

URBAN CONSERVATION IN IRAQ

THE CASE FOR PROTECTING THE CULTURAL HERITAGE OF
IRAQ WITH SPECIAL REFERENCE TO BAGHDAD INCLUDING A
COMPREHENSIVE INVENTORY OF ITS AREAS AND BUILDINGS
OF HISTORIC OR ARCHITECTURAL INTEREST

(THREE VOLUMES)

VOLUME I

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SUMMARY

The first part of this study shows that, although Iraq is fortunately endowed with a very rich and varied cultural heritage, efforts to protect it have been hitherto largely inadequate and unco-ordinated. While the official protective machinery centres its attention on single outstanding ancient and historic monuments and sites, the historic vernacular buildings, groups of buildings and areas - both rural and urban - remain not only badly neglected but are being rapidly demolished. The appalling and increasing destruction of this unique heritage is a serious loss and is, ironically, being caused mainly by official action. The study shows that over twenty per cent of Baghdad's historic fabric has been destroyed since World War 1 through new streets and clearance projects alone. This alarming loss is illustrated by an inventory of some 160 buildings of outstanding cultural interest demolished since 1917.

The second part covers the history and morphological evolution of Baghdad and examines its recent planning and its four existing historic cores namely Rusafa, Karkh, Aadhamiya and Kadhimiya. A detailed conservation field survey was undertaken in the city between 1975 and 1976 which resulted in the identification of 53 archaeological sites and 47 zones of visual interest, in the proposal of 36 conservation areas, and in the selection, grading and documentation of 603 buildings of historic or architectural interest whose records, in Volumes II and III, form the first inventory ever produced for Baghdad.

The thesis concludes, in Part Three, 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. An outline is also given on the necessary amendments to legislation, the introduction of listing, the creation of a conservation authority, the need for a greater allocation of funds and the training of staff for this specialist type of work. Finally, emphasis is given to the ten areas and seventy-one buildings in Baghdad which are under immediate threat and for which urgent action is vital.

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GLOSSARY OF ARABIC TERMS

NOTE: Arabic words marked thus * are primarily of Iraqi usage

Aajur	Bricks
Aazaj	Vaulted ceiling
Abniya	Buildings
Adab	Water-Closet
Alliyat*	Swastika-like geometric ornament elaborated from the Kufic type of Arabic script
Amanat al-Assima	The Municipality of Baghdad
Aqd	Vault, also Alleyway
Araqchin*	Shallow, saucer-shaped dome
Athar	Antiquities, relics
Athari	Archaeologist
Awqaf	The official organisation which administers the property bequeathed by Muslims for charity
B. (or Ibn) ..	The son of . . .
Bab	Gate, Door
Badami*	Almond-shaped ornament
Badgeer*	Air-Scoop, Wind-Catcher
Bait	Home, House
Baladiya	Municipality
Barrani	The disrobing room in hammams
Beer	Well
Binaya	Building
Daka	Dais (raised platform)
Dalag*	Wooden column
Dar	House

Daraj*.. ..	.. ..	Stairway
Darb .. ..	.. ..	Road, Way
Darbouna* .. ..	.. ..	Narrow alleyway
Dariz* .. ..	.. ..	Pointing of brickwork
Dihleez .. ..	.. ..	Narrow corridor or passage
Dinar (Iraqi) .. ..	.. ..	The monetary unit in Iraq (I. D.). In 1972 its value was about £1.2, but is now about £1.8 (1977)
Diwankhana* .. ..	.. ..	Men's section in traditional houses
Dharih .. ..	.. ..	Shrine
Dolan* .. ..	.. ..	Entrance lobby, usually square and domed
Fana .. ..	.. ..	Courtyard
Farshi* .. ..	.. ..	Paving bricks (28 x 28 cms.)
Fasil .. ..	.. ..	Intervalum, Separator
Funduq .. ..	.. ..	Hotel
Fusaifasa' .. ..	.. ..	Mosaic
Ghurfa* .. ..	.. ..	Room
Hammam .. ..	.. ..	Public bath
Haniya .. ..	.. ..	Pendentive
Haram* .. ..	.. ..	Women's section in traditional houses
Haram .. ..	.. ..	Prayers area in mosques
Hasiri* .. ..	.. ..	Herring-bone like ornament
Hawdh .. ..	.. ..	Pool, also the balcony of a minaret
Hibb* .. ..	.. ..	Large water-vessel made of barbotine
Higra (AH) .. ..	.. ..	Islamic Calendar, AH 1 equals AD 622. For conversion the following formula is used: $AD = AH - \frac{3(AH)}{100} + 621$
Hosh .. ..	.. ..	Courtyard

Hosh Murabaa*	..	..	A square peristyle Baghdadı traditional house
Husainiya*	..	..	A building used by Shiı Muslims for prayers and other religious activities
Iqada	..	..	Vaulting
Iqadat Shailman*			Jack-arching: shallow brick valuts between I-section steel joists
Imam	..	..	Saint in Shiı sect, spiritual leader of Islamic community in Sunni sect
Imara	..	..	Architecture
Iwan	..	..	Open porch, normally with a pointed barrel-vault also a room with its main side open to the courtyard of a traditional house
Iwancha*	..	..	A small iwan in traditional houses used as a corridor
Jamı	..	..	Friday mosque
Jawarı	..	..	The inner hot room in hammams
Juss*	..	..	Local plaster used for mortar in brickwork
Kabıshkan*	..	..	A small room at mezzanine level in traditional houses, normally located at the corners
Kanısa..	..	..	Church
Kashi*	..	..	Terrazzo floor tiles
Kashanı	..	..	Glazed tilework (Azulejos in Spanish)
Katıba	..	..	The decorated part of a portal, usually the tympanum and spandrels of the arch
Khan	..	..	Caravansarai, Inn. In towns it is used for the storage of goods and is always located off suqs
Khutba..	..	..	The sermon in Friday mosques
Kufic	..	..	A square, often decorated Arabic script
Lıwan*	..	..	See Iwan. Also used for the iwans of the inner hot-room of hammams
Libbın*	..	..	A mixture of earth and straw used as a roof finish in traditional buildings

Mabain*	..	..	The lobby which connects the diwankhana section and the haram section of a traditional house.
Madina	..	..	Traditional Islamic town
Madrasa	..	..	Islamic religious school
Mahalla	..	..	Traditional residential quarter
Mahfal	..	..	Gallery in mosques
Maidan	..	..	Open-air market or square
Manara	..	..	Minaret
Manzil*	..	..	Hostel
Maqbara	..	..	Cemetery
Masjid	..	..	Mosque
Maskan	..	..	Residence, House
Mihrab	..	..	A niche in mosques indicating the direction of Mecca. In Baghdad it is always placed in the south-western wall.
Minbar	..	..	Pulpit in mosques
Msanaya*	..	..	Embankment on the river
Muhafadha	..		Province
Mujammada*	..		Property whose ownership has been 'frozen' by the government
Muqarnas	..	..	A stalactite-like building technique in Islamic architecture. It is especially used in iwans and pendentives
Musalla	..	..	Prayers area in mosques
Mutbakh	..	..	Kitchen
Naskhi	..	..	A type of Arabic script
Neem*	..	..	Partly-underground cellar
Noura	..	..	Lime
Qabr	..	..	Grave
Qadhi	..	..	Muslim judge
Qahwa*	..	..	Coffee-house

Qala'a	Citadel
Qasr	Palace
Qibla	Direction of Mecca
Qubba	Dome
Raf (Pl. Rufuf) ..	Shelf
Rahrau	Store under the takhtabosh in cellars
Razuna*	Recess
Riwaq	Colonnaded aisle in mosques
Sachagh*	Cresting in traditional buildings in Iraq
Saha	Open square
Sahn	Open court, normally in mosques
Salat	Prayer
Sandug	Box, usually covering a tomb
Saqaya	Water-font in mosques
Shaikh (Sheikh) ..	Title of respect, normally for a distinguished Muslim scholar
Shanashil*	Oriel window
Sharia*	Loading-bays on the river
Sirdab*	Underground cellar
Shithirwan*	Fountain
Siyana	Maintenance of buildings
Sufi	Muslim ascetic or hermit
Suq	Market
Tafsil	Architectural planning
Takhtabosh*	Platform in neem cellars
Takya	Building used by Sunnı Sufıs for prayers and other religious activities (Khanqa in Turkish)

Talar*	..	..	A colonnaded iwan in traditional buildings
Taq	..	..	Arch
Tarikh	..	..	History
Tarma*	..	..	Colonnaded gallery in the first floor of traditional buildings
Tarmim	..	..	Repair of buildings
Tell	..	..	Mound, Hill
Thulth	..	..	Type of Arabic script
Tigha*	..	..	Parapet wall
Tole*	..	..	Stable
Turath	..	..	Heritage
Umbar*	..	..	Store
Ursi*	..	..	Room with a glazed window facing the courtyard of a traditional building. The word is also used for the window
Usta*	..	..	Master Mason skilled in traditional building techniques
Waqf	..	..	Land or property perpetually endowed to Awqaf
Waqfiya	..	..	Legally attested document specifying the waqf property and its conditions if any
Wastani	..	..	Intermediate room in hammam
Zanbour*	..	..	Bottom part of the shaft of a wind-catcher used for cooling water jars
Ziggurat	..	..	Mesopotamian temple, usually a high structure

CHAPTER I

INTRODUCTION

1.1 General

Culture is arguably a manifestation of man's physical as well as spiritual interaction with nature, and that 'cultural property' is essentially the expressive product of such interaction. Cultural property becomes valued, and consequently protected, not only because it provides a physical evidence of the reality of the existence of a bygone culture, but also because it adds to the total body of knowledge about that particular culture and its people.

However, attitudes towards the value of such property differ widely among individuals, groups of people, or even nations. What is regarded of great value to some people or to a particular generation is often dismissed by others as worthless. Conversely, ordinary and common objects today may be considered rarities by posterity. It follows, therefore, that a central question that is bound to confront any protective agency is the problem of choice. What should be preserved and why? Indeed, for a country with a rich heritage, but lacking the technical or financial resources, this problem becomes particularly acute. While it is neither possible, nor perhaps desirable, to protect all cultural property, it is nevertheless submitted here that at least the important are safeguarded and an attempt is made to have adequate sampling and documentation of a wide range of its types.

The reasons for the indifference or attachment to one's heritage are perhaps too varied and complex to define here. They may depend upon such variables as the level of intellectual and cultural development of society, the awareness of one's historical and traditional roots, religious attitudes and dogmas, or even upon what may be termed the 'national psyche' at a particular moment in history. But what is certain, however, is that the loss of much historical evidence means that future generations are deprived of their historic continuity and, consequently, will remain largely ignorant of the richness of their cultural heritage.

Iraq is a land of great antiquity which has endowed it with a rich cultural heritage. Situated in the fertile alluvial plains of the Tigris and Euphrates rivers, it became the centre of several notable Mesopotamian civilisations, namely, Sumerian, Babylonian, Assyrian, Sassanian and Islamic Abbasid. With a largely Moslem population of about twelve millions, it is today one of the important oil-producing Arab countries of the Near East. The capital, Baghdad, is a large metropolitan city of some three million people. Throughout its long and eventful, if not somewhat turbulent, history it nearly always maintained its supremacy as the most important urban centre in the country. For nearly five centuries (AD 762-1258) it became one of the major commercial, intellectual and political centres of the Islamic Empire.

Since the last three to four decades, Iraq has been undergoing several radical socio-economic and cultural changes of far-reaching effects. 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, progress has become socially and culturally associated with Westernisation, and much of the traditional heritage has either been lost or now pejoratively described as 'backward'. However, despite much destruction, enough remains today to warrant serious protective action; and, if such action is not taken soon, the loss of the remaining heritage will not only continue unabated but is very likely to accelerate.

1.2 Definitions

In the context of this study, the word 'heritage' is used to denote the inherited 'immovable' types of cultural property. Therefore, only the physical evidence of history in the shape of archaeological sites, monuments, buildings, rural and urban areas are considered here. Movable cultural property, such as books, manuscripts and artifacts, is regarded as beyond the scope of this research. This convenient distinction is, however, only relative as buildings too can in fact be moved to another site if the need arises.

The welter of currently-used words that are associated with the whole question of protecting the historic environment is rather confusing. These words, which include 'preservation', 'restoration', 'reconstruction', 'anastylosis', and 'conservation', are often freely interchanged, but for the purpose of this study, they are defined as follows.

Preservation: It is taken here to mean the protection of a single monument or a building by measures designed to arrest its decay and 'freeze' its existing state

Restoration: The rebuilding of the missing, or the ruined, parts of a single monument or a building so that it attains its former form

Reconstruction: The complete rebuilding of the whole, or the major part, of a single monument or a building to its original form by using new materials

Anastylosis: The rebuilding of a single monument or a building from its fragmented original elements. In cases where a building has collapsed in such a manner that substantial fragments survive it is often possible by accurate measurements and study to recover its original form

Conservation: The planning, protection and enhancement of a group of buildings or areas of architectural or historic interest. Therefore, conservation can be regarded as a specialised form of planning which deals not only in the restoration of single buildings and the spaces around them, but also involves accommodating new changes in, and physical as well as visual improvements of, the whole historic setting.

1.3 Aims and Limitations of the Study

This study is basically concerned with the question of the protection and planning of the historic environment in Iraq but takes Baghdad as a special case study to focus on conservation in more detail. Baghdad 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 a greater danger of loss.

It attempts to draw particular attention to the destruction and the alarming rate of loss of historic fabric by taking several examples in the country as well as in Baghdad. The study seeks to highlight

these dangers by examining the various factors which have led to such destruction and also by the preparation of an inventory of cultural heritage lost in Baghdad since the end of World War 1.

Because conservation is a relatively recent development in Iraq, this study 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. Its relevance and applicability to the existing traditional madinas is assessed; and a comparative review of its legislative, administrative and financial aspects in several European and Arab countries is made to discover and formulate policies that are suitable in the context of Iraq.

To gain first-hand insight on the state of historic environments in Iraq, many historic cities and archaeological sites were visited during the course of this research, notably Mosul, Arbil, Kirkuk, Hatra, Samarra, Ctesiphon, Babylon, Karbala and Najaf. However, to provide a detailed analysis of the existing historic fabric in Baghdad, a conservation field survey was undertaken. This survey, which was conducted solely by the author over three periods totalling nearly twelve months between 1975 and 1977, was of crucial importance to the case study, it furnished not only the data necessary for the consolidation of the basic argument of the study, but was also used to document over 600 items of the city's heritage. The survey itself was limited to the four historic cores of the city, namely Rusafa, Karkh, Aadhamiya and Kadhimiya.

The availability of a comprehensive inventory of cultural heritage is considered as indispensable to the initiation of conservation policies, and without such a basic tool, these policies would remain largely theoretical, devoid of feasibility, and, therefore, difficult to succeed. Consequently, a major aim of this research was the preparation of such an inventory. Although the inventory forms an integral part of this work, it became too large to include within the text but is found separately in volumes II to III. It is the first time that such an

inventory has been undertaken for any city in Iraq. It was limited to the area within the present municipal boundaries of the city and the selection of items of interest was limited to those built before 1932. The detailed description and bibliographic coverage of each item is largely confined to grades A and B.

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

To develop an appreciation of the philosophy of conservation and a theme of its relevance to Iraq as a country that is rich in heritage but has hitherto taken few steps towards its systematic protection

To determine the factors which have led, and still lead, to the destruction of historic environment in Iraq and to substantiate the findings with an inventory of lost heritage in Baghdad

To examine, critically, the workings and efficacy of the existing protective machinery, and to diagnose the causes that have made such loss possible

To investigate, by means of a field survey, the state of the historic cores of Baghdad, trace their morphological development, analyse their problems and constituent urban and architectural elements, and assess past and present planning attempts which affect them

To select, grade, and document sites, monuments, buildings and areas of architectural or historic interest, and compile the collected data in one systematic and comprehensive inventory

Finally, to suggest feasible measures to stop the destruction of heritage, identify those items of interest that are in particular distress or in immediate danger of loss, and to propose policies and recommendations to document and protect this heritage.

1.4 Importance of the Study

While conservation has been extensively discussed, debated and practised in the West, it remains almost a new concept to the majority of the countries of the Third World. However, the importance and relevance of the idea of protecting and enhancing whole areas or towns of cultural value is slowly gaining some recognition in Iraq. Over the

last few years, studies were made of five historic cities by several foreign planning firms; but due to the lack of adequate basis for implementation, the reports of these studies are now largely shelved. It can be argued that none of these studies was based on an intimate or systematic knowledge of the historic fabric of these cities; nor did they attempt to document the cultural heritage within them. Indeed, only two studies were primarily concerned with conservation, the remaining three treated it somewhat lightly as it formed one part of a larger brief which involved the presentation of a development plan for the whole city.

Although Baghdad has been adequately covered by numerous historical, geographic, housing and planning studies, it has never been comprehensively studied from a conservation point of view. The importance of this study, therefore, lies partly in the fact that it represents the first attempt to study the whole historic fabric of the city; and, partly, in the preparation of two inventories - of the lost as well as the existing cultural heritage in the city - both of which are also attempted for the first time.

It is hoped that the critical analysis of the protective agencies, together with the conclusions and recommendations, will be of value to the Iraqi authorities concerned. In particular, the list which identifies items in distress and in need of almost immediate attention, should help induce quick remedial action. The comprehensive inventory of this study can help those interested agencies and individuals in their efforts to be more aware of the extent and value of their heritage. In addition, it is believed that the coverage in the inventory of a large number of items of vernacular domestic architecture, which are hitherto unprotected under present legislation, should help stimulate an official movement towards their recognition as being an important and integral part of the total body of the heritage of the city.

1.5 Major Sources Consulted

Despite Iraq's prominent position in the art and culture of Islam, there are relatively few documentative studies or publications which deal directly in its historic environment, and this applies equally to

Baghdad. However, there are numerous references and studies which deal indirectly with the subject, they tend to be either limited to outstanding monuments, or too dated and therefore, more often than not, contain accounts of buildings which have long disappeared. Consequently, the majority of minor monuments, urban features such as suqs, and almost all houses remained undocumented. This fact presented some difficulties for the research, especially for the inventory where previously untrodden ground had to be covered.

Of particular interest to this study were the accounts and illustrations of several European travellers, artists and historians, especially since the early decades of the nineteenth century. These are mentioned in chapter VI but outstanding amongst them are the following:

1. Felix Jones's "Memoirs on Baghdad"¹. This work includes the first accurate survey and map of Baghdad (1853). It is still useful for the comprehensive list of names of traditional mahallas and main monuments in the city
2. Massignon's "Mission en Mesopotamie"², 1910, is another interesting source. It is largely based on Arab works and includes several important 'waqfiyas' and accounts of main monuments especially mosques and tombs. It includes a general map of Baghdad but lacks plans.
3. Sarre and Herzfeld's "Archaeologische Reise..."³, 1911-1920, is a monumental work by two methodical scholars. It is of great value for the numerous accurate plans, sections, and other drawings which it contains. However, it is again limited largely to the main monuments of Mesopotamia, especially mosques and churches.
4. Reuther's "Das Wohnhaus in Bagdad..."⁴, 1910, is the published version of a Ph.D. dissertation on domestic architecture in the central region of Iraq. It is of immense value because, until today, it remains the only major reference on this very important but largely overlooked field. It includes a great many plans and other drawings of houses in Baghdad, Hilla and Karbala.

Other important sources of a more recent date include: the Encyclopaedia of Islam⁵; Creswell's "Bibliography of the Architecture, Arts and Crafts of Islam"⁶, Strika and Khalil's article on "Islamic monuments in Baghdad"⁷, which includes several useful and hitherto unpublished plans of mosques and hammams. Some planning reports which were submitted to the Ministry of Municipalities by various planning firms were of interest. These include the various reports and studies on Baghdad by Polservice⁸, a study by "Iraq Consult" and Colin Buchanan and Partners on the conservation of Arbil's Citadel⁹, and a final report by Doxiadis Associates on the conservation of Kirkuk's Citadel¹⁰.

Several other historical studies and researches by official Iraqi agencies or scholars provided valuable background data for this study. These include the following: the "Archaeological Sites in Iraq"¹¹, "Atlas of Archaeological Sites in Iraq"¹², and the annual periodical, "Sumer" (since 1945), all of which are produced by the Directorate of Antiquities, Alusi's original manuscript on the mosques of Baghdad, or "Masajid Baghdad"¹³, its published version. Also the various works of Iraqi historians: Dr. Jawad¹⁴, Dr. Susa¹⁵; Azzawi¹⁶, Aadhami¹⁷; and Durubi¹⁸.

Sources on conservation and on the issues involved in it are too numerous to mention. They were obtained largely from European books, journals and other publications. Sources on the protection of heritage in Arab countries were collected from various Unesco regional reports, Arabic and European periodicals, and from local official publications.

1.6 Methodology

This study is divided into three main parts which total nine chapters excluding the inventory. The first part, which includes chapters II to V, furnishes the background and general data and relates largely to Iraq. Chapter II attempts to explain the various aspects of conservation and its practice in some European and Arab countries. Chapter III briefly reviews the history of Iraq and describes the main

types of immovable cultural property inherited from past civilisations. It shows, by means of several tables and maps, the number and location of important sites, monuments and historic towns in the country. Chapter IV is concerned with the problem of the loss of heritage and discusses the different factors which lead to such a loss. The destruction of historic environment is then illustrated by the tragic example of the pharmaceutical factory in Samarra and also by an inventory of outstanding buildings and monuments lost in Baghdad since 1917.

Chapter V critically examines the work of the various agencies of the protective machinery, including: the Directorate of Antiquities, Ministry of Awqaf, Directorate of Planning, Tourism Administration, research and educational centres. The planning of two historic towns in Iraq, Arbil and Karbala, is examined in more detail.

The second part, which includes chapters VI to VIII, is concerned with the city of Baghdad. Chapter VI provides a brief outline of the historical and morphological evolution of the city and gives special attention to the latter periods of its development. Chapter VII reviews the position of the city today, discusses and analyses the existing four historic cores in detail, and by giving particular emphasis to the destruction of their historic fabric. It also considers the planning of the city and the role of its municipality, Amanat al-Assima. The planning of the historic cores is then assessed and Polservice's Kadimiya conservation study is investigated. Chapter VIII describes the methodology of the conservation survey and the inventory (volumes II-III) which should be read in conjunction with this particular chapter. It explains the criteria followed in listing, grading and other procedures. It also analyses the different urban and architectural elements of the survey including: archaeological sites, conservation areas and zones of special visual interest, and individual items, such as houses, mosques, suqs, hammams and khans.

Finally, the third part contains chapter IX which sums up the findings and conclusions of the whole study and gives general as well as specific recommendations, including a list of buildings and urban items identified by the survey as in urgent need of remedial and protective action.

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PART I
CONSERVATION AND IRAQ

- Chapter II The Concept of Conservation
- Chapter III The Heritage of Iraq
- Chapter IV The Loss of Heritage
- Chapter V The Existing Protective Machinery

CHAPTER II

THE CONCEPT OF CONSERVATION

2 1 Introduction

The most radical development in the planning of historic towns of the West has been the shift of emphasis from the mere protection of single buildings or monuments to the conservation of a group of buildings, whole areas, or even the entire town. In effect, conservation has now come to mean the planning of historic environments. Single buildings and other items of cultural interest are still protected and planned for, but the new approach emphasises their overall character and context.

This comprehensive and integral approach is, perhaps, even more relevant to traditional Islamic madinas where the individual buildings cluster together in such a compact and physically inter-dependent way that consideration of a single structure is often impossible. Even monuments and large public buildings, such as mosques, are, more often than not, sandwiched in a maze of other buildings. Any attempt to 'free' them from their surroundings, therefore, must result in the removal of their context and historic setting. This ill-conceived 'monument-object' approach has recently gained popularity in several Near-Eastern countries such as Syria, Iraq and Iran.

The explosive growth in population and urbanisation, perhaps more than any other phenomenon, characterises the twentieth century. Urbanisation based on industrial growth in Western societies and on a mass rural-urban migration in pre-industrial societies has often resulted in the destruction of much of the historic fabric of towns. In Iraq, modern urban growth based on Westernisation - both in physical and cultural terms - has not only resulted in such destruction but also in the rejection of indigenous architecture and the traditional urban way of life.

During the past two decades or so industrialised societies have witnessed something of an upsurge of interest in the conservation of

their cultural heritage. This interest has developed largely from a general reaction against modern architecture and planning but also from the increasing appreciation that the historic environment is a valuable asset whose loss is irretrievable. The industrial society, whose economy seems to be largely based on growth and material consumerism, has evolved a built environment that is efficiently standardised but rather monotonous and inhumane. This Western but now 'universal' urban style has contributed, among other factors, to the social crisis of modern society. Typical of such reaction was that expressed by the (now defunct) Ministry of Housing and Local Government¹:

"The variegated fine grained texture created by occasional rebuilding of the past is being superseded by larger units of standardized types, for the new building forms and materials of which they are made are ubiquitous. Modern architecture tends to replace buildings for individuals with buildings for masses-housing instead of houses."

The revolt against modern architecture and urban planning in the West should be seen as a part of a greater movement that questions the apparent benefits of fast technological progress. Theo Crosby² attacks the misuse of modern technology as the reason behind the creation of de-humanised environment and states that

"... In such an (industrial) world, the past is an embarrassment - old buildings are therefore considered pretentious and over decorated."

However, apart from these 'negative' reactions, urban sociologists and conservationists stress several positive contributions which conservation makes to society. The historic environment helps to provide a physical link between the past and the present which represents a stabilising factor in a fast-changing world. As Bailly and Debsat³ put it

"(Conservation) is destined to serve as a regulator for civilization, mitigating its stresses and ensuring its continuity, and also as a motor stimulating thought."

Planners have also come to realise that there are other social and psychological reasons for the present popularity of conservation.

Walter Wilson⁴, writing on historic Newcastle, observed:

"Perhaps the essential justification for preserving the distinctiveness of our cities is that we all share a feeling that life would be poorer without it. People fear that places are becoming more and more like other places, that universal concrete and glass are taking the place of richer, more regionally diversified materials, that the intimate nooks and crannies of childhood memory are giving way to windswept and inhospitable spaces which are physically uncomfortable and visually and emotionally unsatisfactory."

Others believe that the desire to maintain the fabric of historic towns draws on deep psychic sources in national consciousness, and on psycho-social forces in a nation's culture that are only partly conscious. Shankland⁵ suggests that when nations of diverse political systems, such as France and Poland for example, embark on costly conservation programmes, it is such sources that are being tapped. Dr. Smith of Sheffield University⁶, observes that human experience is more conveniently associated with physical objects and, consequently, historic buildings provide

"a few still points in the turning world... and to remove them is to subject the (old) inhabitants to a kind of mental amputation. The young have vast recuperative resources, but for the elderly it can be lethal."

While industrial societies are now re-appraising the bases and objectives of their technological development and regretting the high price they have had to pay, the Third World is still 'basking' in the apparent sunshine of westernisation. Iraq and other Arab countries are being stampeded into a Western form of development. In the process, the traditional culture and physical milieu are being rapidly replaced by alien Western models without learning from Western mistakes. Modernisation is wrongly equated with westernisation. The process of modernisation was defined by Bendix⁷ as being

"a type of social change, since the eighteenth century, consisting in the economic and political advances of some pioneering societies and the subsequent changes in follower societies."

Riggs⁸ described it as the process of "emulating the characteristics of another 'superior' culture."

It is evident that the 'superior' culture, at this particular stage in history, is thought by most of the Third World to be that of the West. Accordingly, 'follower' societies, such as Iraq, are now attempting very hard to 'catch up' with this illusive Western level of development. Is it correct to assume that all nations have to follow one standard developmental experience? There is no pre-determined or ideal model for national development because the process involves a considerable degree of choice; different cultures can and should learn from each other but each has to evolve its own model based on its own particular circumstances. The importation of Western technology is perhaps inevitable but it should be selective and syncretive - adapted to suit the needs and cultural traditions of each society.

Indeed, it is ironic to realise that, while Islamic countries are busily destroying their heritage, planners and urban historians in the West have now begun to appreciate the values of the Islamic madina. Bianca⁹, in a paper read at a colloquium on the Islamic city (held in Cambridge in 1976), outlines the general failure of architecture and planning in the West and sees in the madina an alternative solution to today's problems:

"This lack of identification between the (Western) town-dweller and his own town has become a serious problem of modern towns and that is now more important than the technical and organizational questions that used to predominate. . . The traditional Islamic town may be regarded as an almost perfect model of a universal unity made visible through the medium of architecture. . . . I found many things implemented in a quite natural way in the Islamic town which have recently been 'discovered' as new postulates in the modern architecture of the West."

