See fig. (7.5)].

7.4.1 Priority 1 :

The greatest attention needs to be paid to the renewal of the heart of the Old Town around the Shrine. Here, urgent solutions are required for a highly unsatisfactory situation regarding land use, traffic and a disharmonious townscape. A detailed building layout plan must be produced on the basis of the urban design and regulations provided in the Urban Renewal Plan. Because the Municipality of Najaf is the land owner of this area, it will guide further acquisition of land necessary for the purpose, and at the same time, together with the regulations, it will provide the framework for the final architectural design of the new buildings.

Restoration and redevelopment in the proposed Conservation Areas and Zones of Visual Interest, should have the top priority, and to follow guidelines which secure their historical continuity. These areas need to be surveyed immediately – in a similar manner as has been depicted in this study – and detail conservation plan for these areas prepared. Specialist help could be enlisted, from UNESCO or other international organisations, to prepare such plans. Meanwhile, several first-aid measures and general improvement programmes should include the provision of efficient sewerage and surface drainage systems, paving of alley-ways and *Souqs*; cleaning up and removal of eyesores such as garish signs and advertisements, the removal or tidying up of overhead wires. This is not difficult in Iraq, and has recently been completed at many places, particularly in Baghdad.

7.4.2 Priority 2 :

As an extension of the first action area in the centre of the Old Town, and as a valuable contribution in itself to tourist development in Najaf Old Town; the next priority shall be the creation of the Pedestrian Link leading out to the Tourist Town of Bahir Al-Najaf, this could be done through modification of project No. 1, and as it

has been discussed in para (6.3.2). Other projects are included in this priority. Like the Tourist Facilities Project (No. 2) and, the proposed Commercial Centre Project (No. 3).

Since this also involves the redevelopment of existing built-up areas, the procedure will be the same as for the area around the Holy Shrine. The amount of development involved indicates the necessity of dividing the work into major building phases, whereby the section from the commercial centre to the Great **Souq** - the Imam Ali Square and its proposed development - takes priority, since there is at present no direct passage through this area. An incongruous situation in this area is caused due to mixed movement of traffic and pedestrians which should be sorted out through an appropriate solution. [See fig. (7.4)].

At the same time, the redevelopment of Al-Tousi Street and area in the north sector of the Old Town which leads to the Great Cemetery will resolve two problems simultaneously; on one hand it will provide space for parking and area for shops, services, and housing, and on the other it will replace an inappropriate open space and a disturbing activity with a development which offers a proper urban atmosphere. The appropriate means of dealing with this development would be a single comprehensive architectural design, which would have to take into account the guidelines laid down in this study.

#### 7.4.3 Priority 3 :

Third priority is attached for similar reasons to the large areas, which are located at different sections of the periphery of the Ring Road. The proposed development provides a commercial/parking on the ground floor and housing on the two upper floors; this should also be treated as a single development requiring comprehensive architectural design. For more detail see (5.3.1).

Also to be completed at this stage is the removal of industrial activities causing disturbance along the north-east section of the Ring Road. The Najaf-Kufa Master Plan provides an alternative location for these small scale industries in other places of the city. The redevelopment of this area will require the production of a detailed local plan covering land use, building controls and traffic management, and following the regulations and other provisions laid down in the Urban Renewal Plan. [See fig. (7.4)].

At the same time, the redevelopment of the Tourist Town of Bahir Al-Najaf Project No. (4), would be the last project to be implemented in Najaf Old Town. This project would meet the demand of accommodation space for pilgrims and visitors in future; because pilgrims and sightseeing visitors to Holy Shrine are expected to increase considerably. This project will also provide a unique opportunity for recreation in the heart of Najaf.

The last priority is for renewing the extensive areas of often poor quality housing which are scattered within the Old Town; and, the area located - south of the Old Town which is part of the Planning Area in this study. Urban Renewal here should be carried through a comprehensive planning process. This will require a detailed plan which is based upon a detailed examination of all buildings individually and then provide for a wide spectrum of measures encompassing land use, design controls, building finance and environmental improvement.