It is unfortunate, therefore, that those who advocate a more careful and selective approach to modernisation should be accused of reaction or conservatism. Planners are often accused of being conservative by those who do not appreciate the deeper insights of conservation. To maintain the historic fabric of towns should not be thought as being inconsistent with change, towns must evolve and renew their cells to stay alive. As Dr. Smith¹⁰ put it:

"The real job of conservation is to ensure that such renewal is consistent with certain fundamental urban values."

Conservationists in the West face a much easier task in comparison with their few counterparts in the Third World. Western societies have evolved the necessary administrative, legislative and financial machinery to ensure the protection of their heritage. The abundance of national and local amenity groups, societies, trusts and various other pressure lobbies have influenced private as well as governmental decisions regarding the built environment. The wider level of civic consciousness and awareness of the values of cultural heritage have led to a wider support from the public.

By contrast, conservationists and planners in Iraq have to deal with a much harder task and also face the torrent of westernisation and its powerful adherents. The apathy towards the heritage, the lack of adequate protective measures, and the almost total lack of civic pressure groups, all help to make their task even more formidable. Moreover, because conservation is largely a Western concept, many Third World planners - who are mostly educated either at Western academic institutions or Western oriented national ones - fall unwittingly into the trap of imitation. John Warren¹¹, an English architect-planner with a wide experience in the Near East, rightly observes that while conservation could be used positively its emulation could be harmful:

"The introduction of Western philosophy of conservation, which is accepted largely without question because of its origin, is in itself a very positive pressure on nations whose whole economy and much of its thought-process is subject to rapid change. Sheer imitation of established Western procedures will sometimes lead an emergent regime to copy - lock, stock and barrel - conservation ideas (and even legislation) based on Western models without serious analysis of their relevance."

Planners should try to reach a fine balance between the many conflicting forces in the historic town, between the desire to maintain its historic fabric and the need to accommodate some modernisation and change. Conservation policies should be formulated to suit the particular conditions of each country while, simultaneously, be adaptable to the different regions within that country. Conservation should be extended beyond historical aesthetics and be regarded as a creative and positive tool of planning.

2.2 Dimensions of Conservation

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

2.2.1 Social Aspects

Because conservation involves the inhabitants of an area, the social implications of implementing a conservation plan should be understood and considered. However, this is not always possible as there is often a lack of communication between the planning authorities and the local population. Consequently, conservation policies in Iraq, for example, are likely to be initially resisted by the local inhabitants of traditional areas because of their fear that implementation will involve the disruption of their small businesses or their removal from the area.¹²

Traditional quarters (Mahallas) in Iraq, which usually contain the most interesting historic parts of the city, are inhabited by the poorest social groups of society. This fact was recently substantiated by a socio-economic survey carried out by Polservice in Kadhimiya, one of the four historic cores of Baghdad¹³. According to this survey, a staggering figure of ninety-seven per cent of the surveyed households belonged to the lowest income-group of less than ID. 50 per month in 1973. These local communities are noted for their deep-rooted distrust to elitist professionals and local municipal authorities. They share a strong feeling of solidarity and mutual co-existence,

usually through ethnic, tribal or sectarian linkages.

It is important, therefore, that planners are aware of the social consequences of their policies; for if neglected or overlooked, they can frustrate any well-intentioned plan.

However, being aware of social problems is not sufficient in itself. The poor population of traditional mahallas can hardly be receptive to the usually bureaucratic plans of municipal authorities. Consequently, it would be vain to attempt to explain the long-term benefits of conservation to such poor and usually illiterate people. A more suitable approach seems to lie in assisting them to rehabilitate their houses and in providing them with the basic necessary infra-structural services. Through active participation in upgrading the physical standards of their environment they should begin to appreciate that conservation also involves modernisation and is not merely concerned with the care of a few historic buildings.

The ever-increasing population and the concomitant shortage in housing can be a potent argument in favour of conservation. The stock of traditional housing, even those of minor 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. This stock 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.

Another difficulty facing Iraqi planners is the fact that conserved historic areas are not yet 'fashionable'. Most Iraqis, especially those of the middle class, prefer to live in the new western-style madinas. They associate traditional mahallas with social and cultural underdevelopment. The traditional house, which has been successfully used in Mesopotamia for millennia, has been socially rejected within the span of a few decades. In contrast, the western-style house, which provides an enclosed

shelter and therefore depends on modern technology to combat the excessive heat, is now socially more acceptable but functionally inferior. Experience has shown that modern technology has its problems also and that it is not the panacea to all the ills of mankind. Urban sociologists in the West are beginning to learn from the wisdom of past generations and the increasing interest in ecology and conservation are a hopeful concern for future generations to come.

It is the moral duty of Iraqi architects, planners and all those concerned with the historic environment, to take the initiative in showing and learning from the mistakes of the West. The value of conservation is aptly described by Shankland¹⁴:

"To any generation, an identifiable past offers a line of communication with others: between the living, the dead, and those still to be born. It provides a reference to previous experience, a reservoir and perpetual source of historical delight, a culture to be accepted, altered, rejected, or rediscovered. A country without a past has the emptiness of a barren continent; and a city without old buildings is like a man without memory."

2.2.2 Economic Aspects

The process of conservation and its implementation must take into account the available economic constraints and resources. Economic pressures are largely responsible for the destruction of much of the fabric of historic towns. The high value of urban land of historic mahallas, due to their central location, has resulted in their gradual replacement by modern and more profitable commercial uses. Because traditional houses in these areas are relatively cheap to rent, they are especially attractive to low-income groups such as workers and rural migrants.

This is particularly true for Baghdad as was affirmed during the conservation survey of this research. One of the most startling findings of this survey has been the high degree of overcrowding in all four historic cores of the city. The author has frequently found out that as many as ten different households live in one large

traditional house, each of them occupying one room which is used for living, sleeping, and sometimes even cooking. Some houses are now occupied by as many as forty or more people, mostly of the young age-groups. The presence of numerous young children, who are forced to use the house as their playground because of the lack of public open space or safe roads nearby, has accelerated the rate of physical deterioration of many a fine house in the city. According to Polservice's survey of Kadhimiya¹⁵, it was shown that forty-six per cent of the total population of the old core was under the age of fifteen years.

The same survey¹⁶ revealed that 40.5% of all houses in Kadhimiya were rented, and the average monthly rent was only about twelve Dinars. However, the larger houses, which are often rich in architectural interest, are usually rented by an agent (Wakil) who, in turn, sublets individual rooms to the poor families and thus makes a profit. With such a low return, absentee landlords are naturally reluctant to repair their buildings and, in fact, the majority 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.

The failure to maintain these buildings regularly leads, in time, to the accumulation of heavy restoration costs which are also increased by inflating labour and market trends. Moreover, the type of materials and high standards of craftsmanship required for such restoration are usually very expensive compared with the costs of restoring more modern buildings. Another serious problem that besets most historic buildings is obsolescence. Obsolescence is a fundamental cause which leads to the neglect, decay and eventual destruction of the historic fabric of towns. Lichfield¹⁷, who was commissioned to prepare a conservation study for York in 1969, distinguished four types of obsolescence:

1. Functional: Where a building has such internal defects in its planning arrangement that it is difficult to use efficiently today;

2. Structural: Where the structure of the building itself is no longer safe,
3. Locational: Where the location of the building is no longer convenient in relation to its external linkages and communication lines rendering it undesirable for any use,
4. Developmental: When the rate of return of developing the site is much higher than that of the existing building thus making it less profitable to restore.

These four types of obsolescence are also relevant to the context of Iraq and, perhaps, are universal phenomena. However, another type of 'social obsolescence' is proposed here to describe the trend in Iraq and elsewhere, when a building becomes obsolete because of its social unfashionability. This is particularly true for Baghdad where the impact of Westernisation has been the greatest in the country. Thus, traditional houses are sometimes pulled down not due to their bad structural condition, for example, but because of the desire of their owners to replace them by Western types. By understanding how and where obsolescence occurs, planners should be able to formulate policies, that are based on social and economic considerations, to combat it.

The economics of conservation has often been approached through the so-called 'cost-benefit analysis'. Ideally, the aim of such a method of assessment is to provide some sort of rationalisation to decision making. Its name implies the comparison of costs against the benefits of conservation. However, it is a relatively recent attempt to introduce a measure of scientific 'objectivity' into fields such as planning. Nigel Stocks¹⁸, realises the difficulties involved in such a method:

"Certain areas of planning and certain types of decision yield more readily to cost-benefit analysis than others... Conservation unfortunately tends to be one of the harder fields for analysis, since it affects in even greater degree than most planning issues so many persons whose actions are difficult to predict, and is beset by 'intangibles' of all kinds."

Cost-benefit analysis should be taken only as a general guide by planners and decision makers. However, in spite of its defects and shortcomings, it does represent one way by which conservation could be evaluated. To illustrate this methodology, the following is an outline of the sort of costs and benefits that are likely to be involved in conservation:

a) Costs

1. Costs of restoring economically obsolete buildings:

As was indicated earlier, historic urban cores have become economically attractive because of their central location. A property is prima facie ripe for development when the value of its land alone is equal or greater than the value of the land and the building on it. However, this formula is purely economic and does not take into account the value of the history or architecture of the building in question. This represents one of the more important 'intangibles' of conservation. Berg¹⁹ argues that the difference in costs between the restoration of old buildings and the construction of new ones is generally in favour of the old ones. He correctly observes that, although for example restoration costs look higher than construction costs, it should be noted that restoration costs are in fact costs of postponed repair works.

It is of interest to note that fortunately the majority of vernacular domestic architecture in Iraq employed standardised architectural features by using a modular constructional technique. This is clearly seen in oriel windows (shanashils), internal 'ursi' windows, wooden columns and their muqarnased capitals. This is of significant importance because it means that such architectural features can be freely interchanged and cheaply mass-produced by local conservation workshops. Local authorities and protective agencies should collect such discarded material when demolition takes place to create a materials bank for restoration work.

2. Costs of Environmental Improvements: These are costs incurred by public authorities to improve a declining area of architectural or historic interest. These include the costs of piecemeal redevelopment, introduction of modern infra-structural services, removal of eye-sores and the upgrading of the visual standards of the environment.
3. Costs of Disturbing the Social Fabric: The implementation of conservation policies can sometimes cause considerable inconvenience to the local inhabitants of an area. It can result in the temporary displacement of some of its population, and it can force up the rents which results in distressing the poor and smaller businesses. These low-income groups may again be penalised because, if they opt to live in the suburbs, they would have to pay higher fares for journeys to work.

b) Benefits

1. Retention of the Historic Fabric: The conservation of an area results in the retention, restoration and enhancement of as much historic evidence as possible. The benefits of extending the life of buildings of cultural interest relate to the very essence of conservation and have been dealt with earlier. It remains very difficult to assess the value of history or architecture in a building in quantitative terms.
2. Improved Quality of the Environment: Because conservation is concerned with whole areas and environments, its benefits are extended to a larger number of people and buildings compared with restoration, it results in an overall physical as well as visual improvement in the quality of the environment.
3. Attracting Tourism: Tourism plays a major role in the economic life of many countries. Tourists are especially attracted to areas of cultural interest and because of the money they spend, they can have a direct impact on the revival of a declining area. Municipal authorities are also encouraged to protect and restore their historic buildings.

Tourism can also bring many other advantageous spin offs such as the revival of traditional skills and crafts. However, tourism needs careful and sensitive planning because, if it is allowed to grow into mass tourism, areas of cultural interest are likely to be over-exploited by intensive commercial development which has been shown to have a detrimental effect on the quality of the historic environment.

In conclusion, decision analysis and conservation do not lie easily together and considerable thought, research and experimentation are still required.

2.3 Traffic and Conservation

The rapid and often sudden re-shaping of historic towns has been largely caused by modern technology. Perhaps more than any other technological innovation, the motor car has been, and still is, responsible for the outright destruction of much of the fabric of historic areas. It has become the principal means of transport of humans and goods. Its popularity is mainly due to its - hitherto unsurpassed - convenience in providing a door-to-door service. It has also become a status-symbol giving its owner a false sense of freedom and power. The following quotation is taken from a statement by the Steering Group which reviewed the now famous report of 'Traffic in Towns' (1963) to illustrate the prevailing attitudes of planning towards the car²⁰:

"... We regard (the car) as one of our most treasured possessions or dearest ambitions, an immense convenience, an expander of the dimensions of life, an instrument of emancipation, a symbol of the modern age. To refuse to accept the challenge it presents would be an act of defeatism."

During the last two to three decades, urban planners and engineers were largely preoccupied in traffic and road construction. Until recently, urban planning was regarded merely as a section of road planning in Iraq. The provision of the maximum possible space and accessibility for the motorist became a primary consideration to most

planning authorities throughout the world. It was this motorist's perfectionist ideal that caused the destruction of much historic fabric of towns by driving through them many new roads. This unfortunate but disastrous approach to planning is now being re-assessed radically in the West. Lloyd²¹ shows the dangers of its pseudo-scientific basis and calls for a reversal of policy:

"Traffic engineering and road design have, for far too long, been based on so-called 'optimum' forecasts for future traffic. This 'scientific' approach is based on the fundamental assumption that traffic should, if possible, never be held up but always flow freely... New roads are undoubtedly needed for these towns but they should be designed for minimum rather than maximum standards, with traffic light intersections rather than large roundabouts - with the necessary acceptance that traffic enters historic towns on sufferance."

Most historic towns are today surrounded by a much larger modern city but continue to function as the centre. This often means that the greatest proportion of commercial and administrative uses, which usually attract and generate a relatively large volume of traffic, are established within this centre. In addition to this local traffic, these vulnerable historic centres have to accommodate a large volume of through traffic because of the inadequacy or non-existence of suitable alternative routes. This results in frequent traffic jams, blocked streets and general environmental deterioration.

Short-term or ill-advised traffic measures often result in traffic increases, both in volume and in speed, which lead to more noise, pollution, and physical damage to historic buildings. A dilemma is thus created by attempting to reconcile what is basically irreconcilable - the historic town and the motor car. Wood²², as planning officer for the historic town of Norwich, explains his experience in this particular problem:

"The effects of unrestricted traffic in historic cores, and the attempts to impose traffic conditions, therefore, led to a situation where no-one is winning. Old buildings are lost through road widening and other projects but the motorist continues to be frustrated because the increase in traffic volume makes it difficult for him to reach his objectives. Public transport services cannot be operated successfully because all types of traffic are attempting to use a limited amount of road space."

The imposition of modern technological traffic techniques on historic towns by planners was a major blunder. By their characteristic pedestrian layout and human-scale, historic areas are obviously more susceptible to damage by modern development than modern forms of settlement. The Arab madina is arguably even more vulnerable to such damage than the Western town because the imposition of Western technology on the madina has been more sudden, more rapid and more ruthless. This will be shown in more detail in Chapter VII.

The recognition of the limitation of an area to accommodate traffic was an important first step towards a more rational approach to planning. The concept of 'Environmental Capacity' was defined by Buchanan²³ as the "capacity of a street or an area to accommodate moving or stationary vehicles having regard to the need to maintain the environmental standards." His fundamental assumption that accessibility of vehicles and environmental standards are inversely proportional is even more relevant to historic streets or areas than modern ones. In his attempt to quantify environmental standards, a points system²⁴ was used that involved four factors: safety, comfort, convenience, and appearance. As a solution, the technique of 'Environmental Management' was proposed to protect areas against environmental damage by preventing extraneous traffic as well as the re-organisation of internal flows so that such damage is kept to a minimum.

The traffic planning of most European historic towns is now largely based on limiting the accessibility of the car, especially in those places that are designated as 'Conservation Areas'. Pedestrianisation schemes in such areas and elsewhere have in fact proved so successful that the turnover of many shops within them has actually increased²⁵. However, some vehicular penetration in these areas is necessary for servicing and emergencies such as fire-fighting and ambulances. Important commercial streets could be serviced at limited hours only.

Iraqi and other Arab planners should learn from these recent hopeful developments in the West and avoid its costly past mistakes; sheer imitation is harmful and, therefore, innovative experimentation and ingenuity are perhaps the only effective way by which they can develop successful solutions. The most appropriate measures for a particular madina will ultimately depend upon its own particular circumstances. However, all historic madinas need a special sensitivity in the planning of their vehicular traffic because of their special vulnerability to vehicular intrusion. In the words of Sharp²⁶:

"Years ago we planners used to think in terms of planning our towns to meet the needs of traffic. Such town planning would be madness now: we must plan and control the traffic to meet the needs of the town."

2.4 Administrative, Legislative and Financial Aspects

To implement conservation policies, an administrative agency, backed up by effective legislation and adequate financial resources, is a prerequisite. The basic objectives of such a protective agency may be grouped under three general headings:

1. To select, grade, list and document the cultural heritage,
2. To vigilantly and regularly inspect this heritage, enforcing appropriate penalties against infringements, and,
3. To plan and implement the conservation and enhancement of this heritage.

In many countries, however, such an administrative agency does not exist on its own, the responsibility is usually shared amongst several independent agencies. This often causes an unnecessary duplication of effort and even disputes, because each agency has not sufficient authority in relation to the others. Moreover, some countries, such as Iraq, do not have adequate legislation nor any kind of listing and grading system to be able to identify and protect their heritage methodically and effectively.

The purpose of any legislation is basically to provide the powers that are necessary to enforce and regulate a given policy. In conservation, policies designed to protect and enhance the historic fabric of an area are often rightly linked to urban planning legislation. To work effectively, such legislation should consist of the following main provisions:

1. To allow the intervention of planning authorities to carry out conservation programmes,
2. To prevent the thoughtless alteration, damage or destruction of heritage by appropriate development control measures; and,
3. To provide adequate financial incentives or reliefs to privately-owned listed buildings.

The protection of a nation's heritage is clearly a national responsibility and should, therefore, be administered and legislated for as such. This is not to mean that conservation can only be effectively carried out by a central machinery, local authorities should also be actively involved in the decision-making process and the planning of their areas. Unduly authoritarian decisions can jeopardise conservation in local areas. However, when local authorities lack the basic essential technical expertise and skilled manpower required in conservation - as is the case in Iraq - the centralisation of planning is perhaps the only available alternative in the short run. The following is a brief review of how conservation is being tackled in some European and Arab countries. Iraq is excluded here as a more detailed analysis of its protective system is found in Chapter V.

a) European Countries

2 4.1 United Kingdom

Conservation legislation in Britain has often been praised as leading the world, and the enthusiastic involvement of the public through hundreds of amenity societies and other private pressure groups is an admirable feature. The interest in heritage goes back to 1877 when William Morris founded the Society for the Protection of Ancient Buildings. Since then, numerous administrative and legislative measures have been introduced to further protect the national heritage. These include: the Ancient Monument Acts of 1882 and 1900 which now protect some four hundred non-inhabited ancient monuments and provide an annual public fund of one million pounds²⁷, the Town and Country Planning Act of 1944 which empowered Ministers to compile a list of historic buildings and resulted in listing some 235,000 buildings by 1974²⁸, the Historic Buildings and Ancient Monuments Act of 1953 which established special councils to administer grants to listed buildings, and the Civic Amenities Act of 1967 which introduced the concept of 'Conservation Areas' and resulted in the designation of 3,165 by 1974, of which 135 (five per cent) were considered to be outstanding²⁹. It also introduced the concept of enhancing an area as well as conserving it.

The Secretary of State for the Environment has a duty to 'schedule' monuments and other structures of national cultural interest. On the other hand, occupied houses and ecclesiastical buildings are not scheduled but listed. It took the Investigators from the Department of the Environment some twenty-three years to survey the whole country for buildings of cultural interest. Included in this list are all buildings built before 1700 and most Georgian buildings (1700-1840), those between 1840 and 1914 of definite quality, and exceptional buildings built after 1914, while those erected after 1930 are not eligible. The Statutory List classifies these buildings into two grades: Grade I, of outstanding interest, and Grade II, of special interest. The List is being constantly revised and extended. Its annual increase between 1970 and 1973 was about 25,000 buildings which represents an

average of twenty per cent.³⁰ However, it is estimated that some two hundred listed buildings are lost annually but the number has recently diminished³¹.

It is of interest to note that although churches are listed they are not subject to protection by the existing legislation. Famous churches like St. Paul's and York Minster were able to raise three and two million pounds respectively by major public appeals. Such massive national support is obviously not possible to the hundreds of smaller, but still listed, churches. Another anomaly is the rather ludicrous taxation system which applies 'Value Added Tax' of eight per cent on all repair work on listed buildings and even on sub-standard houses. Ironically, this levy is not applicable to new construction and acts, therefore, as a deterrent to owners from adequately maintaining their existing buildings

Central government grants are made available through Historic Buildings Councils and given to outstanding buildings and areas. Since 1953, a total of over twelve million pounds has been offered in grants³². These Councils and local authorities combine in a system of 'Town Schemes' where they meet fifty per cent of the cost of repairs for buildings which do not individually qualify for a national or local grant. In addition, the Local Authorities (Historic Buildings) Act of 1962 empowers local authorities to make discretionary grants and loans for listed buildings. Grants and advice are also given by many private organisations such as the National Trust, the Pilgrim Trust, and the Historic Churches Preservation Trust. It is estimated that the total annual expenditure by all public and private funds, except the National Trusts, was in the region of three point five million pounds in 1974-75³³.

There are perhaps more private organisations involved in conservation in Britain than anywhere else in the world. The National Trust (England and Wales) was founded in 1894 and now cares for some three thousand buildings and one hundred and thirty thousand hectares of land³⁴. It is exempt from income tax and estate duties on gifts. It is now the largest landowner in the country. The Civic Trust, which was founded in 1957, co-ordinates the activities of over 1,100 local amenity societies in the country.

2.4.2 France

Since the appointment of its first Inspector-General of Historic Monuments in 1830, France has been actively involved in the conservation of its heritage. Its protective legislation is comprehensive and includes: the Historic Monuments Law of 1913 which controlled a limited number of important monuments but was later amended to include a much larger number of classified buildings, the Sites Law of 1930 which protected rural and urban sites of cultural interest including landscapes and parks, and was later augmented by the revolutionary concept of 'Protected Zones' in 1945 which provided for a protective circle of up to five hundred metres in radius around classified monuments, and the famous Malraux Law of 1962 which provided for the designation of special areas followed by the preparation of obligatory schemes to implement 'action areas'.

The French legislation is noted by a characteristic State intervention and control. Both the listing of monuments and the designation of conservation sectors are administered centrally which, according to Rodwell³⁵, seems to have resulted in using the best national expertise to protect the heritage in all parts of the country. The protective administration is shared between the Ministry of Culture and the Ministry of Housing. Grants are statutory: for the 12,000 'classified' monuments, a minimum of fifty per cent grant, tax exemptions and a Value Added Tax reduction, for the 18,000 'listed' monuments, a ten to seventy-five per cent grant and tax exemptions. The total annual expenditure on historic monuments is estimated at 230 million new francs (£1 = 11.1 nF in 1975). Between them, the two Ministries spend an annual sum of 31 million nF on sites, zones and protected areas. In addition, an average of 37.5 million nF was spent annually on a bout a hundred State and municipal properties over a ten year period (1962-72)³⁶. In contrast to Britain, public involvement in conservation is virtually non-existent in France, nor is there a national inventory of cultural heritage³⁷.

2.4.3 Italy

Italy is perhaps endowed with more architectural heritage than any other European country. Its protective legislation, which began in 1892 when the various laws of the old States were confirmed and a Commission for the preparation of a national inventory was appointed, includes: Law (1479) of 1939 which protects historic urban sites and refers to them as "urban areas of special interest by reason of their aesthetic value"; Law (1089) of 1939 which deals in the classification of national monuments; various Laws, passed between 1942 and 1968, which provide for development controls in historic urban areas, a succession of special Laws for the protection of specific historic towns, such as Venice, were passed between 1953 and 1972, and Law (865) of 1971 which facilitates rehabilitation schemes for low-cost housing in historic centres³⁸.

A circular by the Ministry of Works in 1967 defined conservation areas as "urban structures in which the majority of quarters comprise buildings built before 1860, even if none of these buildings in them is of special artistic merit".³⁹ Public grants are also statutory. Under the 1961 Law, a maximum of fifty per cent grant is made available to listed buildings. The average annual expenditure on State-owned monuments was 4,250 million Lire (£1 = 1,620 L in 1975), and 6,000 million Lire on privately-owned buildings⁴⁰. The Italian protective machinery is shared between the Ministry of Education, the Ministry of Works and Planning Authorities.

Generally, the Italian public's involvement in conservation has been rather scant, but the foundation of Italia Nostra in 1954 was an encouraging start. It has recently become an important pressure group with over a hundred local chapters and a membership of twenty thousand in Italy and fifty thousand abroad⁴¹. The serious threat to Venice has also aroused Italian public opinion and attracted considerable world-wide interest in saving it from being submerged.

2 4.4 Sweden

Sweden can justifiably claim to be the pioneering country in the world as far as conservation legislation is concerned. Its legislation goes back to 1630, when a Royal Proclamation established the office of the Curator of National Antiquities⁴². In 1666, another Proclamation protected historic monuments, and in 1752 a supervisory office for state-owned monuments was created⁴³. However, its more recent legislation includes a Proclamation in 1920 on the listing of buildings; the Ancient Monuments Act of 1942 provided for an inventory of all archaeological sites and remains, the Historic Buildings Acts of 1942 and 1960 provided for listing privately owned monuments and the protection of their surroundings, and the Nature Conservancy Act of 1964 provided for the protection of outstanding landscapes and parks and an inventory.⁴⁴

Financial grants are provided from the State and Local Authorities. An average sum of over twelve million Kroners (£1 = 10.25 K in 1975) is being spent on conservation, including one million Kroners from a national conservation lottery⁴⁵. Another interesting idea was the formation of a company to carry out restoration in Old Stockholm. The 1963 Act of Old Stockholm enabled the municipality to buy the sites and rent the buildings on long-term leases that stipulate the use of the restored buildings. The price paid for the site enables the owner to defray the cost of restoring his property⁴⁶. Moreover, because the rent charged is quite low (often no rent at all is paid during the first ten years), the owner has ample time to write off restoration costs. The involvement of public authorities with private property offers an example that could with advantage be used elsewhere, especially in countries which foster collective ownership of land.

The national inventory includes more than 500,000 sites of archaeological interest, 330 state-owned monuments, 260 privately-owned monuments, and over 3,000 churches⁴⁷. The Swedish public is actively involved in conservation. There are numerous amenity societies and pressure groups throughout the country.

b) Arab Countries

2.4.5 Syria

Syria's cultural heritage is considerable as well as varied. Like other Arab countries, the protective machinery consists of a Directorate of Antiquities, a Ministry of Awqaf, a Ministry of Tourism, and the Planning Authorities. Its legislation is relatively recent compared with European Countries. In 1947, an Antiquities Act (89) was passed to protect both movable and immovable cultural property. Because it was only concerned with ancient and outstanding monuments, it has recently been superseded by a new Antiquities Act (222) of 1963⁴⁸. This new legislation provides, inter alia, for the statutory protection of buildings which are older than two hundred years, and also those of a more recent origin if they possess certain artistic or historic significance. The concept of protecting areas as against single buildings was introduced in clause 8 of the first section. It obliges all planning and municipal authorities to protect areas of historic or architectural interest within their boundaries, and also that master plans should be approved by the Directorate of Antiquities.

The Act calls on all the relevant authorities to designate such areas of cultural interest and work towards their enhancement⁴⁹. It also provides, in general terms only, various development controls to ensure the harmony of modern development with the character of these protected areas. Old Damascus is protected under specific legislation. This consists of a Proclamation of the Executive Bureau (No. 67) of 1972 and another one issued by the Governorate of Damascus (No. 2424) of 1972⁵⁰. The latter Proclamation includes, for the first time, specific and detailed development control measures such as infill policy and supervision. However, Aleppo and many other historic cities in the country are not covered by similar specific legislation.

Syria is perhaps the only Arab country that provides grants for the restoration of privately-owned buildings of cultural interest.

The Act⁵¹ vaguely allows the Directorate of Antiquities to contribute an unspecified part of the costs of restoring such buildings; but for state-owned buildings, it specifies a grant of fifty per cent to the governmental owner. The penalties against infringements are relatively light and have proved largely ineffective: Clause 75 calls for the imprisonment of between one month and three years and/or a fine of 250 to 10,000 Syrian Liras (£1 = £S 6.46 in 1976) against those who carry out unauthorised alteration, cause damage or demolition of a protected property.⁵²

The destruction of vernacular architecture, especially houses of architectural or historic interest, continues unabated. In 1953, the Damascus National Museum published a list of some fifty private houses dating back to the eighteenth century. Some of these houses, which are supposed to have been protected, were demolished or sold to tourists, who dismantled the valuable fabric and shipped it abroad. A current list of seventy-five large houses is being maintained by the Museum of Popular Arts and Traditions. Recently, the Directorate of Antiquities acquired fifteen houses and madrasas, which it is restoring and converting into museums and artisans' workshops.⁵³

The planning of Syrian historic towns has been rather ill-advised and insensitive. According to Cantacuzino⁵⁴, Aleppo has been seriously damaged by several bad master plans. In 1952, a plan, prepared by Gutton, resulted in the driving of two major roads through the old town. Another plan, prepared by Banshoya of Tange, not only completed Gutton's earlier proposals for new roads through the historic town, but proposed even more new constructions within the old town. More seriously, only khans and minor mosques are being allowed to retain their original 'hugger-mugger' setting; the more important monuments and buildings are to be subjected to the now familiar but deplorable process of 'freeing' such buildings from their surroundings.⁵⁵ Experience shows in Syria that, by itself, good legislation is not sufficient, it must be backed up by many other equally important measures and by the will to protect the heritage.

2.4.6 Morocco

Morocco is endowed with a particularly rich Islamic cultural heritage. Its experience in conservation goes back to the early decades of this century. Thanks to a few enlightened Frenchmen, notably, Lyautey and Prost, several innovative architectural and planning policies were formulated in 1910 to safeguard its traditional madinas⁵⁶. Basically, these policies were designed to separate Western-style modern urban growth from the old madinas of Morocco (and of Tunisia) thereby protecting their historic character. Consequently, many historic towns, such as Rabat, Meknes and Fez, were able to maintain their historic fabric almost intact. It was only after the advent of mass tourism in the 1960's that these towns began to be rapidly changed by intensive commercial development. In 1912, Lyautey established a 'Service des Beaux-Arts et des Monuments Historique', and he was the first to introduce the idea of conserving whole areas rather than single monuments - at a time when no such legislation existed in France⁵⁷.

The protective machinery is shared mainly between the 'Services des Monuments Historique et due Folklore' of the Ministry of Culture, the Ministry of Habous (Awqaf), and the Planning Authorities. As in most other Arab countries, the Awqaf has not shown active interest in protecting its cultural property and the 'Services des Monuments' is empowered to acquire any neglected or redundant waqf property⁵⁸. In an article on restoration in Morocco, Roditi⁵⁹ observes various problems arising between the Ministry of Culture and local municipalities to which many secular buildings belong. Historic madinas, such as Rabat, are considered to be the responsibility of the Rabat Municipality. The inadequacy of local financial and technical resources has made such responsibilities rather difficult to manage. In conclusion, Morocco can be justifiably regarded as one of the leading Arab nations in conservation. It has already started preparing its first national protective inventory of cultural heritage⁶⁰.

2.4.7 Libya

The cultural heritage of Libya, especially rich in Roman and Islamic monuments, has been relatively better preserved than those in other Arab countries. This is because Libya is a large, underpopulated⁶¹ and mostly underdeveloped country. A high population density results usually in overcrowding, substandard housing in historic areas, and in a sharp demand for a more intensive form of modern development. Another contrasting feature is Libya's ability to meet the financial resources which would be required in future conservation programmes.

The protective machinery in the country is shared mainly between the Department of Antiquities and the Awqaf. The legal framework for protection is provided by the Antiquities Law (No. 40) of 1968. However, according to Abd al-Haq⁶², who is a Unesco consultant in conservation, this Law has several serious defects: the omission to protect areas of architectural or historic interest; its imprecision regarding the preparation of the proposed inventory, and the marked difference of the proposed inventory to the small inventory which has been already prepared by the Department of Antiquities.

Realising the need to protect the historic madina of Tripoli, the Libyan government set up a standing committee in 1974 to study the madina and prepare a conservation plan for its future. The committee included representatives from the Ministry of Housing and Public Works, Awqaf, General Board of Tourism, and the Faculty of Architecture of the University of Tripoli⁶³. Libya's attempt systematically to conserve its heritage is only a recent development and, consequently, she lacks the necessary technical resources and expertise. Foreign assistance will be unavoidable in the short and medium term.

TABLE 1 Comparative Aspects of Conservation in Some European and Arab Countries

Aspects of Conservation	European Countries				Arab Countries			
	Britain	France	Italy	Sweden	Syria	Morocco	Libya	Iraq
Date of earliest protective law	1882	1830	1892	1630	1947	1912	1968	1923
Legislation on monuments and archaeological sites	x	x	x	x	x	x	x	x
Legislation on historic areas and towns	x	x	x	x	x	x		
Legislation on rural areas and landscapes	x	x	x	x				
Legislation on individual towns			x	x	x			
Protective zones around monuments and sites		x						
Tax reliefs and/or grants to owners of protected houses	x	x	x	x	x			
National inventory	x		x	x				
Listing and grading	x	x	x	x				
Special traffic controls in historic towns	x			x				
Active public participation	x			x				
Availability of amenity groups	x	x	x	x				

2.4.8 Conclusion

With the exception of a few isolated examples, the protection of heritage has not yet been fully appreciated by Arab governments. For several decades, the national protective machineries have been governed by nineteenth-century ideas of restoring single items; caring for outstanding monuments and archaeological sites and finds, but seldom showing a similar concern for historic areas or towns. A primary task is to convince these authorities to adopt conservation as an integral part of town and country planning. Hitherto, Arab planning authorities have been not only largely ineffective in protecting madinas, but often responsible for the destruction of much of their historic fabric. This explains the fact that, in almost every Arab country, the principal protective agency is the 'Directorate of Antiquities' and not the planning authorities. Similarly, the Awqaf has been instrumental in the neglect and destruction of many historic mosques.

In contrast to Europe, Arab conservation legislation remains largely preventative - offering little, if any, incentive for private owners to restore their historic property. Another primary task, therefore, is to change the existing legislation from 'passive' to 'active'. This means the compensation of private owners for the legitimate controls which such legislation imposes upon them, through adequate tax concessions and grants to cover the cost of restoring their property. Inter-Arab co-operation in conservation remains at a minimum level. Recently, however, the Organisation of Arab Cities, the Association of Arab Engineers and the Organisation of Arab Antiquities, have all expressed their interest in Arab heritage by passing many resolutions. It remains to be seen whether the words are matched by deeds. In a cynical article on the future of old Sana'a Mullins⁶⁴ observes pessimistically:

"To a European, the word conservation generally means 'safeguarding objects'. To an Arab, if the word means anything at all, it means 'safeguarding a way of life'."

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CHAPTER III

THE HERITAGE OF IRAQ

3.1 Historical Background

The ancient name of 'Mesopotamia' was first coined by the Greek historian, Polybius (second century BC), to describe the fertile area enclosed by the rivers of Tigris and Euphrates¹. Most of this area is now within the boundaries of Iraq. The great antiquity and richness of Mesopotamia's Pre-Classical civilisations have led many eminent historians and archaeologists to call her the 'Cradle of Mankind'. According to Moortgart², she "appears as the major centre of artistic and, more broadly, of cultural irradiation of the ancient Near East".

The existence of pre-historic cultures (600,000-3000 BC) is evidenced by the numerous sites in northern Mesopotamia which belong to this period. Between 7000 and 5000 BC, this region witnessed the momentous transition from food gathering to food production³. The Chalcolithic period (5000-3000 BC), which some archaeologists call 'Proto-History', is usually identified by the different types of pottery from each of its five sub-periods (Table 2). Around 3000 BC 'Proto-Literate' villages began to develop into small urban settlements in southern Mesopotamia. This was followed by the 'Early Dynastic' period (c. 2700-2400 BC) which witnessed the invention of writing by the Sumerians and the development of numerous independent City-States, such as Ur, Lagash and Uruk. The Sumerian civilisation was interrupted by successive invasions from the Akkadians and the Gutis. However, by c. 2100 BC, they were able to revive their former power, reaching their cultural peak in the city of Lagash under the famous ruler, Gudea⁴.

By 2000 BC, the Third Dynasty of Ur was overthrown by an alliance between the Semitic Amorites and the Persian Elamites. The Amorites founded their own City-States which included: Isin, Larsa, Ashur, Mari and Babylon. Led by the 'Law-giver' Hammurabi (1792-1750 BC), the

First Babylonian Dynasty united the entire region under its rule. But his death was followed by a rapid disintegration of his kingdom and, when the Hittites captured Babylon in c. 1600 BC, it had fallen to the rank of a minor city. The Hittite occupation was short-lived and Babylon was soon controlled by the Kassites who made Kuri-galzu (today's Aqarquf) their capital. They seem to have been culturally inferior to the Babylonians and their five hundred years of domination has yielded little impact⁵. Even their ziggurat at Aqarquf (thirty kilometres west of Baghdad) is not considered by archaeologists as being a typical Kassite monument, but one belonging in the mainstream of Sumero-Babylonian architecture⁶.

Meanwhile, the Assyrians, who were a race of tough warriors from the northern mountains of Mesopotamia, were gradually growing in power. It was not until 1350 BC, however, that Assyria began to enjoy its first independence from her former masters, the Hurrians. From c. 1200 to 612 BC, she played the main role in the history of the whole Near Eastern region, and reached its peak of power under the leadership of King Tiglath-Pileser I (1115-1077 BC). Other notable kings include: Assur-nasirpal II, Shalamansar III, Sargon II, and Ashur-banipal (668-626 BC) who founded the celebrated library that included the Babylonian Epic of Gilgamesh, now at the British Museum. The Assyrian Empire was destroyed by the united armies of the Babylonians, Medes and Scythians, who finally sacked Nineveh in 612 BC (Table 2).

The fall of Assyria brought new hopes for Babylon. Under Nebuchad-nazzar II (605-562 BC), Babylon became, once again, a great capital. He expanded the Empire by defeating the Egyptians in Karkamish in 605 BC, and by destroying Jerusalem in 586 BC. Babylon itself was rebuilt and enlarged to cover an estimated area of more than 1,000 hectares⁷. However, Aristotle⁸ gave the impression of a much larger area when he said that, at the time of its capture by the Persian King Cyrus in 539 BC, "It was three days before a part of the City was aware of the fact. . ." It was reduced to a mere province of the Persian Achaemenid Empire and was again sacked by Xerex in

485 BC. Its remains are considered today as one of the most important ancient sites in the Near East (Table 2).

Led by Alexander the Great, the Greek armies defeated the Achaemenids in 331 BC near the city of Arbela (today's Erbil). The death of Alexander in 323 BC in Babylon, which he had made his capital, was followed by the succession of Selucus. In 274 BC, the Selucids founded their capital, Selucia, whose remains can still be seen near Ctesiphon. The Hellenistic domination of Mesopotamia was ended in 126 BC by the Persian Parthians, who ruled it - save for two interludes of Roman occupation - until they were themselves subdued by the Sassanids in AD 227. The Sassanid period witnessed a bitter struggle with the Byzantians in northern Mesopotamia that lasted four centuries. At Ctesiphon (thirty-five kilometres south-east of Baghdad), the remains of a magnificent palace and an arched thirty-metre-high iwan show their considerable achievements in art and architecture. They ignored the summons to embrace Islam and were defeated by the Arabs in AD 637 (Table 2).

During the reign of the second Arab Caliph, Omar (634-644), all of Mesopotamia was conquered and became known as 'Iraq'. Here the Arabs founded two new cities: Basra and Kufa, which became the capital of Islam under the fourth Caliph, Ali. In 747, the Abbasids (who derive their name from 'Abbas' - an uncle of the Prophet) overthrew the Umayyad Caliphate of Syria and established their brilliant Caliphate in Iraq. The Round City of Baghdad was founded in 762 by the second Abbasid Caliph, Mansur. After the first three centuries, the Abbasid Empire began to be weakened by many local secessionist movements. By the end of the ninth century, the Caliphs relied mainly on foreign Turkish mercenaries to protect their seat. This caused a hostile reaction from the Arab population and led the Caliph Mutasim to shift the capital to the newly-built city of Samarra in 836. However, the use of Samarra as the capital lasted only another fifty-six years (836-892) after which the Caliphate returned to Baghdad. As only a few Abbasid monuments remain in Baghdad today, Samarra shows their architectural and town planning genius more convincingly. After being controlled by

the Persian Buwaihids and the Turkish Seljuqs, the Caliphs regained their power around the end of the twelfth century. This latter renaissance is now immortalised by two superb madrasas in Baghdad: Sharabiya (built in 1226) and Mustansiriya (1234).

The Abbasid Caliphate was ruthlessly terminated in 1258 by the fierce Mongolian armies. Baghdad was destroyed by Hulagu and was reduced to an unimportant town. Iraq became ruled by a series of rival local dynasties - the Ilkhanids and Jalairids. This rivalry was exploited by the Persian Safavids who, under Shah Ismail (1502-24), conquered Iraq in 1509 but were quickly contested by the Ottomans in lengthy wars. The Ottomans finally defeated the Persians in 1638 and ruled Iraq uninterruptedly until 1917 when they were driven back to Turkey by the British.

The Turkish Sultans assumed the title of Caliph and the heart of Islam was thus transferred from Baghdad to Istanbul. Iraq was divided into three provinces (Wilayas), Baghdad, Mosul and Basra, administered by an appointed governor (Pasha) who was directly answerable to the Sultan. The Ottomans were often fully occupied in their somewhat unsuccessful attempts to pacify the hostile Arab tribes of lower Iraq. Although a tenuous peace was maintained with the intractable nomads it was not until 1830 that they asserted full control over the whole of the country. They were not particularly interested in developing Iraq and their long rule is noted largely for its neglect of the agricultural system and local economy. However, several Walis, especially Sulaiman Pasha (1780-1802), Daud Pasha (1816-1831) and Midhat Pasha (1869-1872), are remembered for their positive contributions to the country. The majority of historic mosques which exist today belong to the Ottoman period and, consequently, they show a marked Turkish architectural influence.

In 1921, the British Administration installed Faisal I as King of Iraq but the country remained under a British Mandate until 1932 when it became a full member of the League of Nations. In 1958, the ruling Hashimite Monarchy was ended by a revolution and Iraq has since then been a republic.

TABLE 2 Historical Periods of Iraq and their Chief Existing Sites and Monuments

Period	Date	Archaeological Sites	Monuments
1. Paleolithic	600,000-100,000 yrs. ago	Shanidar (Arbil); Zarzarı (Sulaimaniya); Hazar-Merd (Sulaiman), Barda-Balka (Kirkuk)	
2. Neolithic	8000-5000 BC	Jarmo (Kirkuk) Hazar-Merd (Sulaimaniya)	
3. Hassuna	5200-5000 BC	Hassuna (Nineveh) Mattara (Kirkuk) Qıdri Basikin (Sulaimaniya)	
4. Samarra, Halaf, Eridu	5000-4500 BC	Samarra, Tepe Gawra (Nineveh); Arpachiya (Nineveh), Eridu (Thee-Qar)	
5. Ubaid	4500-3800 BC	Tell Ubaid (Thee-Qar); Eridu (Thee-Qar), Uruk (Muthana), Lagash (Thee-Qar), Ur (Thee-Qar)	
6. Uruk	3800-3200 BC	Uruk (Muthana), Lagash (Thee-Qar), Isin (Qadısiya); Eridu (Thee-Qar)	Uruk Zıggurat
7. Jamdat Nasr	3200-3000 BC	Jamdat Nasr (Babil); Eshnuna (Diyala), Tell Uhaimir (Babil), Lagash (Thee-Qar)	
8. Early Dynastic	3000-2500 BC	Larsa (Muthana); Uruk (Muthana); Balad (Baghdad), T. Aswad (Anbar)	
9. Sumer & Akkad	2500-2000 BC	Eridu (Thee-Qar), Larsa (Muthana); Uruk (Muthana), Bırs Nimrud (Babil), Babylon (Babil), Ur (Thee-Qar)	Ur Zıggurat
			Continued...

TABLE 2 continued

Period	Date	Archaeological Sites	Monuments
10. Old Babylonian	2000-1600 BC	Babylon (Babil), Birs Nimrud, Isin (Qadisiya), T. Harmal (Baghdad); T. Khafaja (Baghdad), Larsa (Muthana)	Larsa Ziggurat
11. Kassite & Early Assyrian	1600-911 BC	Tepe Gwara (Nineveh); Calah (Nineveh); Kakzu (Arbil), Eshnuna (Diyala), Aqarquf (Baghdad); T. Harmal (Baghdad)	Aqarquf Ziggurat
12. Assyrian	911-612 BC	Nineveh/Mosul; Calah (Nineveh), Khorsabad (Nineveh); Assur (Nineveh), Araba'Alu (Arbil)	Nineveh Walls/ Gates Nimrud Ziggurat Shirgat Ziggurat Arbil Citadel
13. Neo-Babylonian (Chaldean)	625-539 BC	Babylon, Sippar (Babil), Birs Nimrud (Babil); T. Uqair (Baghdad), Ur (Thee-Qar)	Ishtar Gate B. Nimrud Ziggurat
14. Achaemenid	539-331 BC	Tursaq (Diyala); Baksaya (Misan)	
15. Selucid	312-248 BC	Selucia (Baghdad), Fairuz Sapur (Anbar), Nippur (Qadisiya)	
16. Parthian	248 BC-AD 226	Nippur (Qadisiya), Der (Wasit), Baksaya (Misan); Hatra Town	Hatra Temple
(End of Ancient Era)			
17. Sassanid	AD 226-637	Ctesiphon (Baghdad), T. Dhbai-Baghdad Hira (Kabala), Distijird (Diyala)	Taq Kiswa
18. Early Islamic & Abbasid	AD 637-1258	Wasit; Kufa, Basra; Samarra	Ukhaidhir (Karbala) M. Mustansiriya-Baghdad, Harbi Bridge (Baghdad) Mosque and Spiral Minaret-Samarra
			Continued....

TABLE 2 continued

Period	Date	Archaeological Sites	Monuments
19. Ilkhanid, Jalairid & Turkoman	1258- 1509		M. Mirjaniya-Baghdad, Mirjan Khan-Baghdad, Sahrawardi Mosque- Baghdad
20. Safavid	1509- 1534- 1638		Kadhimain Mosque, Mashhad Ali-Najaf, Mashhad Hussain- Karbala
21. Ottoman	1638- 1917		Abu Hanifa Mosque; Gailani Mosque, Khasaki Mosque, Muradiya Mosque; Ahmadi Mosque; Haidarkhana Mosque; Hussain Pasha Mosque; Sarai Mosque; Qushla and Sarai Buildings (All in Baghdad City)

Sources: Directorate General of Antiquities, Archaeological Sites in Iraq, Baghdad, 1970

Atlas of Archaeological Sites in Iraq (Arabic)
Baghdad, 1976

Martin BEEK, Atlas of Mesopotamia, London, Nelson, 1962

NOTE: Bracketed names are of Muhafadhas (Provinces)

3.2 The Existing Heritage

The traces of the numerous past civilisations of Mesopotamia can be evidenced almost everywhere in Iraq today. More than five millenia of rich and eventful history have naturally resulted in such a considerable and varied heritage that it is convenient to classify it under groupings of certain overall characteristics. Four such groupings of immovable cultural heritage are identified here:

1. Archaeological Antiquities
2. Ancient and Historic Monuments
3. Rural Areas and Villages of Cultural or Natural Interest
4. Urban Areas and Towns of Cultural Interest.

It must be emphasised, at the outset, that these are generalised groupings only and, therefore, there is an inevitable degree of overlap between them. The last group and, to a certain extent, historic monuments that are within urban areas, are treated with more detail in this research.

3.2.1 Archaeological Antiquities

Iraq can indeed be described as the land of archaeology. According to the official Iraqi 'Guide to Archaeological Sites' of 1970⁹, there are about seven thousand known sites of archaeological interest (Table 3). However, since the first archaeological excavation in 1843¹⁰, only about two hundred and fifty sites have been, more or less systematically, excavated. This group includes all archaeological mounds (Tells), excavated and unexcavated sites, ancient irrigation canals and underground traces of fortification walls. The majority of this group tends to belong to the older periods of antiquity - from Pre-Historic times to the end of the Parthian period. Archaeological antiquities are largely underground, buried under tells of earth and, therefore, excavation is often necessary for their exposition. Ancient monuments such as ziggurats, which stand above ground level, are classified under the second group.(Figure 1)



FIGURE 1 THE MAIN ARCHAEOLOGICAL SITES IN IRAQ

Source Beek, Atlas of Mesopotamia

The location factor of archaeological antiquities has had a profound influence upon their preservation-survival potential. Today, they are situated either at remote, non-agricultural locations, or rural agricultural areas, or within rapidly developing urban areas. Clearly, sites that are within urban areas face the greatest risk and danger of loss. Many such sites - and also monuments - have been destroyed over the years in such historic towns as Mosul, Samarra, or Baghdad¹¹. Conversely, sites that lie in rural areas or, better still, in remote non-agricultural areas, have shown a remarkable degree of survival, though not wholly free from looting.

A curious characteristic of Mesopotamian archaeology is the fact that most sites tend to be, in spite of their evocative biblical names, largely unimpressive physically as well as visually. Stone and other more solid building materials are rare in Mesopotamia and, consequently, the majority of sites are constructed of burnt or unburnt clay bricks. A typical excavated Mesopotamian site, therefore, tends to appear as a large maze of trenches and earth walls. For the tourist, who usually comes to Iraq with preconceptions of the glorious past of Babylon and Nineveh, this causes disappointment. In a tourism study, sponsored by the Iraqi Tourism Administration and prepared by a French consulting firm¹², this point is recognised:

"Iraq differs from its neighbouring countries in that it does not possess any single pole of sufficient attraction that could be compared to that of Palmyra (Syria) or Persepolis (Iran). Certainly, there exists the famous ruins of Babylon but their splendour is due to the imposing size of the site, which has become a symbol to the actual remains and which the inclemency of the elements have rendered unrecognizable."

It can be seen from Table 3 that the overwhelming majority of archaeological sites (ninety-eight per cent) are located within either rural or remote areas and, consequently, they are not in

any immediate danger. By contrast, urban archaeological sites remain largely unprotected and are being destroyed by the acute demand for urban land. The majority of these sites are neither identified on the ground by informative signs nor are they physically protected against offenders by appropriate fencing.

Urban archaeology is not yet practiced in Iraq and there is a real need to introduce it as an effective aspect of archaeological and planning activity. It was indicated earlier that monuments and buildings of outstanding architectural or historic value which survive above ground level are already protected under the existing legislation. Below ground, however, almost any new development within historic cores will involve the destruction of archaeological evidence. These latent sites cannot be protected in advance because they remain unidentified. Their importance and extent becomes apparent only during or after excavation work by modern development has taken place. Consequently, there is a clear case for empowering the planning authorities to oblige the developer to give adequate notice in advance of operations and to allow archaeological investigation of the site during the excavation work. In addition, it is necessary for such authorities to prepare special maps of urban areas of potential archaeological interest so that this legislation can be more effectively enforced.

For these mapped urban areas of potential archaeological interest, which may contain buildings of no architectural value, the main need is not to preserve the site, but to ensure that modern development takes place only after there has been adequate archaeological excavation and documentation.

Table 3 gives the number of all recorded archaeological sites in the sixteen Muhafadhas of Iraq, while Tables 4 to 19 give the number of sites in the administrative units of each Muhafadha. Figures 2 to 17 show the location of archaeological sites, and historic towns and villages in each Muhafadha.

TABLE 3 The Number of Archaeological Sites in Each Muhafadha (1970)

Muhafadha and (Centre)	Sites Within Urban Areas	Sites Within Rural and Remote Areas	Totals
1. Dhok (Dhok)	12	368	380
2. Nineveh (Mosul)	39	1283	1322
3. Sulaimaniya (Sulaimaniya)	1	429	430
4. Arbil	5	616	621
5. Kirkuk (Kirkuk)	5	852	857
6. Kiyala (Baquba)	-	436	436
7. Anbar (Ramadi)	3	227	230
8. Baghdad (Baghdad)	71	459	530
9. Wasit (Kut)	-	267	267
10. Babil (Hilla)	7	243	250
11. Karbala (Karbala)	12	98	110
12. Qadisiya (Diwaniya)	1	320	321
13. Muthana (Samawa)	-	77	77
14. Maysan (Amara)	-	212	212
15. Thee-Qar (Nasiriya)	-	534	534
16. Basra (Basra)	4	79	83
Totals	160	6500	6660

Source: Directorate General of Antiquities, Archaeological Sites in Iraq (Arabic), Baghdad, 1970

NOTES: 1. The official list of archaeological sites in Iraq is by no means comprehensive in its coverage. These figures include some monuments but exclude historic buildings and urban areas.