## 7.5 RECOMMENDATIONS & CONCLUSIONS

This section is devoted to specific recommendations and conclusions about the need for a more systematic and comprehensive approach required for protecting, documenting and enhancing the cultural heritage of Najaf Old Town and thus the nation. Enough has been said and suggested about the spatial components of the urban renewal plan, however, to give practical shape to some of these suggestions it is essential that impediments that are likely to be encountered in implementing these ideas must be removed. Therefore, suggestions are included here on related aspects of legislative, financial, and administrative reforms that may be necessary in the present set-up to facilitate effectuation of spatial ideas propounded in this thesis. These are deliberated hereunder : 7.5.1 Power : Legal, Administration, and Financial :

Power :

In European countries adequate legislation and administrative machinery to deal with matters related to conservation often exists. Such legislation is usually incorporated within the town and country planning law and may include financial incentives and tax relief to the owners of private buildings. Official provisions are often aided by strong private conservation lobby and considerable public interest. By contrast, legislation in Arab countries is largely prohibitive in nature and contains no financial incentives or tax relief to the owners of private buildings of historical or cultural importance and interest. Very few historic towns in the Arab World have documented their cultural heritage, and most vernacular architecture remains unlisted and unprotected.

In Iraq, till 1980 legislative protection was available to only structures of antiquity built before AD 1700. However, in 1980 legislation has been framed to protect residential buildings of architectural importance, specially in Baghdad. Consequently, the date of 1950 was used for the upper limit in the inventory, largely to correct this particular defect and also to ensure the documentation of these unprotected items before their possible destruction. The survey findings confirm that the core of Najaf City is being gradually, but consistantly destroyed and replaced by modern uses in several areas. This core of the city, which constitutes some five per cent of the total urbanized area of the city, contains the overwhelming majority of its heritage. [See fig. (2.10)]. Legislative measures alone cannot solve the problem of obsolescence and decay and eventual erosion of several properties and areas of historic importance unless these measures are simultaneously reinforced by other means available to public and private agencies to check deterioration of the areas and buildings of historic importance.

#### Legal :

Legislation pertinent to conservation in Iraq, is largely preventive in nature; offering little, if any, incentive for private owners to restore their historic properties. It is, therefore, necessary to bring about a change in the existing legislation to effect its basic character from "passive" to "active" legislation. This means legitimate compensation to those private owners whose properties are in any manner constrained due to the imposition of legislative controls. Compensation can be through adequate tax concessions and grants to cover the cost of restoring their properties. To tie-up any financial impediments in this regard, it is necessary that inter-Arab cooperation be invoked, because it is not merely a cause confined to the boundaries of Najaf or Iraq but in effect the whole Arab World, as far as the question of preserving Islamic architectural heritage is concerned.

Another problem which besets the historical areas of Najaf Old Town is indiscriminate display of often ugly and unsightly hoardings. There is an urgent need to control and regulate these advertising displays so that they harmonize with the landscape and not act as unsightly detractors.

It is also worth considering whether legislative measures could incorporate some form of penalty for those who demolish their structures for commercial gains without prior permission or approval of the appropriate authorities. In many European countries fines with possible prison sentence can be awarded to those owners who demolish listed buildings without prior approval. In Iraq it will be necessary to exact legislation which includes penalities that are heavy enough to act as a deterent for owners to demolish listed buildings without consent of the authorities.

Administration :

Although the protection of a nations heritage is largely the concern and responsibility of the Central Govternment, however, for eventual effectuation of any policy decisions it is imperative that local authorities should be continuously involved in the decision making process.

Public participation at local levels is also essential because conservation has broader social implications. For example, if programmes propounded by the authorities are socially acceptable, the chances of having the conservation and renewal schemes implemented would be much higher. However, because of the wide gaps between the technical and managerial skills and abilities available, and the ones that the complexity of urban renewal and conservation programmes require at the local authority level, it may be expedient to accept centralised planning as an interim measure. For long term perspective it is necessary to steadily strengthen the local authorities'

technical and managerial infrastructure, specially of historic towns like Najaf.

It is strongly recommended that a planning unit, should be created which is a part of the Master Plan Division of Najaf City, and should be concerned with the Old Town in general and with conservation areas in particular. Experts from universities could be recruited to give their help to this unit, by advice and consultation, assisted by the proposed National Conservation Authority of Iraq.

The local authority should be given conservation grants to appoint conservation officers. The tasks of the conservtion officers are varied. He must cover the whole range of conservation problems within the conservation area, but above all he must be a stimulant and a catalyst.

There is a need to establish a traditional museum in Najaf. The local authority of Najaf province has formulated the idea of converting a traditional Najafian house (DAR AL-NAJAFY), and using it for a museum, thereby helping to preserve and protect at least one aspect of Najaf's heritage. The author urges the Municipality of Najaf to support and implement this idea.