2. See Tables 4 to 19 for further details and figures to for location.

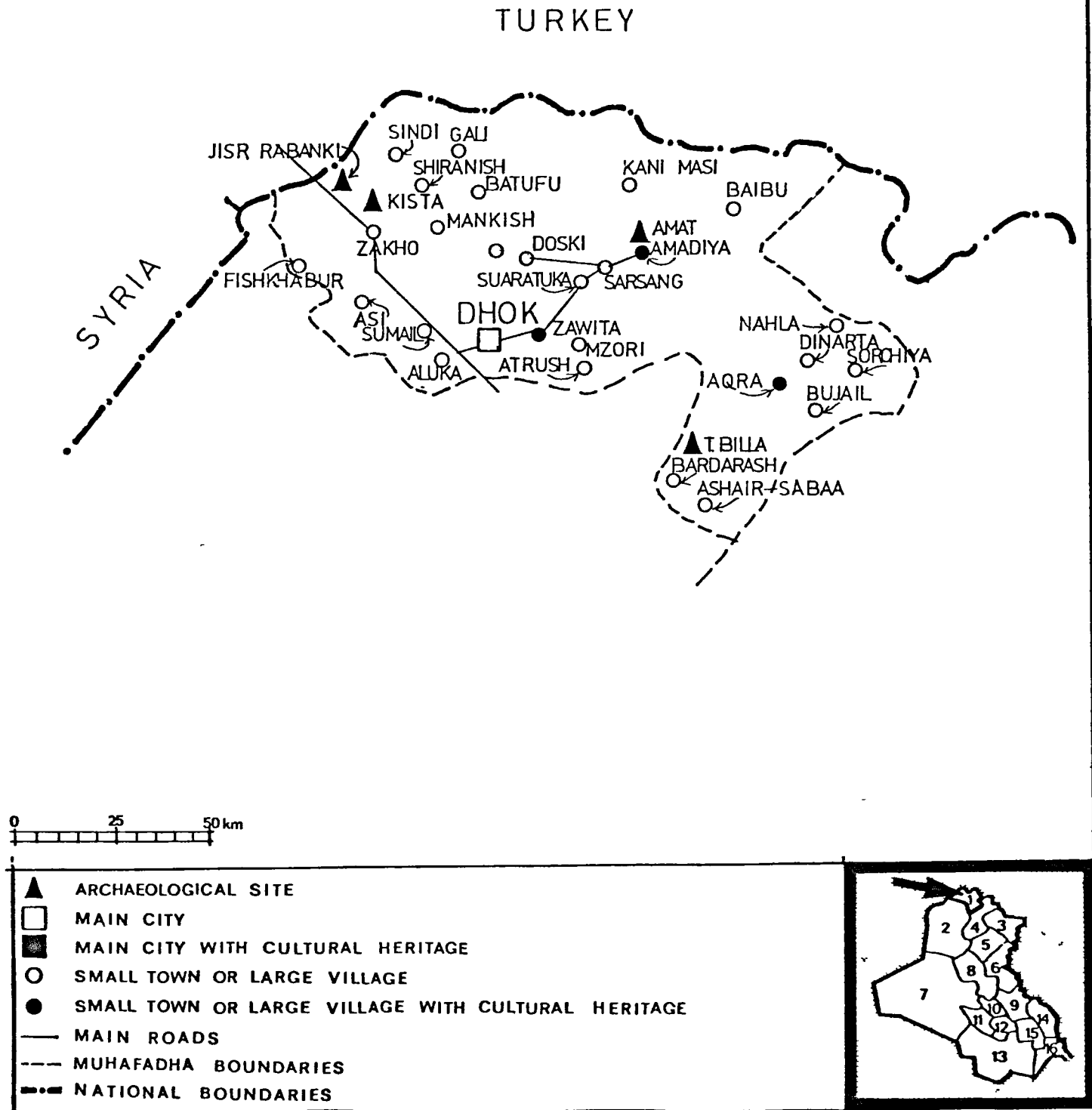


FIGURE 2 THE CULTURAL HERITAGE IN DHOK MUHAFADHA

TABLE 4 The Number of Archaeological Sites in Dhok Muhafada (1970)

Administrative Unit	Sites Within Urban Areas	Sites Within Rural and Remote Areas	Total
Dhok Town*	-	42	42
Atrosh	-	1	1
Doski	-	35	35
Zakho*	3	3	6
Slaifani	-	47	47
Sindi	-	34	34
Kili	-	15	15
Aqra*	2	3	5
Sorjia	-	47	47
Ashair Sabaa	-	67	67
Nahla	-	30	30
Amadiya*	7	40	47
Parwir	-	4	4
Totals	12	368	380

Source: Directorate General of Antiquities, Archaeological Sites in Iraq (Arabic), Baghdad, 1970

NOTES: These figures include some monuments but exclude historic buildings and urban areas

*Cities or towns which possess historic cores

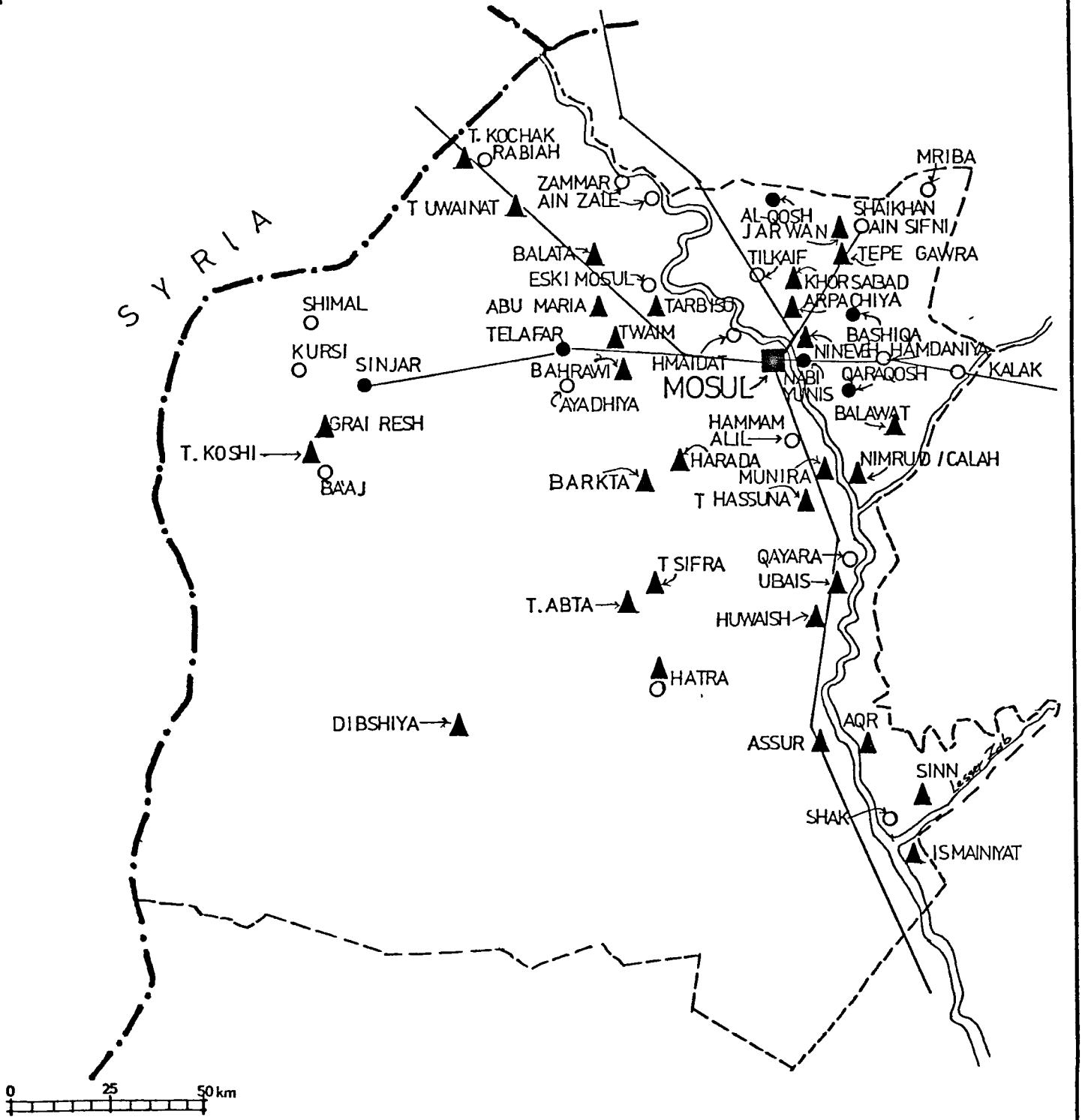
THE CULTURAL HERITAGE OF IRAQ

No of Muhafadha

2

MUHAFADHA

NINEVEH



- ▲ ARCHAEOLOGICAL SITE
- MAIN CITY
- MAIN CITY WITH CULTURAL HERITAGE
- SMALL TOWN OR LARGE VILLAGE
- SMALL TOWN OR LARGE VILLAGE WITH CULTURAL HERITAGE
- MAIN ROADS
- - - MUHAFADHA BOUNDARIES
- · - · NATIONAL BOUNDARIES

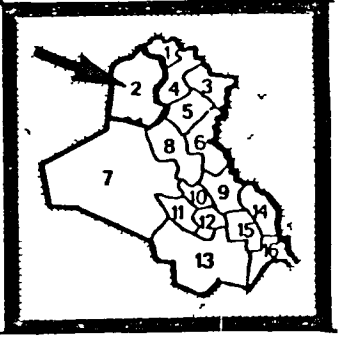


FIGURE 3 THE CULTURAL HERITAGE IN NINEVEH MUHAFADHA

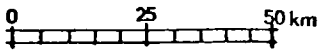
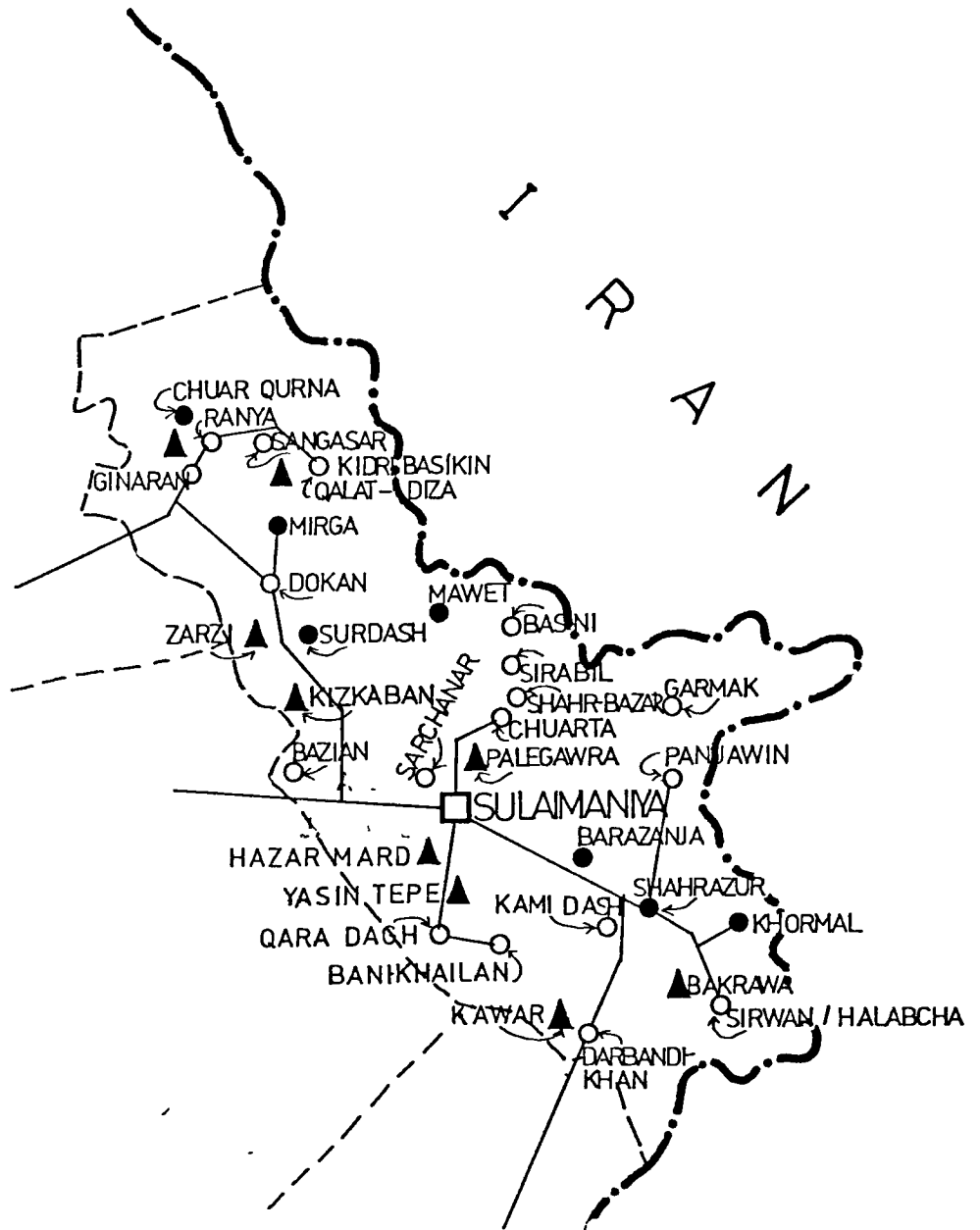
TABLE 5 The Number of Archaeological Sites in Nineveh Muhafadha (1970)

Administrative Unit	Sites Within Urban Areas	Sites Within Rural and Remote Areas	Total
Mosul City*	35	-	35
Tilkaif	-	97	97
Hamdaniya	-	167	167
Hmaidat	-	163	163
Shora	-	154	154
Jazira	-	1	1
Tela'far*	2	8	10
Rabia	-	62	62
Zamar	-	54	54
Ayadhiya	-	189	189
Hatra	-	1	1
Sinjar*	2	76	78
Shimal	-	16	16
Shirqt	-	93	93
Shaikhan	-	73	73
Am Sifni	-	20	20
al-Qosh*	-	57	57
Mazori	-	52	52
Totals	39	1283	1322

Source: Directorate General of Antiquities, Archaeological Sites in Iraq (Arabic), Baghdad, 1970

NOTES: These figures include some monuments but exclude historic buildings and urban areas.

*Cities or towns which possess historic cores



- ▲ ARCHAEOLOGICAL SITE
- MAIN CITY
- MAIN CITY WITH CULTURAL HERITAGE
- SMALL TOWN OR LARGE VILLAGE
- SMALL TOWN OR LARGE VILLAGE WITH CULTURAL HERITAGE
- MAIN ROADS
- - - MUHAFADHA BOUNDARIES
- NATIONAL BOUNDARIES

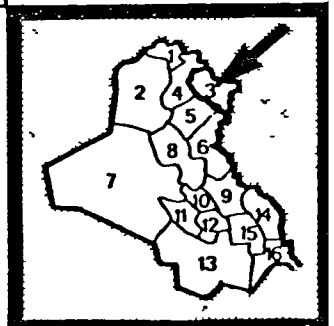


FIGURE 4 THE CULTURAL HERITAGE IN SULAIMANIYA MUHAFADHA

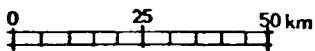
TABLE 6 The Number of Archaeological Sites in Sulaimaniya Muhafadha (1970)

Administrative Unit	Sites Within Urban Areas	Sites Within Rural and Remote Areas	Total
Sulaimaniya City	-	-	-
Bazian	-	14	14
Tanjro	-	36	36
Sarchanar	-	38	38
Surdash	-	29	29
Qara-Dagh	-	32	32
Qalat Diza	-	22	22
Mirga (Bishdar)	-	26	26
Panjawin	-	18	18
Sirwan	-	31	31
Khormal*	1	68	69
Darbandi-Khan	-	25	25
Srowchak	-	10	10
Mawet	-	17	17
Ranya	-	20	20
Jinaran	-	32	32
Nawdasht	-	11	11
Totals	1	429	430

Source: Directorate General of Antiquities, Archaeological Sites in Iraq (Arabic), Baghdad, 1970

NOTES: These figures include such monuments but exclude historic buildings and urban areas

*Cities or towns which possess historic cores



- ▲ ARCHAEOLOGICAL SITE
- MAIN CITY
- MAIN CITY WITH CULTURAL HERITAGE
- SMALL TOWN OR LARGE VILLAGE
- SMALL TOWN OR LARGE VILLAGE WITH CULTURAL HERITAGE
- MAIN ROADS
- - - MUHAFADHA BOUNDARIES
- · - · NATIONAL BOUNDARIES

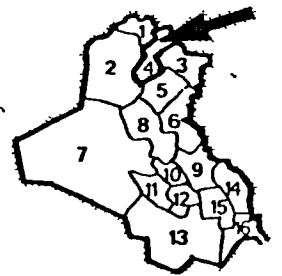


FIGURE 5 THE CULTURAL HERITAGE IN ARBIL MUHAFADHA

TABLE 7 The Number of Archaeological Sites in Arbil Muhafadha (1970)

Administrative Unit	Sites Within Urban Areas	Sites Within Rural and Remote Areas	Total
Arbil City*	2	-	2
Arbil (Markaz)	3	97	100
Makhmur	-	168	168
Qosh Tepe	-	51	51
Rawanduz	-	29	29
Palek	-	19	19
Paradost	-	2	2
Sur (Zibar)	-	2	2
Shaqlawa	-	58	58
Harir	-	39	39
Kwaisanjaq	-	35	35
Taq-Taq	-	76	76
Kindinawa (Makhmur)	-	5	5
Guwair	-	35	35
Totals	5	616	621

Source: Directorate General of Antiquities, Archaeological Sites in Iraq, Baghdad, 1970

NOTES: These figures include some monuments but exclude historic buildings and urban areas

*Cities or towns which possess historic cores

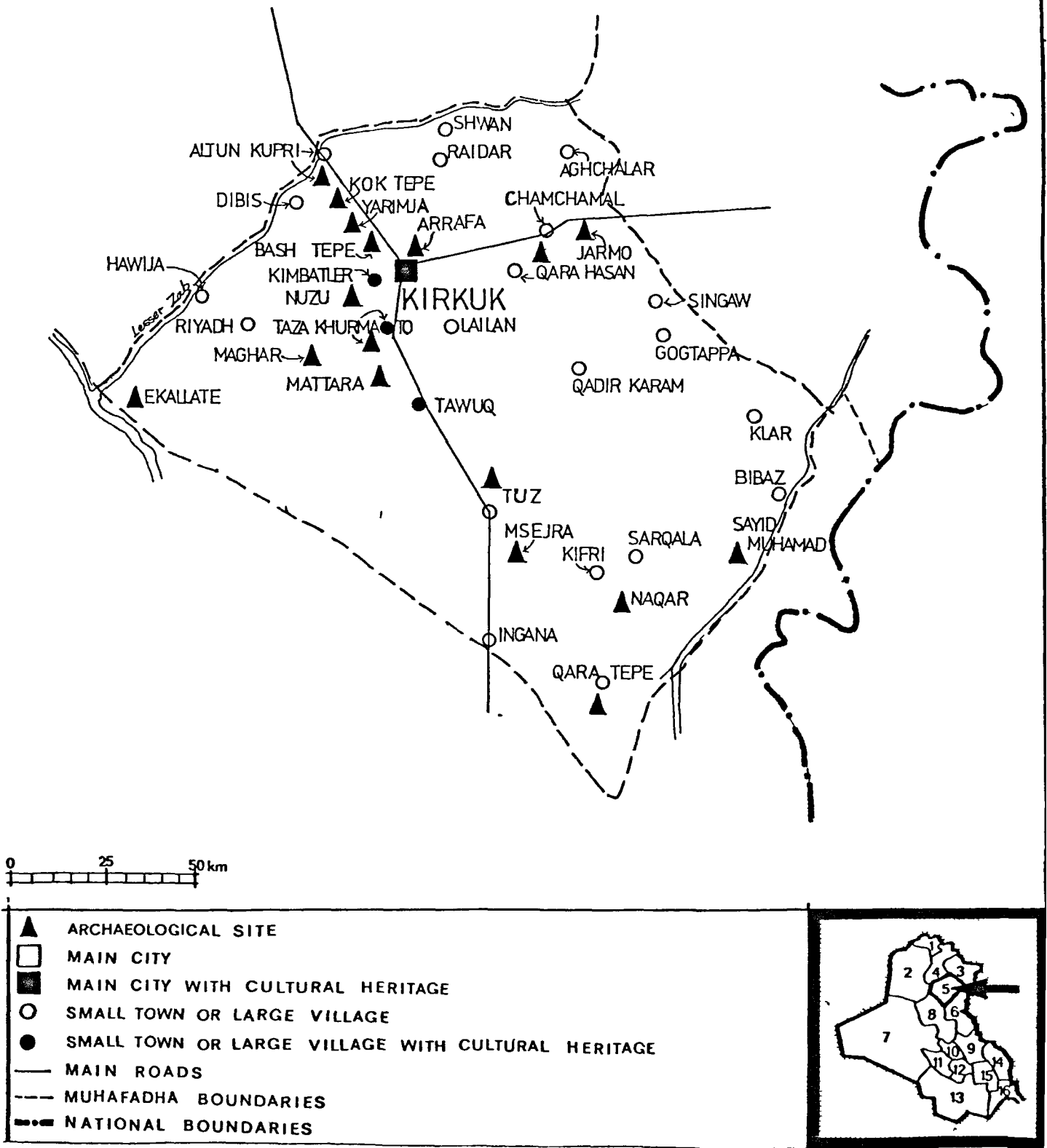


FIGURE 6 THE CULTURAL HERITAGE IN KIRKUK MUHAFADHA

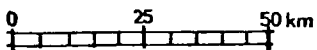
TABLE 8 The Number of Archaeological Sites in Kirkuk Muhafadha (1970)

Administrative Unit	Sites Within Urban Areas	Sites Within Rural and Remote Areas	Total
Kirkuk City*	5	15	20
Altun Kupri	-	38	38
Taza Khurmato	-	1	1
Dibis	-	1	1
Shwan	-	17	17
Qara Hasan	-	73	73
Chamchamal	-	45	45
Aghchaler	-	37	37
Singaw	-	58	58
Hawija	-	36	36
Daquq	-	100	100
Tuz	-	152	152
Qadir Karam	-	35	35
Kifri	-	1	1
Bibaz	-	10	10
Shirwana	-	107	107
Qara Tepe	-	126	126
Totals	5	852	857

Source: Directorate General of Antiquities, Archaeological Sites in Iraq, Baghdad, 1970

NOTES: These figures include some monuments but exclude historic buildings and urban areas

*Cities or towns which possess historic cores



- ▲ ARCHAEOLOGICAL SITE
- MAIN CITY
- MAIN CITY WITH CULTURAL HERITAGE
- SMALL TOWN OR LARGE VILLAGE
- SMALL TOWN OR LARGE VILLAGE WITH CULTURAL HERITAGE
- MAIN ROADS
- - - MUHAFADHA BOUNDARIES
- · - · NATIONAL BOUNDARIES

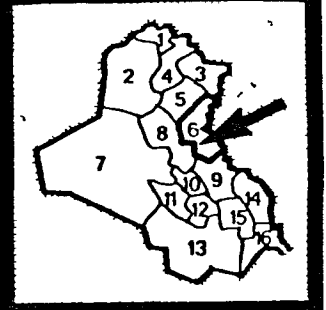


FIGURE 7 THE CULTURAL HERITAGE IN DIYALA MUHAFADHA

TABLE 9 The Number of Archaeological Sites in Diyala Muhafadha (1970)

Administrative Unit	Sites Within Urban Areas	Sites Within Rural and Remote Areas	Total
Baquba	-	11	11
Bahraz	-	6	6
Kinaan	-	11	11
Khalis	-	34	34
Bani Saad	-	38	38
Mansuriya	-	37	37
Khanaqin	-	67	67
Jalawla	-	1	1
Saadiya	-	26	26
Quraitu	-	20	20
Hawrain Shaikhan	-	25	25
Muqdadiya	-	63	63
Abu Saida	-	3	3
Mandili	-	48	48
Baladrüz	-	46	46
Totals	-	436	436

Source: Directorate General of Antiquities, Archaeological Sites in Iraq, Baghdad, 1970

NOTE: These figures include some monuments but exclude historic buildings and urban areas

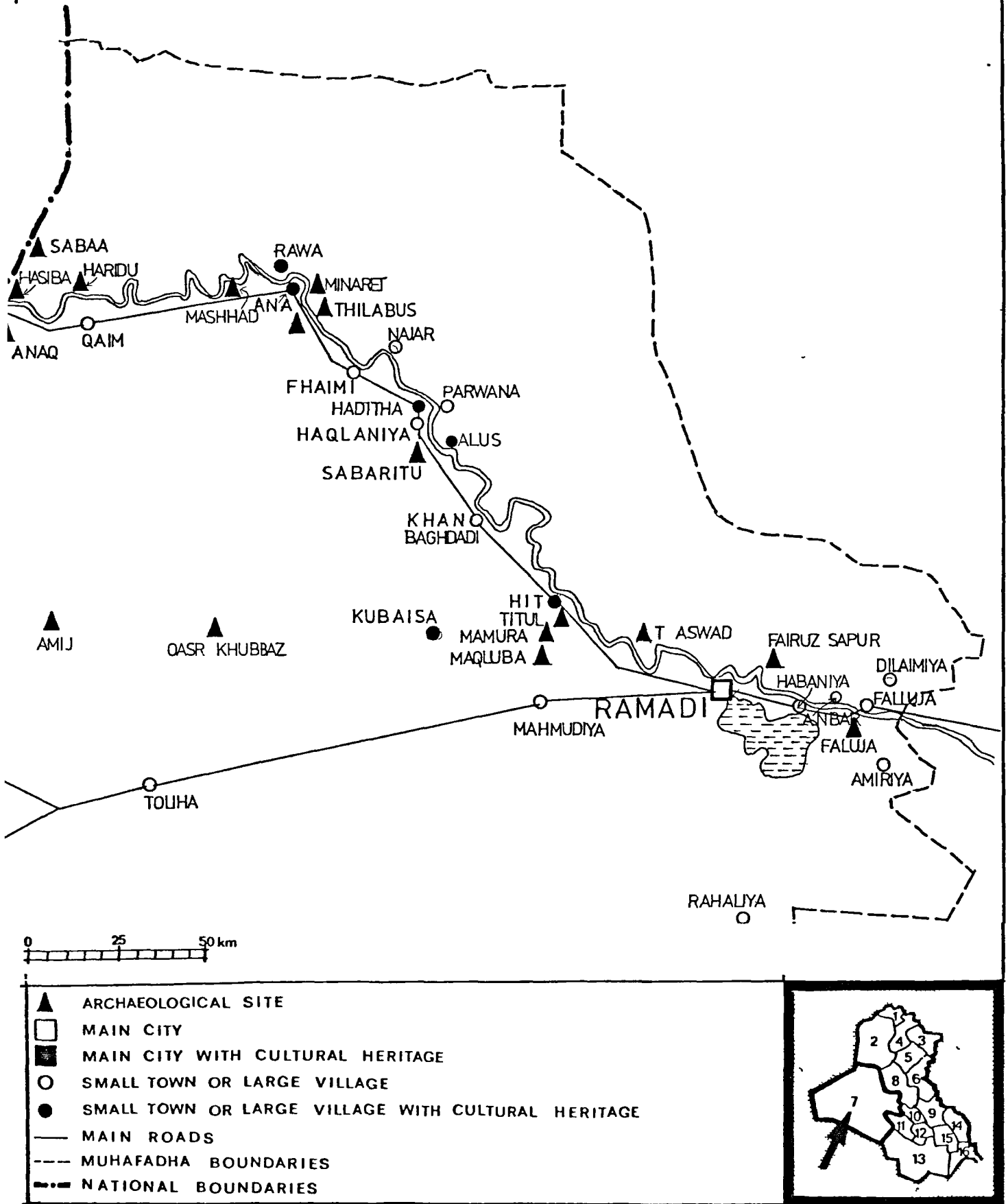


FIGURE 8 THE CULTURAL HERITAGE IN ANBAR MUHAFADHA

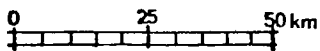
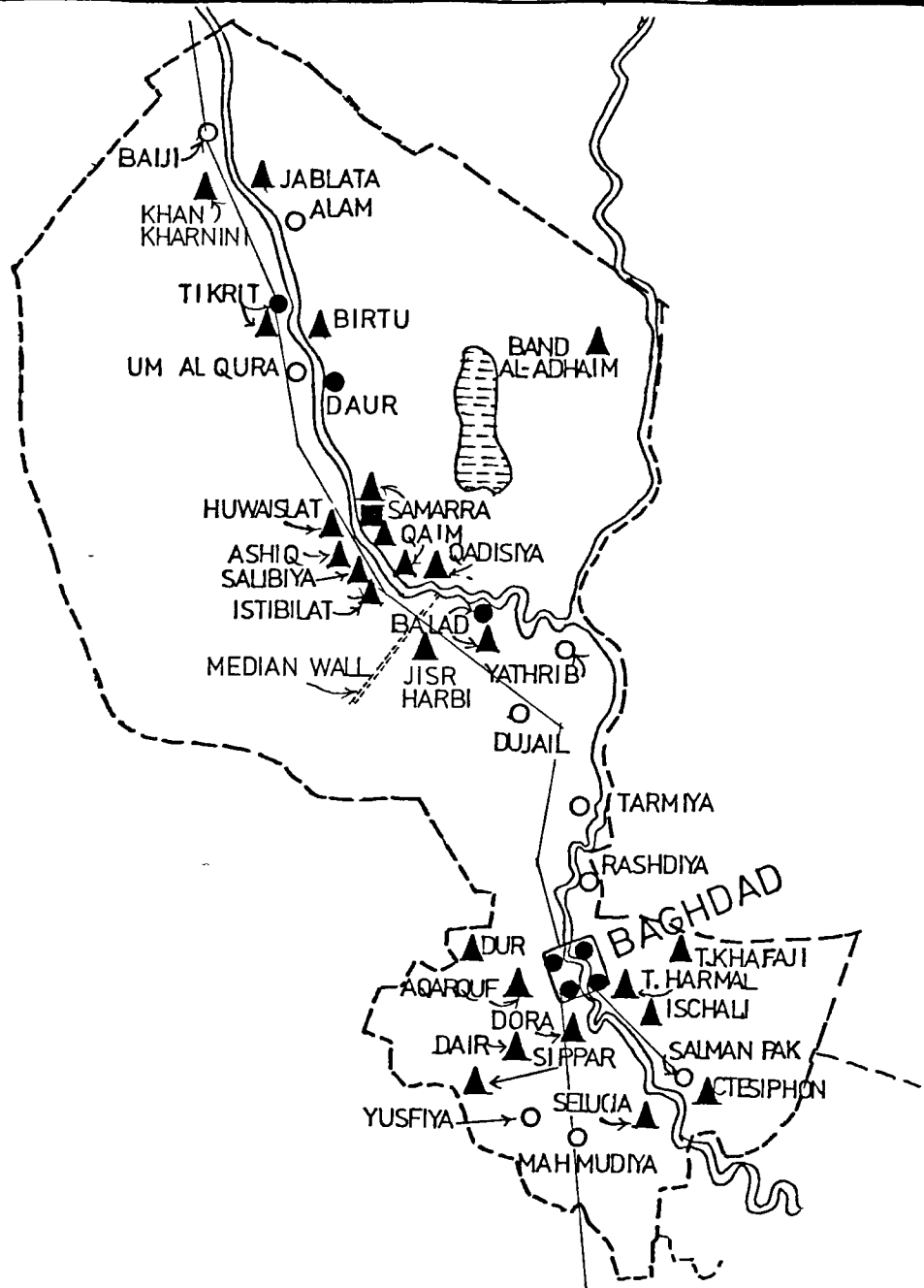
TABLE 10 The Number of Archaeological Sites in Anbar Muhafadha (1970)

Administrative Unit	Sites Within Urban Areas	Sites Within Rural and Remote Areas	Total
Ramadi	-	8	8
Haditha*	1	35	36
Ana*	1	14	15
Jazira	-	2	2
Rawa	-	6	6
Falluja	-	82	82
Karma	-	30	30
Qaim	-	23	23
Hit*	1	27	28
Totals	3	227	230

Source: Directorate General of Antiquities, Archaeological Sites in Iraq, Baghdad, 1970

NOTES: These figures include some monuments but exclude historic buildings and urban areas

*Cities or towns which possess historic cores



- ▲ ARCHAEOLOGICAL SITE
- MAIN CITY
- MAIN CITY WITH CULTURAL HERITAGE
- SMALL TOWN OR LARGE VILLAGE
- SMALL TOWN OR LARGE VILLAGE WITH CULTURAL HERITAGE
- MAIN ROADS
- - - MUHAFADHA BOUNDARIES
- · - · - NATIONAL BOUNDARIES

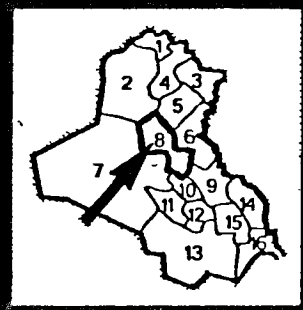


FIGURE 9 THE CULTURAL HERITAGE IN BAGHDAD MUHAFADHA

TABLE 11 The Number of Archaeological Sites in Baghdad Muhafadha (1970)

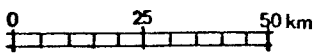
Administrative Unit	Sites Within Urban Areas	Sites Within Rural and Remote Areas	Total
Rusafa*	26	-	26
Karrada Sharqiya	6	17	23
Salman Pak	2	81	83
Karkh*	5	16	21
Aadhamiya*	15	16	31
Dora	6	-	6
Kadhimiya*	5	15	20
Tarmiya	-	35	35
Abu Ghraib	1	8	9
Mahmudiya	1	60	61
Yusfiya	-	34	34
Samarra*	2	29	31
Ibrahimiya	-	62	62
Balad	-	79	79
Dor	1	2	3
Tikrit	1	41	42
Totals	71	495	566

Source: Directorate General of Antiquities, Archaeological Sites in Iraq, Baghdad, 1970

Atlas of Archaeological Sites in Iraq, Baghdad, 1976

NOTES: These figures include some monuments but exclude historic buildings and urban areas

*Cities or towns which possess historic cores



- ▲ ARCHAEOLOGICAL SITE
- MAIN CITY
- MAIN CITY WITH CULTURAL HERITAGE
- SMALL TOWN OR LARGE VILLAGE
- SMALL TOWN OR LARGE VILLAGE WITH CULTURAL HERITAGE
- MAIN ROADS
- - - MUHAFADHA BOUNDARIES
- · - · NATIONAL BOUNDARIES

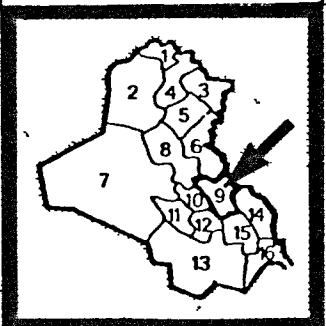


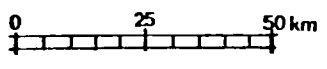
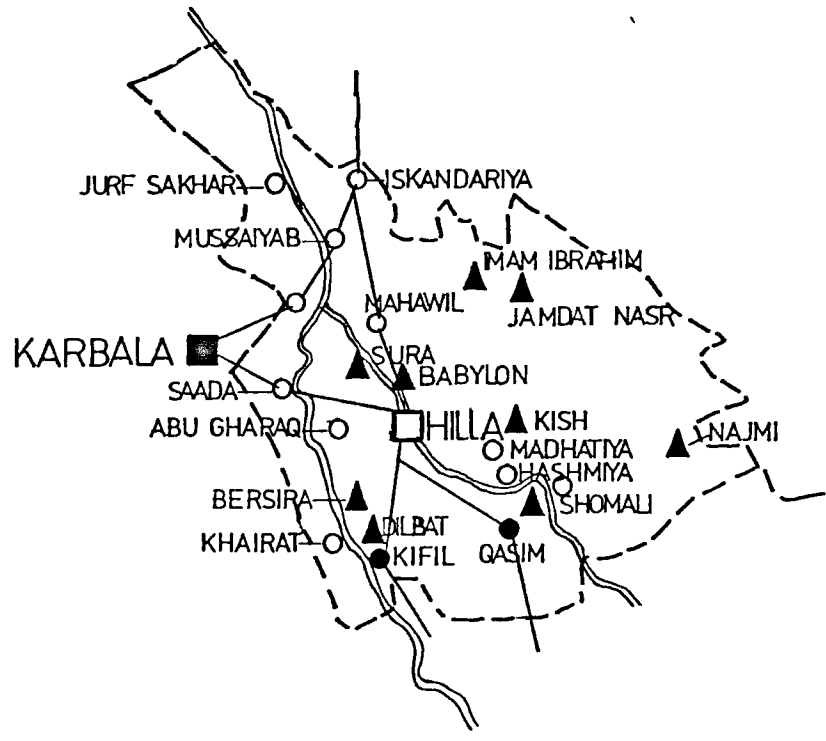
FIGURE 10 THE CULTURAL HERITAGE IN WASIT MUHAFADHA

TABLE 12 The Number of Archaeological Sites in Wasit Muhafadha (1970)

Administrative Unit	Sites Within Urban Areas	Sites Within Rural and Remote Areas	Total
Kut	-	44	44
Badra	-	26	26
Gassan	-	3	3
Zurbatiya	-	19	19
Hai	-	27	27
Muwafaqiya	-	3	3
Suwaibra	-	10	10
Zubaidiya	-	6	6
Aziziya	-	109	109
Numaniya	-	20	20
Totals	-	267	267

Source: Directorate General of Antiquities, Archaeological Sites in Iraq, Baghdad, 1970

NOTE: These figures include some monuments but exclude historic buildings and urban areas



- ▲ ARCHAEOLOGICAL SITE
- MAIN CITY
- MAIN CITY WITH CULTURAL HERITAGE
- SMALL TOWN OR LARGE VILLAGE
- SMALL TOWN OR LARGE VILLAGE WITH CULTURAL HERITAGE
- MAIN ROADS
- - - MUHAFADHA BOUNDARIES
- NATIONAL BOUNDARIES

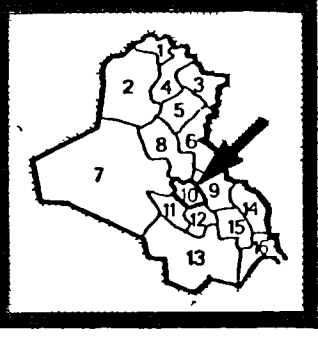


FIGURE 11 THE CULTURAL HERITAGE IN BABIL MUHAFADHA

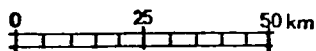
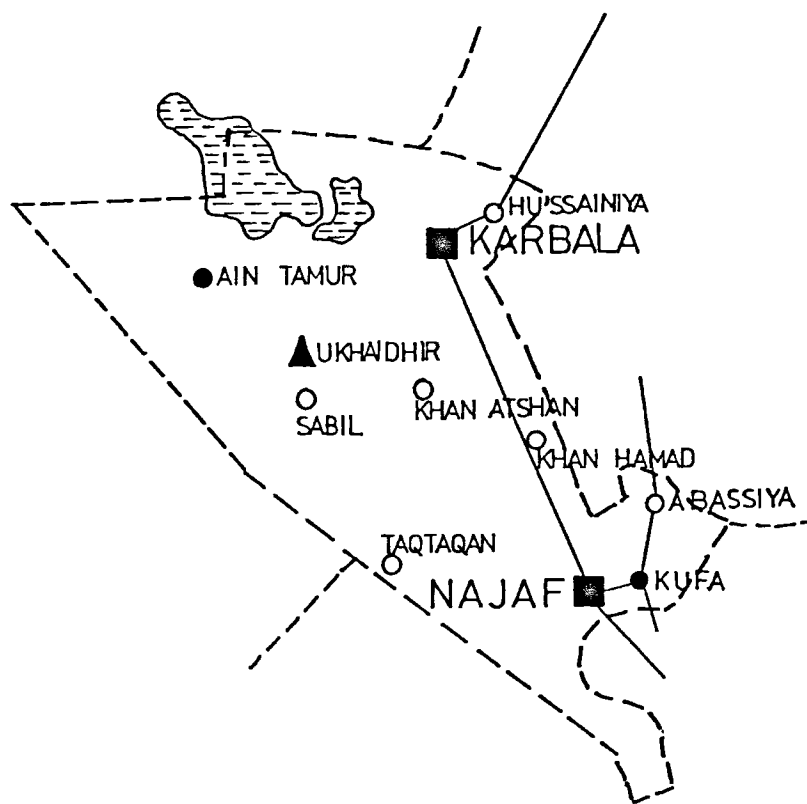
TABLE 13 The Number of Archaeological Sites in Babil Muhafadha (1970)

Administrative Unit	Sites Within Urban Areas	Sites Within Rural and Remote Areas	Total
Hilla City	1	-	1
Hilla (Markaz)	3	16	19
Mahawil	-	38	38
Nil	-	3	3
Mussaiyab	-	3	3
Iskandariya	-	3	3
Jurf al-Sakhar	-	21	21
Sa'ada	-	2	2
Kassim	1	30	31
Madhatiya	-	70	70
Abu Gharaq	-	22	22
Jadwal Gharbi	-	17	17
Kifil*	2	18	20
Totals	7	243	250

Source: Directorate General of Antiquities, Archaeological Sites in Iraq, Baghdad, 1970

NOTES: These figures include some monuments but exclude historic buildings and urban areas

*Cities or towns which possess historic cores



- ▲ ARCHAEOLOGICAL SITE
- MAIN CITY
- MAIN CITY WITH CULTURAL HERITAGE
- SMALL TOWN OR LARGE VILLAGE
- SMALL TOWN OR LARGE VILLAGE WITH CULTURAL HERITAGE
- MAIN ROADS
- - - MUHAFADHA BOUNDARIES
- · - · NATIONAL BOUNDARIES

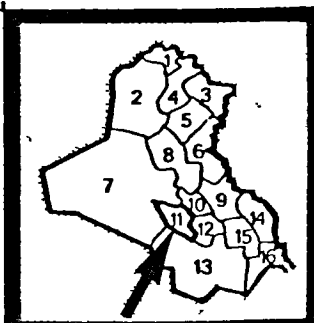


FIGURE 12 THE CULTURAL HERITAGE IN KARBALA MUHAFADHA

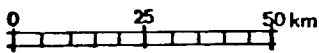
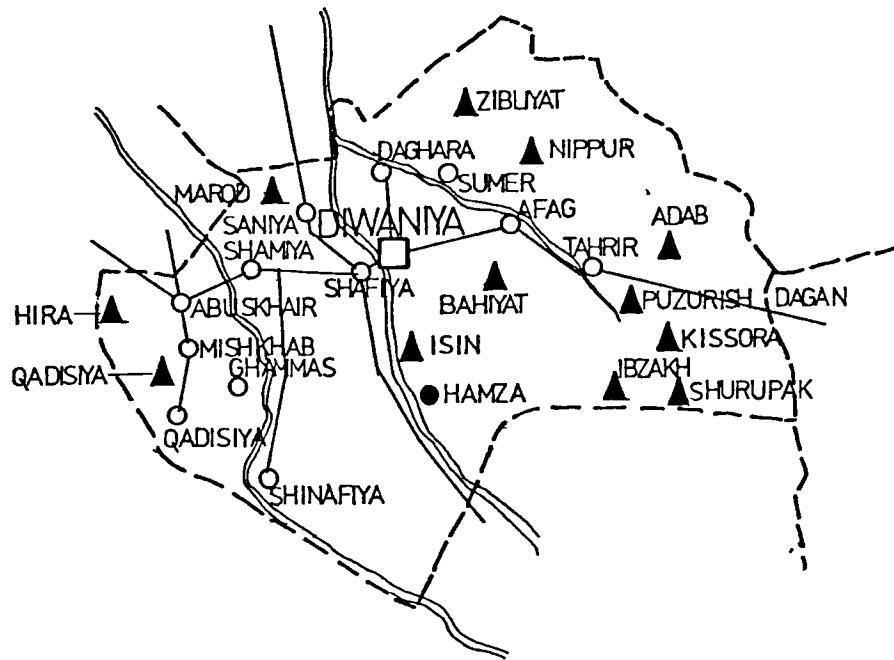
TABLE 14 The Number of Archaeological Sites in Karbala Muhafadha (1970)

Administrative Unit	Sites Within Urban Areas	Sites Within Rural and Remote Areas	Total
Karbala City*	3	-	3
Karbala (Markaz)	4	-	4
Hussainiya	-	57	57
Ain Tamur/Shthatha	-	16	16
Kufa*	3	18	21
Najaf*	2	7	9
Totals	12	98	110

Source: Directorate General of Antiquities, Archaeological Sites in Iraq, Baghdad, 1970

NOTES: These figures include some monuments but exclude historic buildings and urban areas

*Cities or towns which possess historic cores



- ▲ ARCHAEOLOGICAL SITE
- MAIN CITY
- MAIN CITY WITH CULTURAL HERITAGE
- SMALL TOWN OR LARGE VILLAGE
- SMALL TOWN OR LARGE VILLAGE WITH CULTURAL HERITAGE
- MAIN ROADS
- - - MUHAFADHA BOUNDARIES
- · - · NATIONAL BOUNDARIES

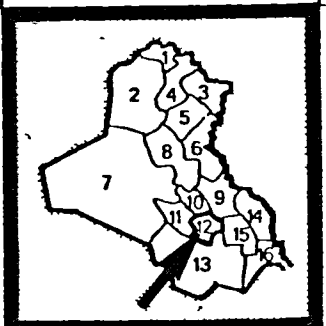


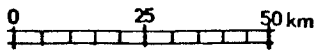
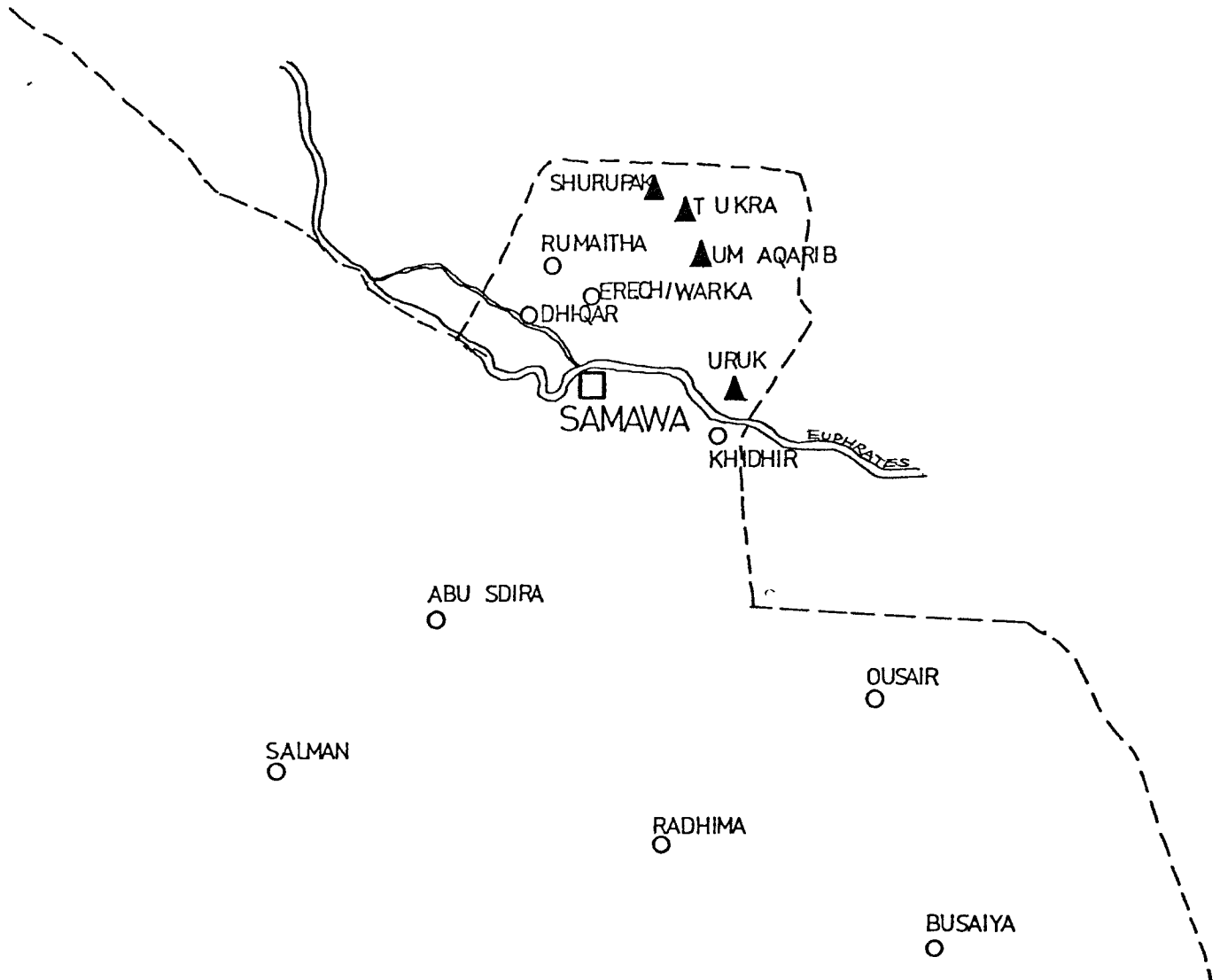
FIGURE 13 THE CULTURAL HERITAGE IN QADISIYA MUHAFADHA

TABLE 15 The Number of Archaeological Sites in Qadisiya Muhafadha (1970)

Administrative Unit	Sites Within Urban Areas	Sites Within Rural and Remote Areas	Total
Diwaniya City	-	-	-
Hamza	1	20	21
Shafiya	-	45	45
Maliha	-	2	2
Abu Skhair	-	1	1
Hira	-	16	16
Mishkhab	-	7	7
Shanafiya	-	18	18
Salahiya	-	10	10
Abbasiya	-	13	13
Ghammas	-	26	26
Afag	-	34	34
Badir	-	34	34
Dghara	-	94	94
Totals	1	320	321

Source: Directorate General of Antiquities, Archaeological Sites in Iraq, Baghdad, 1970

NOTE: These figures include some monuments but exclude historic buildings and urban areas



- ▲ ARCHAEOLOGICAL SITE
- MAIN CITY
- MAIN CITY WITH CULTURAL HERITAGE
- SMALL TOWN OR LARGE VILLAGE
- SMALL TOWN OR LARGE VILLAGE WITH CULTURAL HERITAGE
- MAIN ROADS
- - - MUHAFADHA BOUNDARIES
- · - · NATIONAL BOUNDARIES

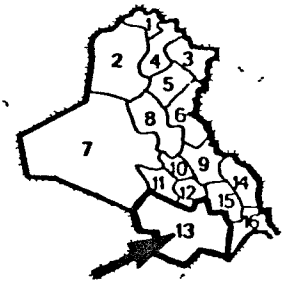


FIGURE 14 THE CULTURAL HERITAGE OF MUTHANA MUHAFADHA

TABLE 16 The Number of Archaeological Sites in Muthana Muhafadha (1970)

Administrative Unit	Sites Within Urban Areas	Sites Within Rural and Remote Areas	Total
Samawa Town*	-	-	-
Khidhir	-	19	19
Khannaq	-	23	23
Rumaitha	-	35	35
Totals	-	77	77

Source: Directorate General of Antiquities, Archaeological Sites in Iraq, Baghdad, 1970

NOTES: These figures include some monuments but exclude historic buildings and urban areas

*Cities or towns which possess historic cores

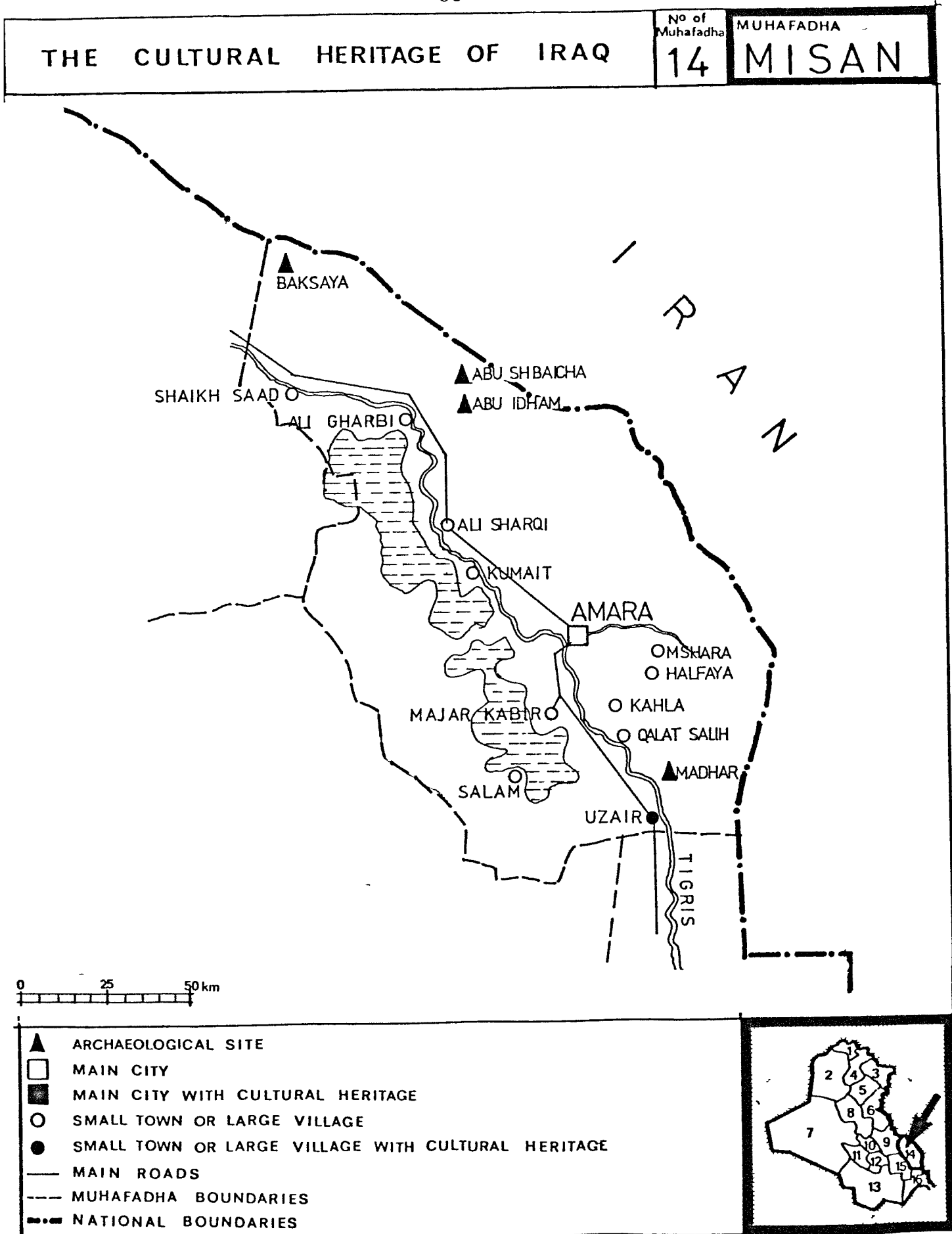


FIGURE 15 THE CULTURAL HERITAGE IN MISAN MUHAFADHA

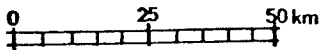
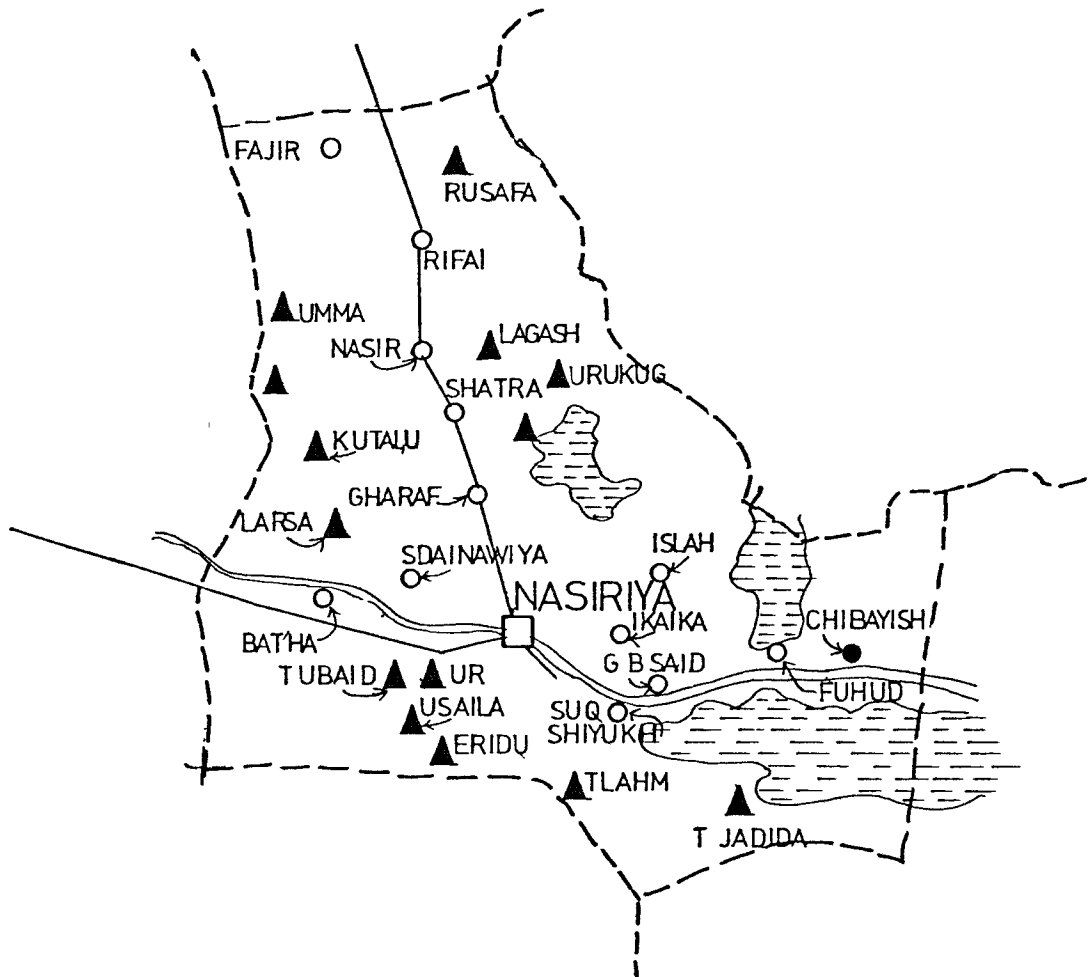
TABLE 17 The Number of Archaeological Sites in Misan Muhafadha (1970)

Administrative Unit	Sites Within Urban Areas	Sites Within Rural and Remote Areas	Total
Amara City*	-	-	-
Kahla	-	3	3
Kumait	-	43	43
Majar Saghir	-	24	24
Msaida	-	17	17
Mshara	-	19	19
Ali Gharbi	-	47	47
Shaikh Saad	-	12	12
Qalat Salih	-	43	43
Majar Kabir	-	4	4
Totals	-	212	212

Source: Directorate General of Antiquities, Archaeological Sites in Iraq, Baghdad, 1970

NOTES: These figures include some monuments but exclude historic buildings and urban areas