It is further recommended that an Architectural Restoration Section be established with the Municipality of Najaf to carry out the necessary architectural restoration and maintenance of listed buildings. It is anticipated that this section would deal largely with vernacular architecture which became protected when the legal date was raised to

1950. However, this restoration is to be co-ordinated with the conservation Authority which may advise on such restoration for the traditional houses in the Old Town of Najaf. It is also recommended that several well known tradesmen or craftsmen be recruited, and a training workshop set up to transfer their rapidly dying traditional skills to younger hands. These skills should cover such fields as brickwork, woodwork, wrought-iron work, calligraphy and ornamentation. Master Craftsmen and workers should be well paid and preferably employed on a regular basis. Some type of qualification certificate should be given to enhance their self-respect and prestige.

It is further recommended that a materials bank, associated with this section, should be started. Strong architectural elements such as windows, columns, ceilings, ceramics work (Arabesque) and accessories such as wrought-iron work and brasswork retreived from old buildings that may be demolished could then be used in either old or new structures depending on the circumstances. This is a very useful and economical way of recycling traditional building materials. It is to be noted that, fortunately, many architectural elements of the domestic architecture in Iraq are standardised which increases their interchangeability.

Financial :

Apart from the fact that maintenance of historic areas is essential from the point of view of their cultural and historic significance to the nation; it has now become increasingly clear that maintenance and conservation of many such areas is also a sound financial proposition.

The recent escalation in the prices of building materials, acute shortage of both housing and urban land, have all swayed the costbenefit argument in favour of up- dating and conserving the existing traditional buildings and the old housing stock. The present movement towards recycling old materials and conserving depleteable natural resources similarly considers conserving irretrievable national resources as a sound financial proposition.

The implementation of conservation plans in all proposed conservation areas would require much less financial resources than if the area was to be cleared and built anew as in the case of the Visitors Town. Although the conservation would not only involve restoration but also the general environmental improvement of the area, the removal of eyesores, the provision of infrastructural services and other works which would enrich and enhance the area, even then it will prove to be financially more viable than clearing the site and rebuilding over it. Since the implementation of any conservation plan is necessarily carried out in several stages, therefore, financial burden would also be phased out and co-ordinated with regular government allocations and then could be spread over a fairly long period of time.

Although successful conservation in Iraq will ultimately depend on central governmental support and action, which is already provided, initiative is also required from private and quasi-public agencies, especially from the locality where action is contamplated and problems first arise. Therefore, success will depend upon the formulation of an overall protection policy, the will to legislate, administrate and enforce these powers, awakening public opinion, and the provision of

financial, technical and professional resources necessary for implementation.

Government should consider mobilising a "National Conservation Fund" through various ways and means such as cess on oil consumed in the country, raising money from lotteries, stamps, and levying charges for parking near places of conservation and the like.

7.5.2 Mobilising Public Opinion for Conservation :

Success of conservation programmes on long term basis would largely depend upon the awareness and concern that the Iraqi people develop over period of time. To do this effort will have to be directed from variety of angles. As it is, conservation and its importance is still recognised only by a very small minority of professionals and scholars It is recommended that the appropriate educational in Iraq. authorities should involve schools and universities in developing consciousness about conservation and its various aspects. In particular, conservation should be included in the curricula of the colleges of Art, Schools of Architecture and the Urban Regional Planning Centre of Baghbad University. Research and involvement into conservation, urban archaeology and Islamic architectural history should be encouraged at both Under-Graduate and Post-Graduate levels. Projects could be organised that would engage students in live programme of investigation and documentation of historic buildings and areas. Joint training courses, seminars and workshops could be arranged with the existing UNESCO Conservation Centre in Baghdad. Measured drawing projects which constitute a regular part of the curriculum of Architectural Schools should coverage on dealing with buildings of historic importance.

Equally important is the development of media to build up public opinion in favour of conservation. In order to exploit the potential of conservation proposals, adequate publicity is required in newspapers, the Heritage Journal and on television. Department of Tourism could impress upon the tour companies to include the historical sites, museums and monuments in their itinerary. Open-air exhibitions, in towns, should be promoted and staffed by people who have knowledge of historic sites within the town.