*Cities or towns which possess historic cores



- ▲ ARCHAEOLOGICAL SITE
- MAIN CITY
- MAIN CITY WITH CULTURAL HERITAGE
- SMALL TOWN OR LARGE VILLAGE
- SMALL TOWN OR LARGE VILLAGE WITH CULTURAL HERITAGE
- MAIN ROADS
- - - MUHAFADHA BOUNDARIES
- · - · - NATIONAL BOUNDARIES

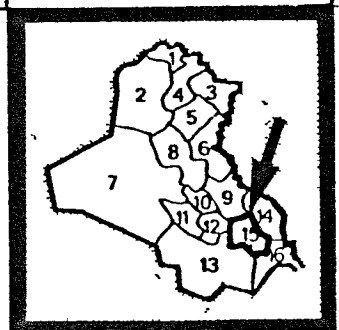


FIGURE 16 THE CULTURAL HERITAGE IN THEE-QAR MUHAFADHA

TABLE 18 The Number of Archaeological Sites in Thee-Qar Muhafadha (1970)

Administrative Unit	Sites Within Urban Areas	Sites Within Rural and Remote Areas	Total
Nasiriya Town	-	9	9
Islah	-	46	46
Bat'ha	-	71	71
Sdainawiya	-	53	53
Chibayish	-	28	28
Rifai	-	80	80
Qalat Sukar	-	48	48
Nasir	-	42	42
Suq Shiyukh	-	3	3
Ikaika	-	16	16
Bani Saïd	-	6	6
Shatra	-	35	35
Dawaya	-	53	53
Swaij Dija	-	44	44
Totals	-	534	534

Source: Directorate General of Antiquities, Archaeological Sites in Iraq, Baghdad, 1970

NOTE: These figures include some monuments but exclude historic buildings and urban areas

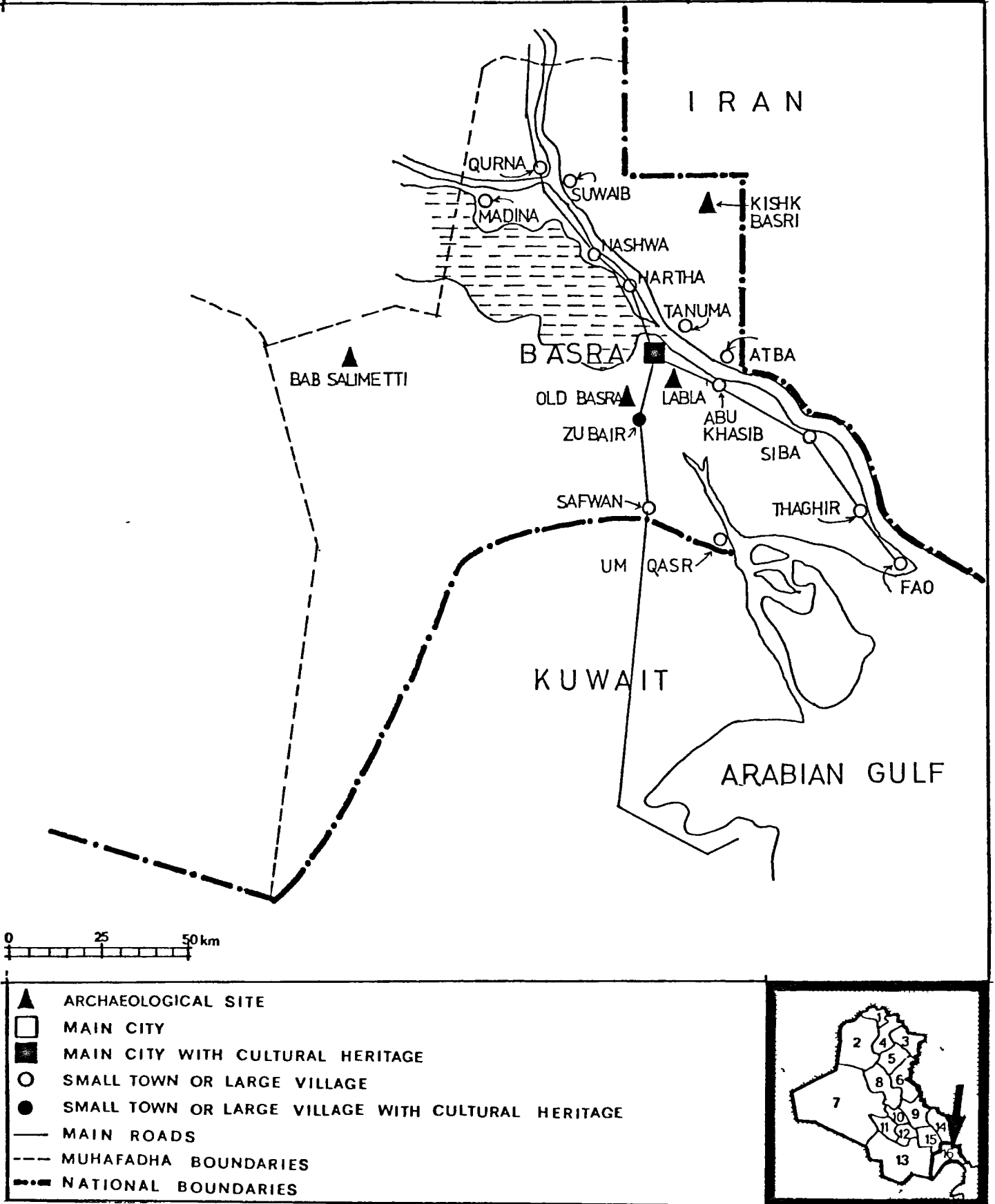


FIGURE 17 THE CULTURAL HERITAGE IN BASRA MUHAFADHA

TABLE 19 The Number of Archaeological Sites in Basra Muhafadha (1970)

Administrative Unit	Sites Within Urban Areas	Sites Within Rural and Remote Areas	Total
Basra City*	1	-	1
Shatt al-Arab	-	15	15
Hartha	-	13	13
Abu Khasib	-	6	6
Siba	-	9	9
Zubair*	3	7	10
Fao	-	1	1
Suwab	-	26	26
Madina	-	1	1
Nashwa	-	1	1
Totals	4	79	83

Source: Directorate General of Antiquities, Archaeological Sites in Iraq, Baghdad, 1970

NOTES: These figures include some monuments but exclude historic buildings and urban areas

*Cities or towns which possess historic cores

3 2.2 Ancient and Historic Monuments

In the context of this research, 'monuments' relate to those uninhabited immovable cultural properties which are free-standing recognisable structures. 'Ancient' monuments are those dating from pre-historic times to the end of the Parthian period, i. e. AD 226. On the other hand, 'historic' monuments are those dating from the beginning of the Sassanid period in Iraq and up to the present legal terminal date of AD 1700. Although this distinction is arbitrary, it is, nevertheless, useful in that it helps to indicate the better survival-potential of ancient monuments as against historic ones.

There are several factors in Iraq that contribute to the survival of a monument over the course of history. These can be narrowed down to:

1. Locational Factor: As is the case with most archaeological sites, ancient monuments, such as the ziggurat of Ur, tend to be located mostly in remote or rural areas and, consequently, they are not immediately threatened by pressures of modern development. In contrast, historic monuments tend to be located within urban historic cores and, therefore, many are misused, altered, or destroyed.
2. Religious Significance: Mosques, shrines, tombs and other types of religious buildings, have generally shown a remarkable degree of survival. The static nature of religions and the emotional devotion and reverence of people have ensured the survival of many, otherwise obsolete but architecturally or historically interesting, religious monuments. Qumriya Mosque (c. AD 1228) in Baghdad, the Friday Mosque of Samarra (c. 847), and al-Nouri Great Mosque (c. 1172) in Mosul are examples of such historic monuments.
3. Durability of Materials: In normal circumstances, monuments which are built of stone or fired bricks are obviously more likely to survive over a long period than those built of sun-dried bricks - Mesopotamia's main natural building material.

It is doubtful whether monuments such as Hatra and Ukhaidhir, for example, could have survived the ravages of time and natural elements had it not been for their durable materials and their relatively isolated locations. Throughout history local people have stolen building materials from abandoned historic sites using them as a free source of supply. Fortunately in Iraq the majority of these sites have been too isolated to make this type of plunder profitable.

Generally, Mesopotamian monuments represent a more vivid and a more interesting physical evidence than archaeological sites. This is perhaps even more evident in the case of Islamic monuments which most Iraqis can appreciate and associate with more easily than ancient monuments. The exact number of monuments in Iraq remains unknown. The figures given by the Directorate of Antiquities (Tables 3-19) include only a small proportion of monuments and exclude most historic ones of the later Islamic periods. However, it is known that the majority of historic monuments are either mosques or some other buildings of religious use, and that most secular monuments have largely disappeared.

An important contribution of monuments to urban archaeology derives from the fact that their location and actual site represent a valuable physical evidence as well as a historical 'spatial anchorage' that is useful in the study of urban history. Because of the sanctity with which most historic religious monuments are regarded, they are usually kept in their original site despite their regular superficial or structural alterations to their physical fabric. This is an important fact for urban archaeologists and historians to whom topographical research is a necessary tool in reconstructing and tracing back historic town maps and other urban features. For example, the celebrated Round City of Baghdad, which was built in AD 762, has disappeared so completely that not even a single brick from it has so far been retrieved. However, due mainly to the existence of certain religious monuments such as Kadhimain Mosque, al-Karkhi Mosque, Shoniziya Cemetery and other historic urban features, its original location is now more or less ascertained.

While only a few outstanding ancient and historic monuments are now effectively protected and maintained by the Directorate of Antiquities, e. g. the Ziggurat of Aqarquf, Ctesiphon, Hadba Minaret in Mosul, and Mustansiriya Madrasa in Baghdad, the majority remain unnoticed and neglected. Because monuments are not scheduled or listed in Iraq they are often demolished or significantly altered without any objections from the appropriate protective authorities. Moreover, even those monuments which are recognised by the Directorate as having architectural or historic value are often allowed to decay or be demolished, e. g. Bint Umran Tomb (c. 1500) now in ruins, and al-Shami Hammam (c. 1600) demolished in 1965. Out of some 150 monuments of high architectural or historic interest which were surveyed by the author in Baghdad, the register of the Directorate of Antiquities shows only seventeen historic monuments. None of these 'registered' monuments is properly measured, documented or photogrammetrically recorded.

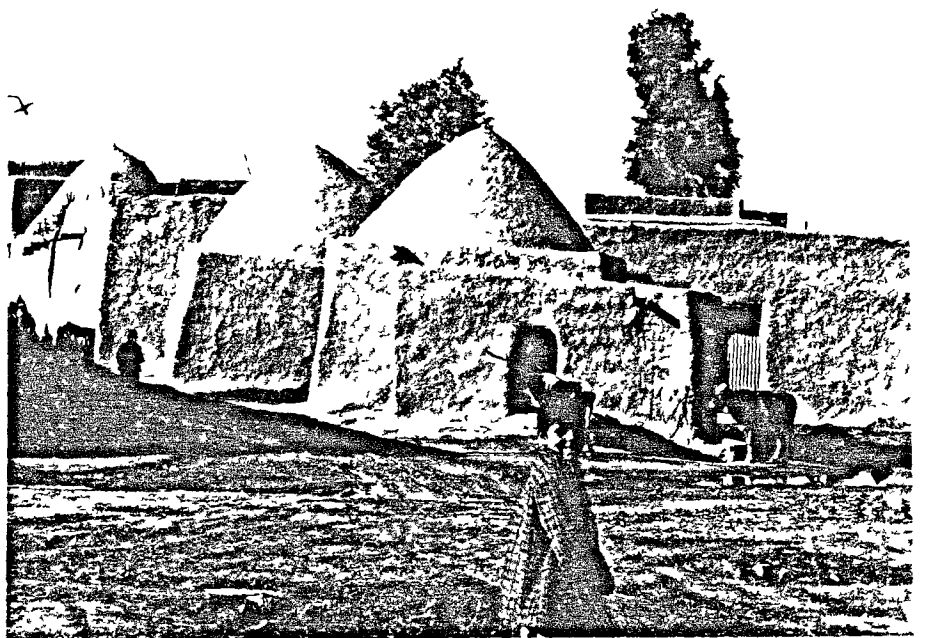
3.2.3 Rural Areas and Villages of Cultural Interest

According to a report by the Ministry of Municipalities in 1975 there were some 9,775 villages in Iraq¹³. The rural population is estimated at just over four million which constitutes slightly under forty per cent of the total population of the country¹⁴. Since the early 1950's, massive rural migration into a few main cities has resulted in the decline and abandonment of many villages, and must have contributed to the fall in the overall agricultural production in the country¹⁵. In effect, rural migration has not only seriously threatened the very existence of most villages but has also caused very high residential densities in most traditional historic urban cores.

The village is clearly more vulnerable to modern development and technology than other forms of human settlement. Villages everywhere are being rapidly invaded by largely incongruous or insensitively-designed modern development. This is causing the destruction of the so-called 'minor architecture' and the disruption of the character of many villages of historic, architectural, or landscape interest.



A. Twaila Village, Sulaimaniya Muhafadha



B. Kimbetler Village, Kirkuk Muhafadha

FIGURE 18 EXAMPLES OF IRAQI VILLAGES OF ARCHITECTURAL AND LANDSCAPE INTEREST

Iraqi villages and rural areas have never been surveyed to discover those which possess cultural and/or landscape interest. This represents a very alarming gap in the documentation of Iraqi heritage and, therefore, there is a real need to prepare an inventory or an authoritative study for this purpose. Iraqi villages and small country towns are generally of two distinct types:

1. Those of permanent fabric, which tend to be located mostly in the northern regions, e.g. Aqra, Amadiya, Qaraqosh; and
2. Those of temporary fabric, which tend to be located mostly in the middle and southern regions of the country, e.g. Ain Tamur, Chibayish, Kubaisa.

Some of these villages and small country towns are of no less cultural interest than historic urban areas of towns and represent authentic physical evidence of a rapidly vanishing way of life (Table 20, Figure 18). Others reflect certain historic developments or associations, or possess a unique architectural character, or are located within rural areas of outstanding natural landscape. Iraq is certainly endowed with some of the most interesting natural landscapes in the Near East, but these areas remain largely undesignated and unprotected against modern man-made threats.

Because historic villages and small country towns are not protected under the existing legislation, considerable damage to their character has already been done. Ill-designed modern housing, tourist rest-houses and buildings, government offices, electric poles, telephone wires and other cables, have seriously damaged the authentic character of most of these rural settlements. Inevitably, if a village or a small country town is to prosper it should be allowed to adapt itself to new changes and needs. The construction of new schools, houses, hospitals and mosques, is essential; but the designers should approach their task with humility and respect for scale, materials, colour, sensitively blending and infilling the new with the old. There is a real need to introduce general design guidelines and effective legislation to protect such villages and small country towns. These new policies should be integrated with the other inter-related aspects of rural environment such as nature conservation, wildlife, national parks, and ecology.

TABLE 20 Examples of Small Country Towns and Villages of Cultural or Landscape Interest in Iraq

	Small Country Towns	Muhafadha	Villages	Muhafadha
Architectural Interest	Aqra Amadiya Sinjar Tela far Hit Ana Kilfil	Dhok Dhok Nineveh Nineveh Anbar Anbar Babil	Baashiq al-Qosh Twailla Barazancha Kimbetler Sharq-Rayah Marsh Villages	Nineveh Nineveh Sulaimaniya Sulaimaniya Kirkuk Arbil Thee-Qar
Historic Interest	Amadiya Haditha Ana Tikrit Kilfil Kufa Zubair	Dhok Anbar Anbar Baghdad Babil Karbala Basra	Qaraqosh Sheikh Adi Karamlis Ba'athra Ababid Ahmadawa Barazancha Biara Qassim Uzair Hamza	Nineveh Nineveh Nineveh Nineveh Sulaimaniya Sulaimaniya Sulaimaniya Sulaimaniya Babil Misan Qadisiya
Landscape Interest	Aqra Amadiya Ana Abu Khasib	Dhok Dhok Anbar Basra	Baibad Aradan Atrush Sarsank Zawita Ain Sifni Fadhiliya Solaf Harir Haj Umran Galala Rayah Rawanduz Qalat Diza Halabcha Baramagron Khormal Badra Alus Kubaisa Ain Tamur Marsh Villages Qurna	Dhok Dhok Dhok Dhok Dhok Nineveh Nineveh Nineveh Arbil Arbil Arbil Arbil Sulaimaniya Sulaimaniya Sulaimaniya Sulaimaniya Wasit Anbar Anbar Karbala Thee-Qar Basra

3.2.4 Urban Areas and Towns of Cultural Interest

Traditional mahallas and historic madinas represent the most vivid manifestations of Islamic urban heritage. These areas and towns, which have been slowly evolving over many centuries, have all become the very centres of much enlarged urban settlements or cities. Consequently, the surviving historic cores and vestiges of old madinas in Iraq are being rapidly destroyed and replaced by modern commercial, administrative, and other forms of modern development. Their very existence is seriously threatened.

There are eight main cities in Iraq which contain historic cores within them. Between them, Baghdad, Basra, Mosul, Kirkuk, Najaf, Arbil, Karbala and Samarra, have a total area of some 1146 hectares of historic fabric (Table 21). Although these historic cores represent a small proportion of the total area of their respective cities, they continue to be inhabited by a large number of people. In Baghdad, for instance, over 203,000 people (seven per cent of the total) lived in historic areas in 1972¹⁶.

Because of their condensed urban pattern and overcrowding, residential densities in these areas often reach a very high figure indeed. The average gross residential density in modern areas in Iraq ranges between ninety and two hundred inhabitants per hectare as against three hundred and eight hundred in historic areas (Table 21). Such high densities not only help to accelerate the rate of structural deterioration of the fabric, but also lower the social and hygienic standards in these areas and, consequently, lead people as well as decision-makers to associate them with backwardness.

The physical form and functional structure of historic madinas in Iraq generally resemble those in other Islamic countries but particularly Arab ones. The evident consistency in their overall character was achieved and maintained over centuries largely because of the existence of a strong sense of religious tradition and social conformity. However, there is a good deal of variation and the 'typical' Islamic madina must be taken only as a convenient

TABLE 21 The Historic Cores of the Main Cities in Iraq

City and its Historic Core(s)	Availability of Conservation Study	Approx. Area of Historic Core(s)	Average Population Density in Core(s) in in/ha (1975)
1. BAGHDAD			
Rusafa	-	360 ha.	300
Karkh	-	85	450-600
Aadhamiya	-	20	300-400
Kadhimiya	Yes	59	600-700
2. BASRA			
Old Town	-*	80	500-700
Ashar	-*	60	600-700
3. MOSUL			
Old Town	-*	215	465
Nabi Younis	-	20	400
4. KIRKUK			
Citadel	Yes	12	262
Old Town	-	25	200
5. NAJAF			
Old Town	-	70	500
6. KARABALA			
Old Town	-	50	400
7. ARBIL			
Citadel	Yes	12	262
Old Town	-	25	200
8. SAMARRA			
Old Town (Not Abbasid Samarra)	-	40	400
Total		1146 hectares	

NOTES: *A general conservation study is available but as a part of the overall master plan of the city
Areas and densities are by author

generalisation. Historic cores such as those in Kadhimiya, Najaf and Karbala, have, for example, originated because of the existence of the tomb of a certain important saint (Imam). Others such as Arbil, Kirkuk and Hit, are built over high historic mounds (Tells) which were used as excellent defensive citadels. It is of interest to note that historic cores that are contained within citadels have shown a better survival-potential than others which are exposed more directly to modern development. Other towns such as Baghdad, Mosul, and Basra, developed largely because of the favourable strategic or commercial location of their site.

Most historic Iraqi towns had their defensive walls and fortifications demolished during the early decades of this century. Perhaps more than any other morphological change, this single act represented a dramatic physical gesture of the newly-gained sense of security. Symbolically, the sudden and ruthless destruction of these walls was a signal to the 'opening up' of these historic towns to the rest of the world. Physically, it started the death of the inward-looking Arab madina, and paved the way for a full-scale expansion beyond the limits of these walls. When seen in aerial photographs, these madinas contrast sharply with the modern grid-iron layouts. Their characteristic pattern is usually recognised by their pedestrian tree-like network of narrow alleyways which eventually lead to the centre.

All of the eight historic cities have master plans prepared by foreign planning firms and the Directorate of Planning. However, only Kadhimiya, Arbil Citadel, and Kirkuk Citadel, have had conservation studies prepared specifically for them. Although this is encouraging, it should be noticed that none of these conservation studies contained detailed surveys of their historic fabric, nor a systematic listing and documentation of areas and buildings of cultural interest. Moreover, in the absence of effective legislation to protect these madinas, these studies have proved largely ineffective as large-scale demolition within these areas continues unchecked.

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CHAPTER IV

THE LOSS OF HERITAGE

4.1 Introduction

It should be stated at the outset that it is difficult to know, in quantifiable terms, the extent and the rate of loss of heritage in Iraq, and it is perhaps even more difficult to find out what immovable cultural property has been lost. The reason is simply because the cultural heritage remains largely undocumented and unlisted. Without the availability of such a basic documentary census, no nation can hope properly and systematically to protect and plan its heritage.

The previous chapter outlined the historical background and showed the richness, the different types and the scale of Iraq's heritage. The various governmental protective agencies are charged with the task of protecting and caring for an enormous quantity and variety of cultural property. Hitherto, these agencies, which are discussed in the next chapter, have achieved little success in their work. On the contrary, it can be argued that the majority of the destruction of historic areas has been caused - or approved - largely by official projects. The loss caused by planning authorities through road building and widening and other engineering works is usually much larger in scale than the loss caused by private action.

Most planners and conservationists would probably agree that it is quicker and politically more dramatic to bulldoze old areas than to conserve them. This is an important fact to realize because it partly explains the willingness of most authorities in Iraq to destroy the historic environment. In his advisory report on the problems of physical planning in Iraq, Professor James of Sheffield University¹, expressed his deep concern for the future of historic madinas and stated:

"There is no doubt that Iraq is remarkably fortunate in the possession of so rich a heritage from the past, many of the older parts of its towns still bearing the vestigial charm of historic and architectural quality. At the same time it is saddening to see the scale of decay which is bringing such areas into slum conditions as the better-off families move out to more spacious homes in the suburbs, and the scale of destruction as new roads are driven through the maze of narrow pedestrian streets and buildings, superbly adapted to climatic conditions... It is often cheaper and easier to use a bulldozer than to maintain the ancient fabric, but the destruction is an irreparable loss which planning must do everything it can to prevent."

The individuality of architectural and urban character which historic madinas 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 Iraqi authorities is another important fact which explains their apathy towards conserving the historic fabric of madinas. Often, large-scale 'clearance' programmes are carried out by municipal authorities not because of a purposeful plan but largely because of a reaction or prejudice against 'backward' areas. In an article on 'Conservation in Islam', John Warren² warns against this particular threat:

"The debilitation of older quarters of Islamic cities, sometimes followed by their demolition, often occurs for no better reason than that authorities with an eye for progress feel ashamed of the traditional and often humbler properties. The West has suffered bitter losses from this attitude and if among the lessons to be learned from European mistakes, Islamic conservationists take special note of this particular danger, they will be poised to resist one of the most significant adverse pressures."

The late Dr. Shiber³, a well-known Arab conservationist, was always strongly opposed to the Westernisation of madinas; he rightly argued that it was the main culprit behind the massive destruction of historic areas, and advocated a more sensitive approach in their planning:

"The ruthless march to superficiality, materialism, consumerism, speculation and fatalism is on - on with a vengeance - in the Arab World. The cities... have suddenly been turned into garages, emporiums and warehouses of the ugly, the disorderly, the trashy. Very fast, Arab city is following Arab city in the race towards physical and visual disorder, poor planning, bad civic aesthetics and inept and corrupt municipal governments... City after city is importing all the architectural, urbanistic and aesthetic degeneracies of the Western World without, however, importing one genuinely good aspect from those sources and founts... Very fast, the vestiges of the 'old' are being erased. Traditions of yore become anathema overnight; cultural characteristics are scorned, the heritage of the past, a malady to be remedied as soon as possible."

It must be recognised, however, that apart from the above-mentioned destructive causes, most municipal and local authorities in Iraq are simply ignorant of the value of their historic environment. Their blatant disregard to it is, more often than not, based on a naive but sincere belief that the 'old' must simply be replaced by the 'new'. Lord Goodman⁴, writing a forward 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 desecrations that happen arise, not from malice, but from folly - since stupidity is even more difficult to control than evil."

4.2 The Different Types of Loss

Obviously, the loss of cultural property is irretrievable. Once an area or a building of architectural or historic value is destroyed, no replica can ever hope truly to convey the same authenticity or character of the original. The overall causes of destruction have been outlined earlier, but the different and specific ways in which the loss occurs are discussed here to illustrate and highlight the dangers. Natural disasters such as floods and earthquakes, and others caused by man such as fires and wars, can take a heavy toll but they are not considered here because they are beyond the reach of conservationists. As far as Iraq is concerned, six different types of loss are identified.

4.2.1 Loss by Large-Scale Engineering Works

The flooding of large areas and valleys through the construction of dams has submerged and thus destroyed hundreds of archaeological sites in Iraq. The dam of Darbandi-Khan, which flooded the fertile and picturesque valley of Shahrzur in Halabcha in 1962, destroyed twenty-three known sites dating from the early Hassuna to Islamic periods⁵. According to some officials of the Directorate of Antiquities⁶, the flooded area was once one of the richest archaeological sites in northern Iraq and included, among others, such sites as: Qurtas, Kard-Beakam, Tell Shamlu, Dwanze Imam, Tulma and Chragh (Figure 19). Dokaan Dam, completed in 1958, flooded the Ranya-Bingrat valley and destroyed several villages including: Mirza Rustam, Qammam and Qarashima, and submerged more than forty known sites including: Basmosian, Shamshara, Qarashima, Dokerdan, Khwairiz, and Kamrian⁷.

Other engineering works can be just as destructive. These include: inter-city highways (city roads are discussed under demolition), railways, military bases and airports which can occupy vast areas and are beyond the control of planning authorities, and irrigation works and agricultural projects. In fact, any large-scale engineering operation within archaeological sites, or even near them, can result in a considerable damage to their fragile fabric. The pharmaceutical

SUBMERGED ARCHAEOLOGICAL SITES	
1.	SHAIKH ALI
2.	ALAMA
3.	KLORAN
4.	TAZADI
5.	QARA TEPA
6.	SHAWLIS PAWLIS
7.	DALASH
8.	KARD BEEKAM
9.	(?)
10.	QOCHKA
11.	SHAMLO WASTI
12.	SHAMLO
13.	KURDI SADIQ
14.	TELAM
15.	DI HUSAIN
16.	SHUKUR TEPA
17.	CHRAGH
18.	TALMA
19.	DWANZA IMAM
20.	HUSAIN FATAH
21.	QORTAS
22.	KARD KANAM

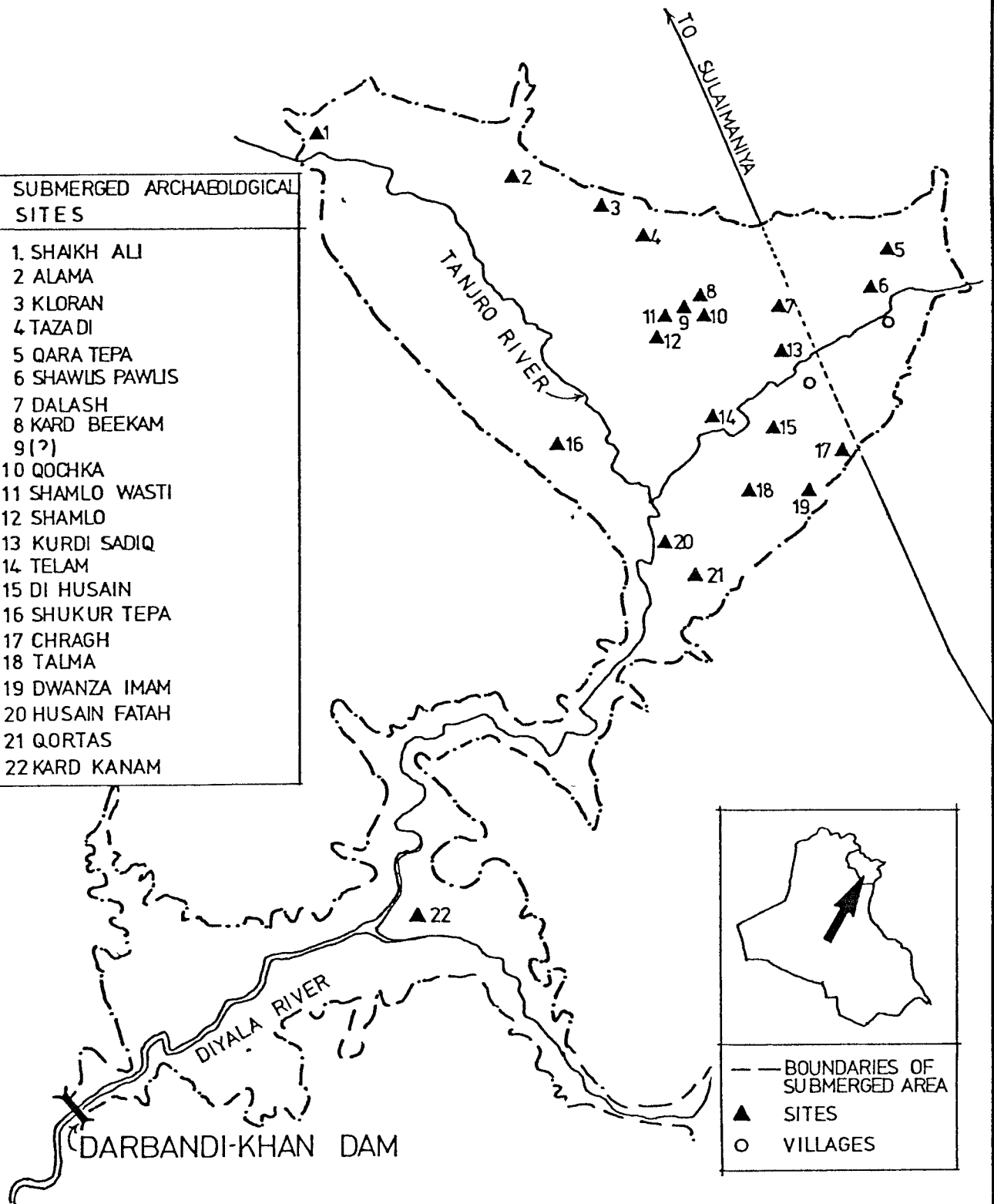


FIGURE 19 ARCHAEOLOGICAL SITES FLOODED BY DARBANDI-KHAN DAM

Source D. G. A.

factory in Samarra, whose tragic location is discussed later, is now reached by several roads cutting directly through Abbasid sites; other services such as sewerage have all 'necessitated' the digging of long trenches through these very important sites thereby destroying even more historic evidence.

4.2.2 Loss by Neglect and Decay

The loss caused by neglect, which itself leads to the gradual decay of the fabric, is by far the commonest type of loss in Iraq as elsewhere. The majority of buildings - even modern ones - are not regularly maintained. Indeed some have never been repaired throughout their long life. Traditional houses are usually more neglected than other forms of building because the majority of their owners are either unable or unwilling to meet the cost of regular maintenance. Often, historic buildings are neglected deliberately because of their high site value and good developmental potential.

Because of the lack of legislation and listing providing for the compulsory care of historic monuments and buildings, many fine examples of mosques, houses, hammams and khans, are badly neglected. Some have decayed to such an extent that it is now very difficult and costly to restore them. Eventually they will either be demolished or 'restored' by unskilled and highly unscrupulous workers to whom historical authenticity is meaningless. The conservation survey of Baghdad by the author has revealed that about a half of the 603 items selected for protection are in need of considerable attention and repair work; only fourteen items (2.3%) were found to be in a good physical condition⁸. The scale of this problem becomes much more extensive when all of the four historic cores of the city are considered for conservation. (Figure 20)

Another cause for the deterioration of the fabric of historic buildings is their misuse. For example, a large number of traditional houses in Rusafa are now used for commercial, warehousing and workshop purposes. If the inventory of 603 items of this research is taken as a sample survey representative of historic cores in Baghdad, then it



The house of Sayid Yihya was a large building of outstanding architectural qualities. The neglect and subsequent decay of its fabric led to its demolition in 1961. Although the Antiquities authorities were aware of its value it was, nevertheless, demolished without first being recorded or measured.

FIGURE 20 LOSS BY NEGLECT AND DECAY

Source of Photograph: D. G. A.

can be stated that more than seventeen per cent of all old buildings are being used for purposes other than their original use, and that nearly twenty per cent of all traditional houses are being used mostly for commercial and warehousing purposes⁹. (Chapter VIII, Table).

The problem of neglect and decay is perhaps a universal type of loss, but some Western planners seem to suggest that it exists in Muslim countries largely due to the fatalistic attitude of Muslims towards life in general. John Warren¹⁰ is again quoted here to illustrate this particular issue:

"...For all the damaging pressures upon the heritage of Islam, neglect is one of the most powerful. By definition the religion embodies an attitude of submission - submission to the overall and total will of God - from this follows an element of fatalism, bringing with it a lack of sentimentality, particularly towards the inanimate. Dust to dust...the brick towers that proudly served the master all too often become the crumbling heaps beside the buildings of the next generation. In the Muslim World new 'cities' have been abandoned with astonishing regularity until...the abandonment of buildings has become something of a tradition itself."

Although religious fatalism is indeed one reason for the neglect of cultural heritage in the Islamic World, this neglect is perhaps largely due to the general ignorance of the existence of such heritage and the lack of awareness of its value. It can be argued that one of the most important tasks facing Muslim conservationists is to popularise the concept and value of conservation and not to antagonise the masses by attacking their religious submissiveness.

4.2.3 Loss by Demolition

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. Demolition in Iraq, as in Britain, is not regarded as a form of development. Consequently, buildings including those of historic or architectural value are demolished without first obtaining the consent of the local authority. In Britain, however, listed buildings or any building in a Conservation Area must not be demolished without 'listed building consent'. Although there are no

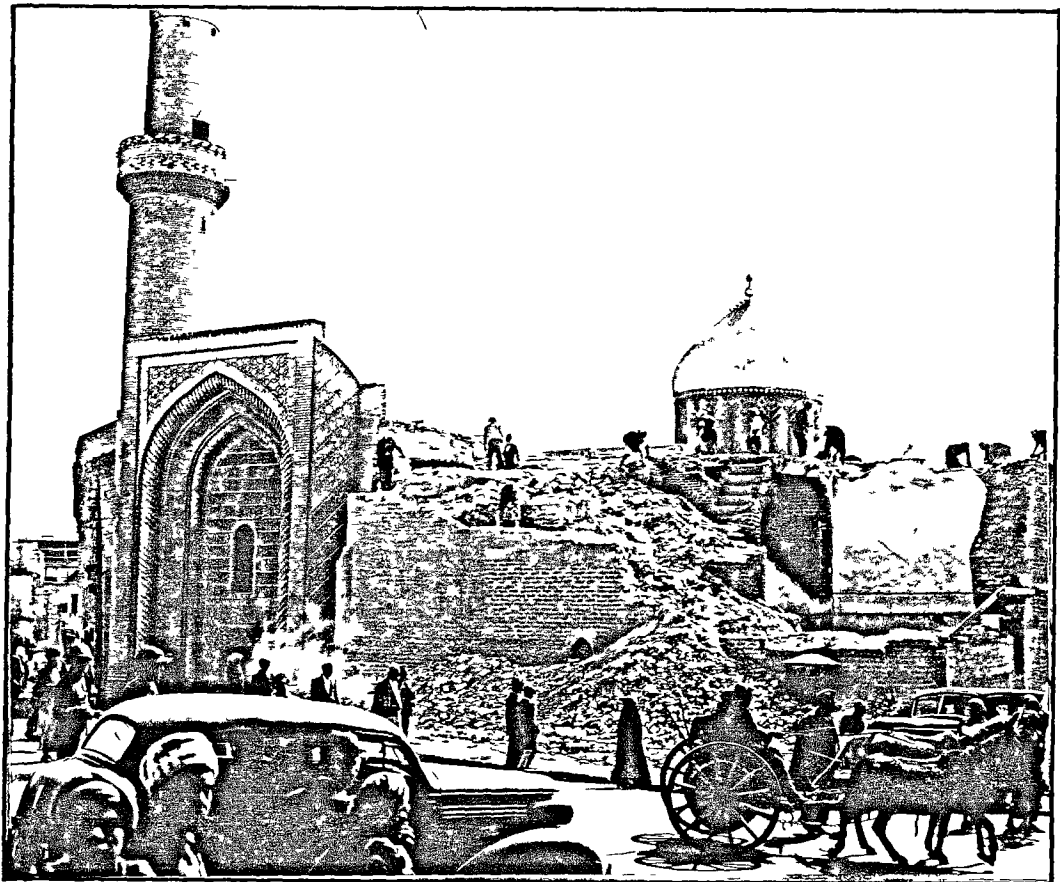
records or statistics documenting demolition in Iraq, it can be safely stated, nevertheless, that private demolition is small in comparison to official demolition which often involves the clearance of large old areas in central locations.

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.

Since World War 1, Rusafa, the largest of Baghdad's four historic cores, has lost nearly twenty-five per cent of its historic fabric by official demolition for new roads and clearance programmes alone¹¹. Rusafa, which was physically well-defined and contained by medieval walls for many centuries, was oppressively slashed by three new major streets and by hundreds of smaller ones. The first street (now called Rashid Street) was begun by the Turks in 1915 but was completed by the British in 1918. Although its forty-metres width, which includes ten metres for commercial development on either side, followed some existing thoroughfares and alleyways it, nevertheless, destroyed more than twelve hectares of historic fabric. Its morphological influence was immense; its construction attracted the bulk of the city's commercial and business uses which developed along its almost entire three-kilometres length. (Figure 21)

The second street (now called Kifah Street) was driven through Rusafa in 1936 starting from Fadhil mahalla and ending near Camp al-Arman mahalla. Its width of fifty metres, which includes fifteen metres for commercial development on either side, and its length of about 3,200 metres, caused serious damage to a great area in Rusafa. In particular, it caused the physical separation of the important historic mosques of Gailani and Fadhil from the rest of their surrounding fabric.

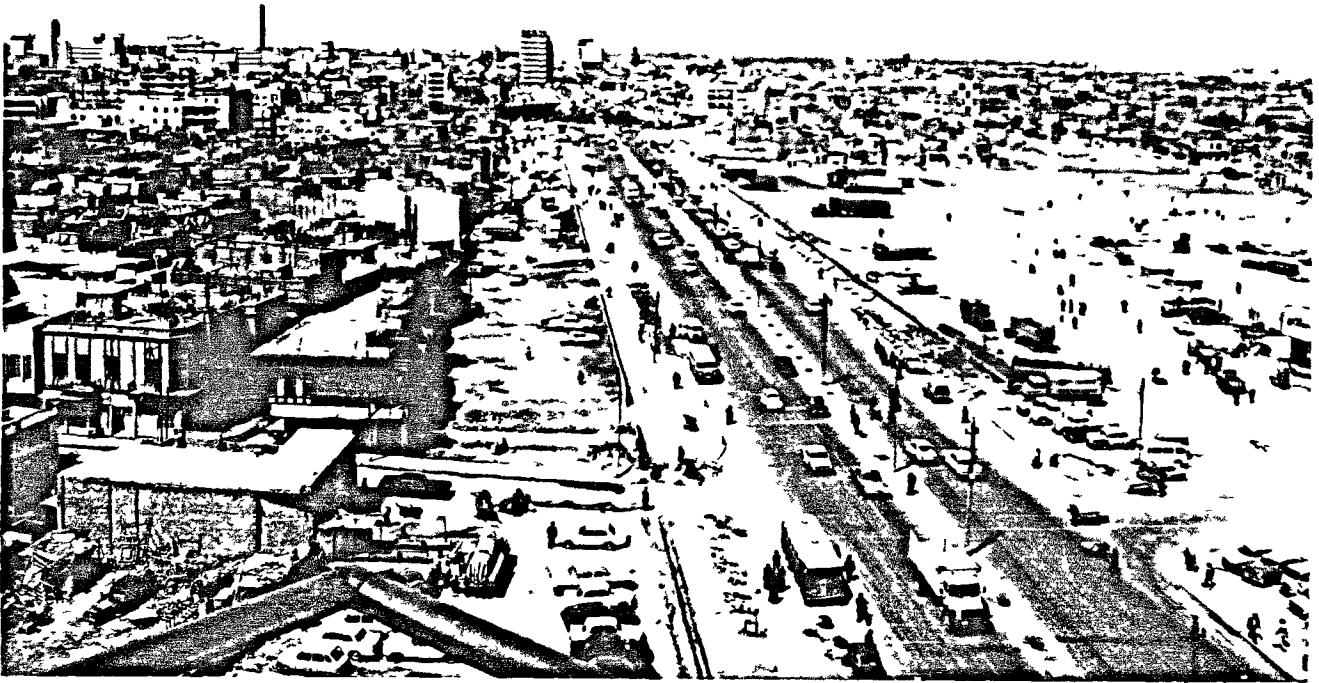
However, the biggest onslaught came when a third street (now called Jumhuriya Street) was cut through the entire length of Rusafa in 1954.



Built in AD 1356, Mirjaniya Mosque/Madrassa was one of the finest architectural monuments in Baghdad. Its ruthless and perhaps avoidable demolition in 1946 because of a road-widening scheme was a great loss to the heritage of Islam.

FIGURE 21 DEMOLITION OF MIRJANIYA MADRASA

Source of Photograph: D. G. A.



A Jumhuriya Street looking North showing the Cleared Area of Uwama



B. Aerial Photograph of Jumhuriya Street during Clearance Operations

FIGURE 22 LOSS BY DEMOLITION CAUSED BY JUMHOURIYA STREET

Source of Photographs: A. By Author; B. By D. G. of Surveys

It was envisaged by the Development Board to grow into an American-style commercial street flanked by high-rise office blocks. It was implemented in a width of eighty metres, which includes twenty-five metres for development on either side, and its 3,700 metres length cut across almost every mahalla in Rusafa. It destroyed an area of about a third of a million square metres including some 1,500 traditional houses and more than fifteen mosques¹². (Figure 22)

Clearly, the destruction of the historic environment cannot be simply calculated and assessed on the basis of the number of 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 difficult to quantify they tend to be overlooked by planning authorities.

Hitherto, the various protective agencies, especially the Directorate of Antiquities and the Awqaf, have shown little interest in recording buildings and areas of cultural interest even when 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 usually a matter of pure chance when an old photograph or a drawing of a lost valuable building is found.

4. 2. 4 Loss by Ill-Advised Restoration and Repair

Several Unesco conservationists and Iraqi archaeologists have often expressed their concern at the loss of historic evidence resulting from ill-advised protective or restorative measures in Iraq. At the archaeological level, one inherent difficulty in excavation and preservation is the rather fragile nature of ancient building materials; once the strata of different occupation levels are excavated and exposed to the elements, they tend to deteriorate very quickly. Jedrzejewska¹³, a Unesco specialist on preservation who visited Iraq in 1968, reported her anxiety at the way in which many sites have been preserved in Iraq, including: Nineveh, Nimrud, Tell Rimah, Babylon, Samarra, tell Harmal and Seleucia.

In a report on tourism in Iraq, a French consultant firm¹⁴ advised the authorities to take a more careful approach to preservation and restoration and observes:

"...At Ur, due to the bricks not being watertight, the exterior walls that were restored on the ziggurat, progressively broke down under the pressure of the mudbrick central part which swells after rain. At Aqarquf, one can regret the methods used for restoration of the ziggurat where the height of the first floor of the tower has not yet been precisely determined, and so is the haste in which the works were carried out before making sure of the perfect stability of the mud-brick structure. At Ukhaidhir, the works directed by a team whose structure constantly changed, suffers from the absence of co-ordination and continuity in efforts."

Another, perhaps more alarming, danger is posed by the projected restoration and reconstruction of Babylon. The central government has already allocated the sum of twelve million Dinars (about twenty-four million pounds Sterling) for the project which, according to the Director of the Antiquities, will involve¹⁵:

"Rescuing the city (Babylon) from underground water and constructing a network for drainage, removing the heaps of debris to unveil the remnants of the preceding centuries of Nabuchadnasir, by using drilling machines, rebuilding the ziggurat and parts of the city's enclosures, and preserving the brick remnants of the city."

This essentially prestige-project is extremely worrying. It may be a good idea to preserve the existing fabric, but the proposed reconstruction of the ziggurat is almost totally conjectural. There is not enough physical or even literary evidence to justify such action. Moreover, the heavy engineering works and machinery involved will undoubtedly result in a further loss of ancient fabric. All efforts should be made - both at national and international levels - to dissuade the authorities from carrying out the suspect elements of this project.

As far as historic monuments are concerned, the preservation and restoration work by the Directorate of Antiquities is largely satisfactory, but still needs more scientific discipline and overall consistency. It is evident that some restoration work on several

Islamic monuments has been partly conjectural and even overdone. Examples of such unfortunate cases include: Mustansiriya Madrasa, Mirjaniya Madrasa, and the Abbasid Palace (or Sharabiya Madrasa) where the decoration of the upper storey has been changed several times during restoration work. The Directorate is perhaps justifiably accused by many of not possessing a clear restoration philosophy.

The Ministry of Awqaf, on the other hand, must be distinguished as having the worst record in this context; it has not only demolished scores of mosques of cultural interest but has also destroyed - and is destroying - the historic fabric of many mosques through very bad 'renovative' operations. These so-called 'Ta'meer' operations, which are classified as maintenance, often mean the virtual replacement of the original mosque by an entirely new version. The Ministry has frequently pulled down historic mosques and replaced them, sometimes on different sites, by modern ones with the same name. Out of the 91 mosques in Baghdad that were listed by the author, only 24 (26.3%) survive substantially in their original condition, the remaining 67 (73.7%) have been either partially or totally rebuilt¹⁶. Examples of changed mosques are found in the inventory of lost heritage but include: Azbaki, Ali Afandi, Asifi, Mantiqa, Numani, Rawas, Sitta Nafisa and Sayid Idris. (Figures in Inventory cards nos. 2, 39, 106, 224, 453, 457, 917, and 925, for example)

4. 2. 5 Loss by Looting and Vandalism

This is perhaps the least recorded or reported type of loss of heritage in Iraq. The majority of archaeological sites, mounds and ancient monuments, which are located in rural or isolated areas, remain virtually unguarded. Beduins, poor villagers, and tourists often clumsily and hastily strip ancient sites and monuments and in their ignorance, they often destroy more than they find. Writing on this particular danger, Gaskill¹⁷ identifies three eager sources which create a demand for cultural property:

- "1. Tourists who are determined to take home 'something really old' (an American girl in Greece paid 100 dollars for the ear of an ancient statue),
2. Collectors who bid up prices, partly from aesthetic love, partly because the smuggled objects are better investments than most shares (on average archaeological finds have trebled in value in the past ten years); and
3. Museums. Dozens of new ones seem to spring up every week, especially in American cities and in new countries. Not surprisingly, all are determined to stock their showcases, no matter what."

Even some archaeologists, both native and foreign, have been involved in such looting and, more frequently, in smuggling artifacts out of the country. Some foreign diplomats have been suspected of using the diplomatic bag to smuggle their finds. It is a well-known fact that Babylon, for example, has for a long time been a free source of building material to local residents of the nearby town of Hilla. Travellers and other foreign archaeologists working in Iraq early this century, often reported seeing houses built of Babylonian bricks. However, some of these foreign archaeologists and others were themselves able to loot 'officially' or buy-off a vast quantity of cultural property and ship it to their respective museums. Although such looting is no longer possible today, private looting and trafficking continues.

Official looting had the advantage of finding and preserving in museums priceless works of art which might otherwise have been defaced, destroyed or sold and lost. The worst offenders in this respect have been Britain, France, Germany and the U.S.A. Negotiations should be started by the Iraqi government to have some of the rare or unique specimens returned to Iraq. In 1964, Unesco recommended that all countries should follow a strict licensing system, and that all countries rich in antiquities should share their archaeological wealth with other countries, by sale or by trade. However, most of the 'have' countries seem to insist on the first part of the recommendation, but practically ignore the second¹⁸.

Recently, the Iraqi government introduced an amendment to the 1936 Law of Antiquities which strictly banned the traffic in and the private possession of movable cultural property¹⁹. This seems to have led

some individual collectors and owners of antique shops to switch to buying items of architectural or historic value from the owners or occupants of traditional houses. Elaborately and richly decorated oriel windows, urşis, doors and inscribed panels have been bought cheaply and sold at exorbitant prices to well-to-do connoisseurs. This form of looting is fast becoming a booming trade in Baghdad and other large cities and can only be discouraged if these houses of cultural interest are listed and protected.

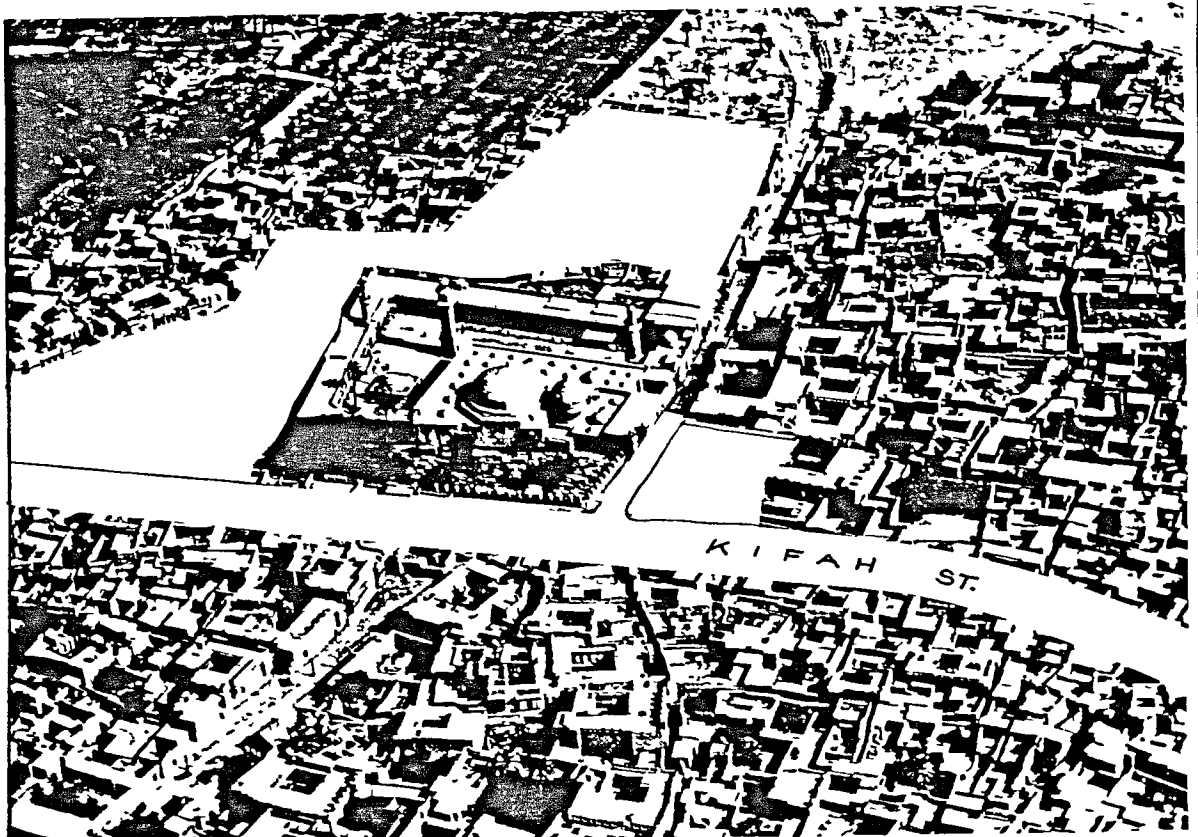
4. 2. 6 Loss by Removal of Context and Spatial Intrusion

As was indicated earlier, many municipal authorities in Iraq have recently adopted the rather unfortunate policy of 'freeing' important monuments from their surroundings. Apart from the fact that some of these surroundings may be historically or architecturally important in themselves, their demolition represents a loss of the authentic setting and urban context of the main monument. A great monument which is stripped of its urban context can lose much of its character and historic atmosphere. This type of loss is perhaps more subtle to appreciate and, consequently, municipal authorities are quite often unaware of it. Examples of such loss include: the clearance of the surroundings of the Mosques of Kadhimain, Aadham and Gailani in Baghdad; Hussain in Karbala, and Ali in Najaf. (Figures 23, 62 and 63)

Another type of loss of the context of a monument or a historic area results from an intrusion upon its space. In the absence of special development controls within historic areas in Iraq, many important historic monuments and areas have been allowed to be invaded by all kinds of unsympathetic modern development. The magnificent Kadhimain Mosque in Baghdad, for example, is now almost entirely surrounded by unsightly high-rise office blocks. The skyline of historic madinas such as Karbala, Najaf, Mosul and Samarra, dominated for centuries by characteristic domes and minarets, has now been largely destroyed by similar high-rise development. At ground level, many historic monuments have been dwarfed by their new surroundings and made to look ridiculously out of scale and urban context. The Khan of Mirjan (Inventory No. 65) and the Madrasa of Mirjanıya (No. 159) are typical examples of this type of loss.



A. Gailani Mosque with its Historic Surroundings during the 1930's



B. Gailani Mosque with its Surroundings Cleared during the early '70's

FIGURE 23 REMOVAL OF CONTEXT OF GAILANI MOSQUE

Another version of spatial intrusion especially affects those monuments which stand alone in a predominantly flat and open landscape, e. g. , the Pyramids in Egypt, Hatra, Ctesiphon and Ukhaidhir in Iraq. A high and sizeable ancient or historic monument usually dominates its entire surrounding area, and this dominance is accentuated when the flat landscape is barren and devoid of any man-made structures. Indeed it could be argued that the solitary and desolate quality of such a monument helps to enhance its authenticity. The almost surrealist-like quality of such settings as that of Ukhaidhir helps one to intensify one's vision and experience of the past.

Clearly, therefore, if a sizeable modern structure is built near such a monument, or even several hundred metres away from it, the whole unique spatial atmosphere of that monument is dramatically disrupted. This rather obvious but very important observation has been overlooked in two glaringly disastrous examples in Iraq: the construction of a huge pharmaceutical factory very near to the Great Mosque of Samarra (Figure 26), and the construction of a monumental 'Panoramic' museum, which commemorates the victory of Arabs over Persians in the famous Battle of Qadisiya, a few hundred metres from the Arch of Ctesiphon (Figure 24). The loss of heritage in Samarra and the tragic intrusion of its factory are taken here to illustrate this issue.