Wherever possible, the original names of historic streets and *Mahallahs* should be restored and used for official purposes, including postal services. A special issue of stamps, depicting historical sites and buildings, could be issued, helping to draw peoples' attention to their heritage.

The author proposes the implementation of a National Campaign, not only for Najaf but for all historic towns in Iraq which have a wealth of historic heritage and culture. An Iraqi Heritage week could be organised by the cultural architectural heritage section of the Iraqi Government every year to bring home to its citizens the glory of their own heritage and the need to preserve the same. This could be done through media and organising of various social and cultural functions.

Government should consider setting up a national society for the protection of architectural heritage in Iraq. This society should

comprise of outstanding and influential personalities drawn from various walks of life. Such a society as far as possible should be an autonomous body, but having financial backing of the Government. Society would be charged with the responsibility of creating awareness amongst the Iraqi citizens about the advantages of conserving national heritage. One of its specific tasks would be to publish a periodical in this regard. Society will have a standing mandate from the Government to deal with conservation in terms of clear and realistic social and cultural objectives and not in euphoric and subjective exhortations about heritage which are likely to be counter productive. Purpose would be to encourage integration of new development with conservation of old heritage in a balanced manner rather than to condemn all what is new and be dogmatic about preserving everything which is old. Historic towns would be encouraged by the society to continue to thrive as dynamic living organisms absorbing useful changes which do not unnessarily impinge upon the essential requirements of conservation.

7.5.3 Mobilising Assistance From U.N. & UNESCO :

Government should constantly strive to acquire U.N. and UNESCO assistance specially for those aspects of conservation where it is considered that indigenous sources are either deficient or insufficient to match the varied requirements of saving the cultural heritage. In particular, for those aspects which require complex technological and scientific know how it may be worthwhile to seek help of those experts from other countries, through U.N. Agencies, who it is sure have long experience and knowledge of the task lying ahead.

This would be easily applicable to matters concerned with restoration, updating of utilities and sources, developing information systems on recording status of buildings and areas to be conserved and the like.

Caution will, however, need to be exercised to ensure that experience of other countries specially of the West is not indiscriminately imposed but adopted to suit local condition obtaining in Iraq.

7.5.4 Tourism :

With the growing importance of tourism particularly in the developing countries, the old historic town is being rediscovered with a great slant on its economic potential.

The state organisation of Tourism which currently looks after the tourist facilities in Iraq requires to reorient its outlook in going beyond its present concern to provide for the incoming tourist. It should endeavour to attract both internal and foreign tourist to important historic towns in Iraq including Najaf with an eye on financial gains to be made from increment in tourist traffic.

Department of tourism should closely collaborate with other involved agencies to ensure that maintenance of quarters of interest to tourism and arrangements of routine routes through the old town and other infrastructural facilities that may have to be built to take care of the added influx of tourist should invariably be in harmony with the flavour of prevailing environment consistant with the policies of conservation.

#### CONCLUSIONS :

- To conserve the architectural and cultural heritage of Najaf old town a balance must be struck within the old values inherent in its urban tissues and the new aspirations of its inhabitants brought about by the new technologies, the motor vehicle and the rising standards of living.
- 2. Upward social and economic mobility of Najaf's citizens would be encouraged and accessibility increased through planned renewal of the old town consistant with the requirements of conservation. The flavour of the traditional environmental homogeneity intimacy of spaces and intermingling of functions would be the hall mark of such renewal.
- 3. Development adjacent to the properties and groups of buildings or areas marked for conservation would necessarily be controlled to ensure architectural and environmental harmony. An immediate stop is recommended to be put on all demolition around the historic monuments and specially those surrounding the holy shrine.
- 4. Through traffic from Najaf Old Town to be discouraged at all costs without unduly impairing accessibility.
- 5. Further commercialization of Najaf Old Town will have to cease forthwith.
- Proposed development initiatives, it is recommended, should be reassessed and also the possibility of locating these outside the core be examined.
- 7. It is imperative that an awareness be created amongst the Government and Non-governmental agencies to have will, initiative, and sensitivity to preserve cultural and architectural heritage of

Najaf Old Town and other historic monuments, buildings and towns in Iraq. It has already been shown how some of the official organizations, such as the *Awqaf* and the Municipality of Najaf City were themselves responsible for much of the destruction of the historic fabric of Najaf. There is an urgent need to remould the attitude of such agencies to look at conservation with sympathy and concern.

- 8. A planned action by a team of experts to enlist buildings and areas essential for conservation is imminent.
- Renewal in the Old Town should invariably follow the dictum of 'conservative surgery,' propounded by pattrick geddes almost a half century ago.
- 10. To effectively implement decisons on conservation, neccessary legislative and financial backing and technical and administrative support at both local and national levels needs to be created sooner than later.

#### NOTES

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# APPENDIX A : THE INVENTORY OF THE SELECTED TRADITIONAL BUILDINGS :

- 1. AL-KHALLEY SCHOOL EST. 1275 H. 1855 C.
- 2. AL-ZEHARRI HOUSE
- 3. MALLA HOUSE
- 4. AL-GAZARIA SCHOOL EST. 1316 H.
- 5. AL-MUSAWAY GRAVEYARD
- 6. AL-SHEIK AL-MUSAWAY HOUSE
- 7. MUHSEN SISTER HOUSE
- 8. MANNAHEL HOUSE EST. 1310 H. 1890 C.
- 9. RASHID SALMAN HOUSE
- 10. AL-NAJEM HOUSE EST. 1310 H. 1890 C.

### APPENDIX B : <u>PAPERS PRESENTED AND CONFERENCES ATTEND</u> BY THE AUTHOR DURING THE PREPARATION OF STUDY.

Study of Redevelopment and Urban Design "For Traditional Islamic-Rabic City". on the 32nd Annual Town and Country Planning Seminar "Development and Environment". May 21st to 24th 1984. Mysore, India.

> "Low-Income Housing within the Traditional Islamic-Arabic City" submitted to the International Conference on "Low Cost Housing for Developing Countries". March 1985, C.B.R.I. Roorkee,India.

> "Education for Conservation of Islamic Architectural and Cultural Heritage "Case Study from U.O.T. Baghdad-Iraq, A paper submitted to the Conference on The Preservation of Architectural Heritage of Islamic Cities" Istanbul, Turkey, April,1985.

> "Commercial Zones within the Residential Districts" in Baghdad City: a pepar in Arabic language sumitted to the IRAQI CONFERENCE ON ENGINEERING ICE 1985. University of Baghdad. December 1985, Baghdad-Iraq.

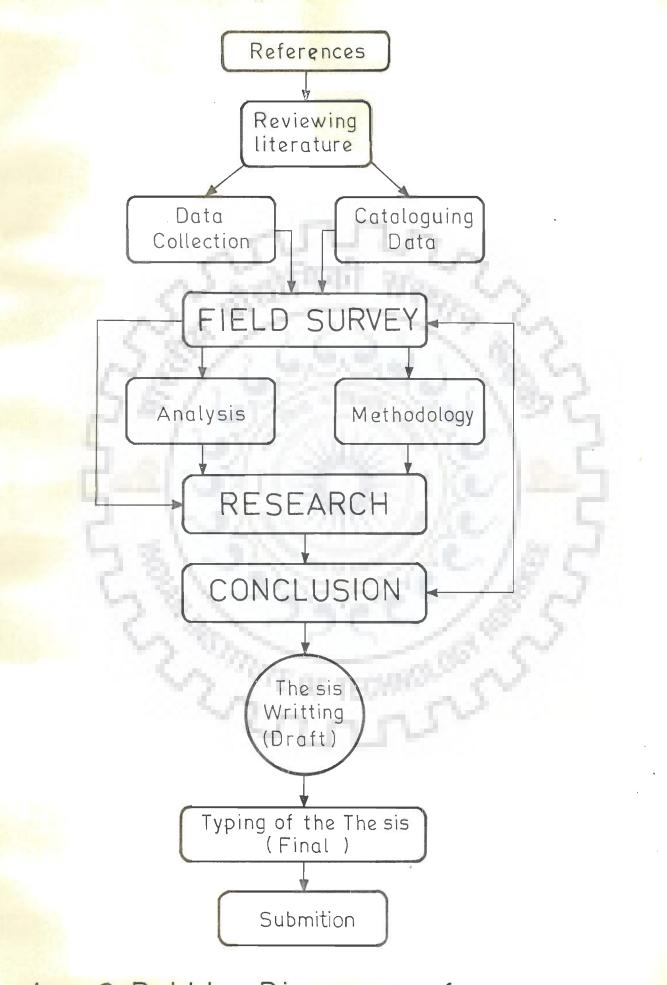
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App. C: Bubble Diagram of

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