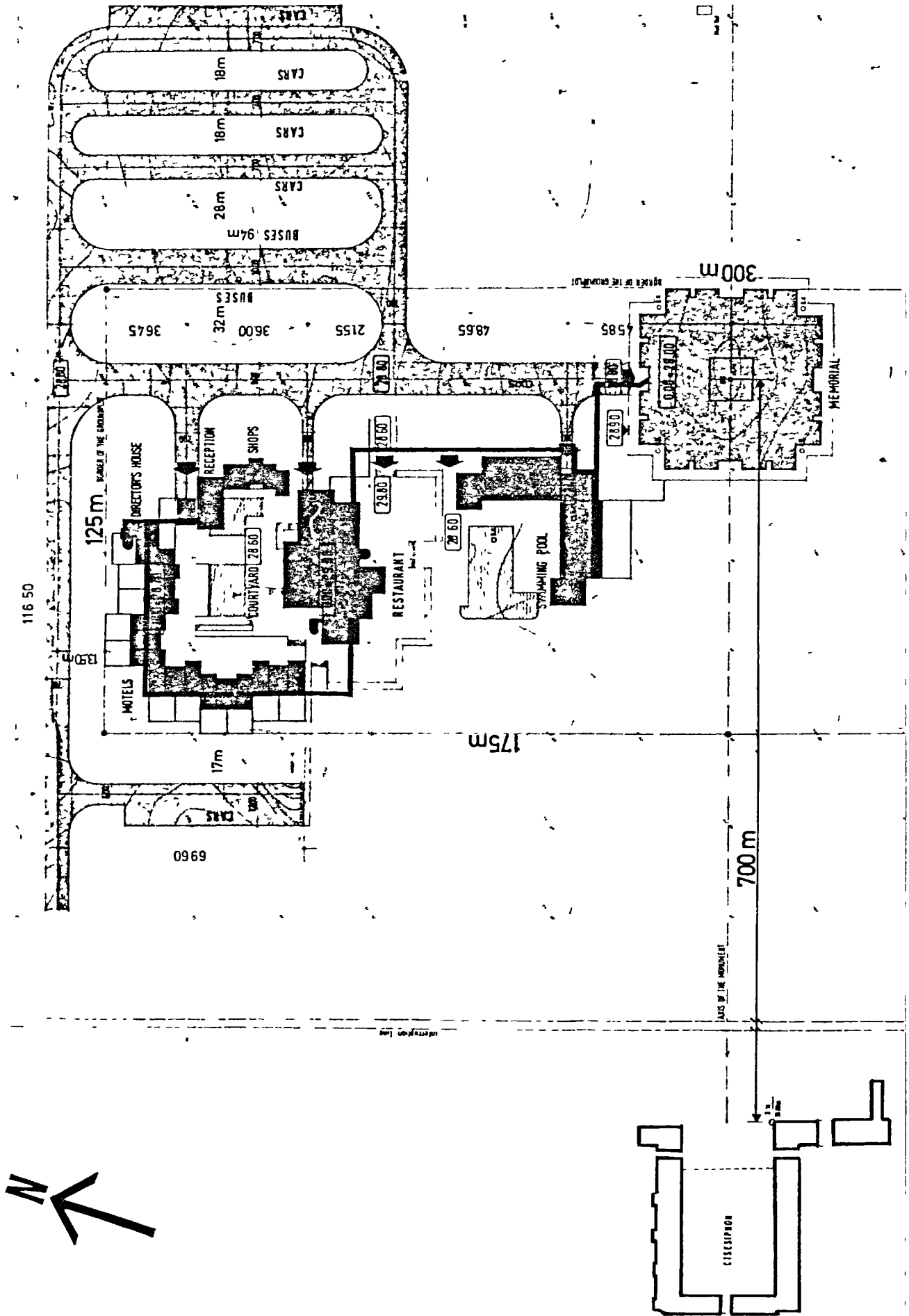


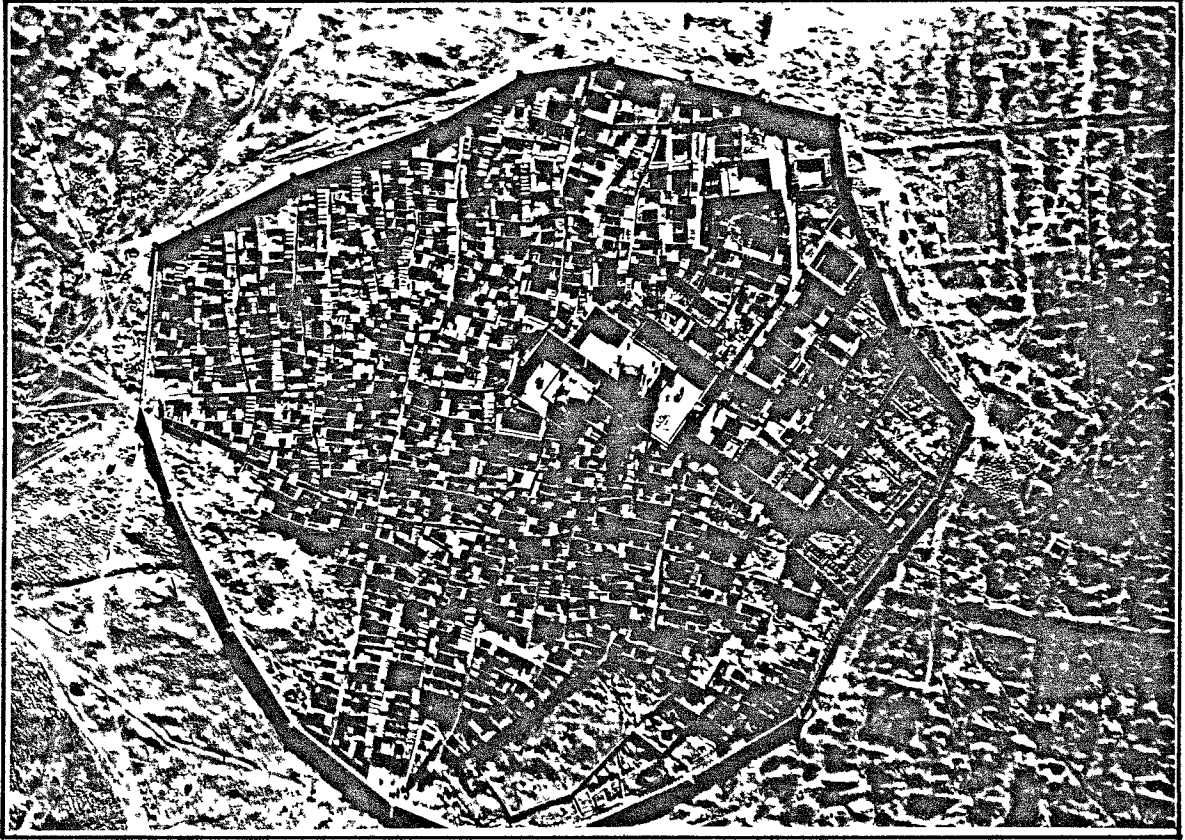
FIGURE 24 AN EXAMPLE OF SPATIAL INTRUSION - PLAN OF MODERN DEVELOPMENT NEAR CITESIPHON
 Source M + R International (Belgium)

4.3 The Case of Samarra

Present Samarra is a small historic town located at about 120 kilometres north-west of Baghdad. Its history goes back well beyond the Assyrians, and it was here that Emperor Julian died in AD 363 after retreating from Ctesiphon. However, the town owes its fame to the Abbasids who, under the Caliph Mu'tasim, built it in 836; and at the peak of its short-lived history it stretched for nearly 42 kilometres along the banks of the Tigris²⁰. It was abandoned in 892 and from it vast areas of archaeological sites remain today, of which the 52-metre high spiral minaret (Malwiya) and its Great Friday Mosque are the best known Abbasid monuments in Islam.

The abandonment of Samarra was not total and a small urban settlement continued to cluster around the tombs of the Tenth Imam, Mahdi (d. 868) and his son, Askari (d. 873). The tombs soon developed into a mosque attracting thousands of Shi'i pilgrims from all parts of the Muslim World thereby ensuring the continued existence of this settlement. Aerial photographs taken early this century show clearly that the traditional part of Samarra was built on top of earlier Abbasid ruins (Figure 25). Indeed, many houses were built of bricks looted from such ruins and monuments²¹.

Further destruction by expansion was rendered impossible by the defensive walls which surrounded the town, although looting still continued. The walls were built in 1834 (perhaps they replaced an earlier one) by a rich exiled Indian King²². A major loss took place when these walls were demolished by the Directorate of Antiquities in 1936 and its bricks were used for erecting modern buildings²³. This demolition signalled a new phase of destructive horizontal expansion hitherto restricted by those walls. The increase in population from just under five thousand in 1947 to an estimated thirty-seven thousand in 1974 was reflected in physical terms. By now, the area of Samarra town had increased six fold to about three square kilometres. Thus nearly one square kilometre of one of the greatest Islamic sites had been irretrievably lost for ever. Clearly, therefore, there is a strong case for limiting Samarra's future expansion to a few satellite settlements located carefully away from the archaeological sites.



An aerial photograph, taken in 1917, clearly shows how modern Samarra is built directly on Abbasid archaeological sites. The expansion resulting from the demolition of the city walls in 1936 has been taking place almost exclusively at the loss of some of the most important Islamic sites in Iraq.

FIGURE 25 AERIAL PHOTOGRAPH OF WALLED SAMARRA

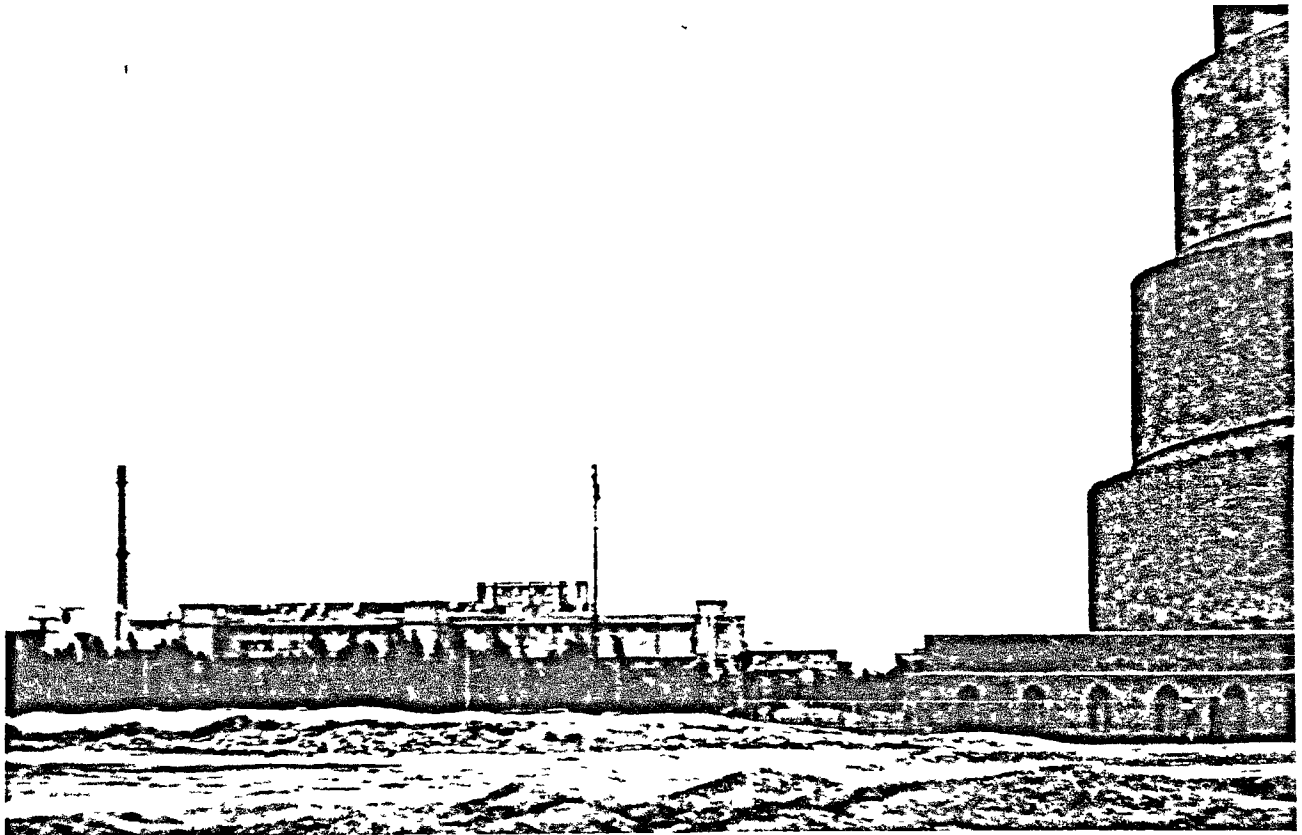
Source of Photograph: Imperial War Museum, London

4.3.1 The Tragedy of the Pharmaceutical Factory

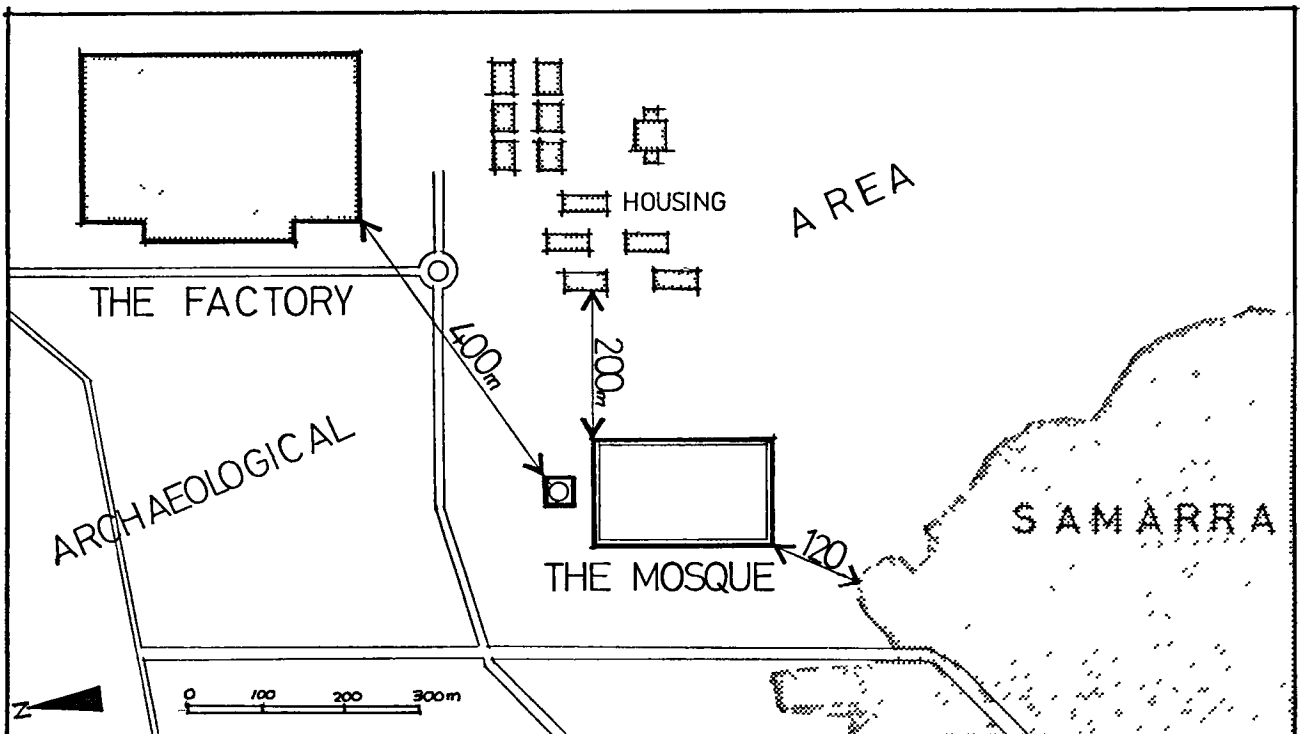
In order to provide local employment and vitalise the economy of Samarra, the central planning authorities decided in 1959 to locate a pharmaceutical factory here. The building operations started in 1961 and were completed in 1969 at a cost of nearly seven million Iraqi Dinars²⁴. This Russian-built factory now employs some 1,150 engineers and workers, and occupies an area of just under a quarter of a million square metres (Figure 26) with plans for future expansion.

While the need for such a factory is not disputed, its location must, however, be regarded as one of the most unfortunate planning decisions taken by the central government. It remains as the outstanding desecration of heritage in Iraq. The siting of such a huge factory only four hundred metres away from one of the greatest monuments in Islam is a most reckless and irresponsible act of official vandalism. This almost unbelievable folly took place with the apparent consent, or apathy, of the official guardian of heritage - the Directorate of Antiquities. Official records of this case were difficult to reach but one can only assume that the Directorate did not exert its full powers to change the location of this factory and succumbed to pressures from higher authorities.

The tragic spatial intrusion of this factory, with its multi-storey structure and chimneys, is being perpetuated by gradual expansion requiring more roads and services that pass through the supposedly protected archaeological sites. Although the master plan of Samarra provides for the protection of these sites by showing a dotted line (Muharram) beyond which development is forbidden, this abstract line seems to have had little effect on the ground. During a field visit by the author in January 1976 it was observed that several governmental projects, including one by the allegedly conservation-conscious Tourism Administration, were being erected well beyond this line. Because of such callous infringements it is vitally important that such unique sites are surrounded by some type of fence or barrier to keep off tourists, cattle and vehicles which at present wander anywhere causing considerable damage to the historic evidence. As for the factory, any further



A. View of the Factory showing its Proximity to the Spiral Minaret



B.

FIGURE 26 SPATIAL INTRUSION BY PHARMACEUTICAL FACTORY IN SAMARRA

Source of A. and B: By Author

expansion must be strictly limited. It may not be politically or economically feasible to relocate it elsewhere in Samarra in the near future but this should be considered as a long-term target. The lessons from this most unfortunate folly should be taken very seriously to avoid similar blunders.

INVENTORY OF CULTURAL HERITAGE
LOST IN BAGHDAD SINCE 1917

4.4 Inventory of Heritage Lost in Baghdad since 1917

It was emphasised earlier that the destruction of cultural heritage goes on largely unnoticed and unrecorded in Iraq. However, despite this serious handicap, it was believed important to attempt to prepare an inventory of buildings, monuments and other urban features of cultural interest lost between 1917 and 1977 (sixty years). It is hoped that such an inventory would not only have a documentary value in its own right, but also throw some light on the scale of destruction in Baghdad. It is probably the first of its type ever attempted for this large city and, consequently, it lacks many details and must not be regarded as comprehensive. Further research is necessary and this might be able to fill in the gaps and discover more lost cultural property, many of the missing details of the demolished buildings included here may be discovered by such research as the majority were demolished within living memory.

Wherever possible, each item has been given one or more written references which are found in abbreviated form as their full text is given in the main bibliography of this thesis (Volume I.

The items are grouped according to their use-type, and sub-grouped according to their general location in Baghdad, i. e.

(1) Rusafa, (2) Karkh, (3) Aadhamiya, and (4) Kadhimiya consecutively and alphabetically. Items that have been rebuilt on the same site or those that still retain some of their original fabric are also included in the main inventory of this thesis and referred to here by their relevant inventory serial number. Items that are known to have had an outstanding historic or architectural value are marked thus (*). The types, numbers and reasons for their loss are given in Table 22, where it will be seen that the majority of the losses have been the result of official action, especially by the Awqaf.

TABLE 22 The Types of Buildings, Numbers and Reasons for Their Loss

TYPES	REASONS FOR LOSS							TOTAL NO. LOST
	Road Building and Widening	Clearance for Car Parks	Replacement by Modern Development	Neglect, Decay, or Obsolescence (not rebuilt)	Rebuilt Differently on Same Site	Blown up	Reason Unrecorded	
A. Gates	2	-	-	-	-	1	-	3
B. Mosques	23	5	12	7	13	-	21	81
C. Churches	-	-	-	1	1	-	-	2
D. Houses	8	1	5	2	-	-	4	20
E. Hammams	6	2	7	1	-	-	1	17
F. Suqs	1	1	2	-	-	-	-	4
G. Khans	1	1	6	-	-	-	22	30
H. Hospitals	-	-	-	1	-	-	-	1
I. Others	-	-	-	1	-	-	-	2
Total	41	11	33	12	14	1	48	160
Percentage of Total	25.7%	6.9%	20.6%	7.5%	8.7%	0.6%	30%	100%

A. CITY GATES

(1) Rusafa

1. Bab al-Muadham Gate*

Built in AD 1095 by the Caliph Mustadh'hir (1094-1118)

Demolished in 1925 by Amanat al-Assima when the northern end of Rashid Street was widened.

Description: This was one of the four gates of the Abbasid walls which surrounded the eastern side of Baghdad and which were demolished by Midhat Pasha in 1869 leaving the gates intact. This gate was originally known as the 'Gate of the Sultan' after the Seljuq Sultan Tughrul II and also because it faced the Sultan Mosque just outside the walls and opposite to the old citadel of Baghdad. Later, it became known as Bab al-Muadham after the Mosque of al-Aadham. Compared with the other three gates, it was the least elaborate. It was about 10 m. wide, 21 m. long and 20 m. high, and had a straight vaulted entrance passage. This is unusual for the Abbasids, who adopted the 'bent' type of entrance for their gates, and it is possible that it may have undergone a later alteration by the Ottomans. An accurate plan of this gate was prepared by Naynabar in 1919 and there exist several old photographs (Figure 27)

References: Naynabar, Vehrbauten Irak, p. 52, Sarre and Herzfeld, Reise, Vol. II, pp. 148-151, Jawad and Susa, Dalil, p. 160

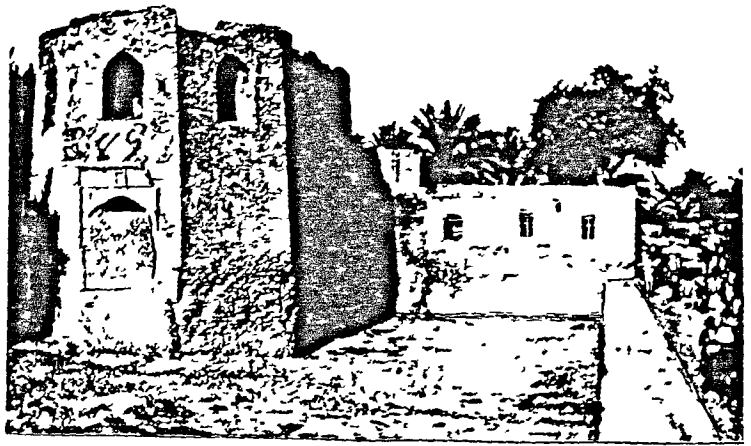
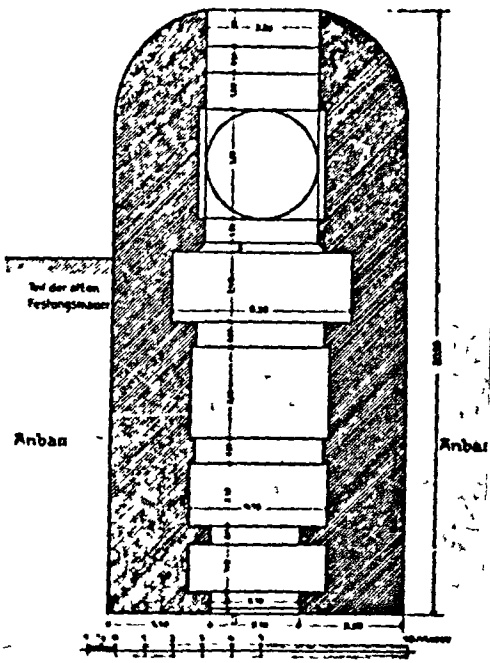
2. Bab al-Talisim Gate*

Built in 1221 by the Caliph Nasir.

Demolished (blown up) in 1919 by the retreating Turkish Army.

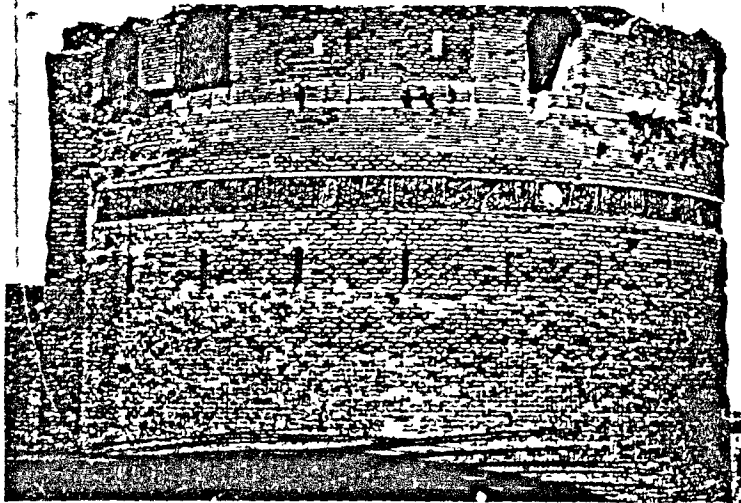
Description: This gate, known in the West as Talisman, was the most interesting and elaborate of the four gates. It was originally called 'Bab al-Hilba' because of its vicinity to a sports ground. It was located at the southern section of the eastern walls of the city and consisted of a round tower of about 20 m. in diameter and a 17-metre long bent entrance passage which is somewhat similar to the only existing Wastani Gate. It contained a superbly inscribed band of 'Nushki' Arabic calligraphy around the upper part of the tower and a finely-carved decoration of intertwining dragons filling the spandrels of the main pointed arch of the gate (Figure 27)

References: Naynabar, Vehrbauten Irak, pp. 51-52 with a plan; Sarre and Herzfeld, Reise, Vol. I, pp. 34-42 and Vol. II, pp. 151-156, illus, Bell, Amurath, p. 190, illus, Harner, Islamic Iconographics, Ars Islamica, Vol. V, pp. 113-154, Jawad and Susa, Dalil, pp. 161-162

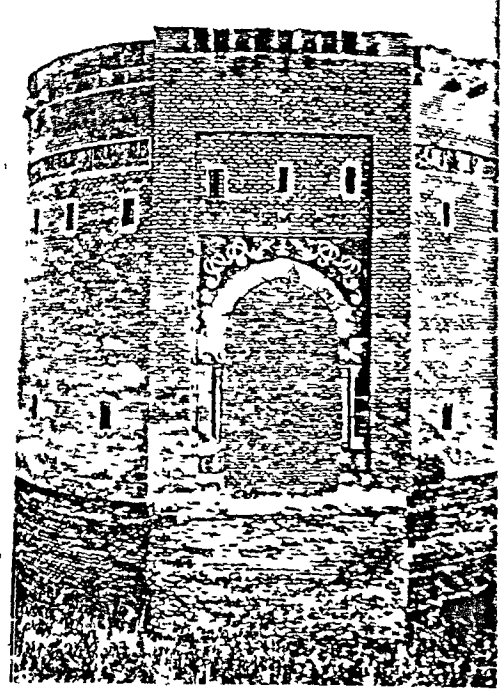


BAB AL-SHARQI

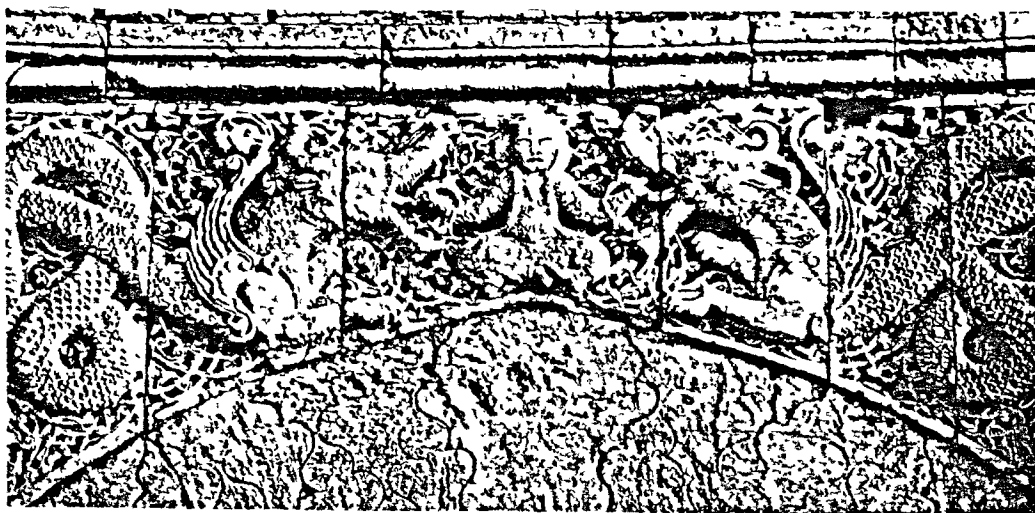
181 Bab Muassam, Grundriss.
BAB AL-MUADHAM (PLAN)



BAB AL-TALISM



BAB AL-TALISM



DETAIL OF BAB AL-TALISM

FIGURE 27 DEMOLISHED GATES IN BAGHDAD

Sources: Herzfeld, Langenegger, Naynabar

3. Bab al-Sharqi Gate*

Built probably in 1221 by the Caliph Nasir.

Demolished in 1937 by Amanat al-Assima - under the orders of Arshad al-Umari, the Mayor - to make way for the widening of the southern end of Rashid Street.

Description: This Abbasid gate was also known by the names of Kilwatha and Basaliya. It had a bent entrance passage and an octagonal tower of 8 m. in diameter and 11 m. in height. Old photographs indicate that it had an upper storey with an arched window on each of its eight sides. During the early decades of this century, it was used as a tannery and later as a 'St. George's' church by the British Army. It has not been possible, so far, to come across a measured plan for this gate but an accurate elevation of it is given in Naynabar's book. Several old photographs were also collected. (Figure 27)

References: Naynabar, Vehrbauten Irak, p. 52; Jawad and Susa, Dalil, p. 162; Jawad and Jamil, Baghdad, Vol. II, p. 218, illus, Langenegger, Baukunst Irak, p. 14, fig. 2

B. MOSQUES, TAKYAS AND TOMBS

(1) Rusafa

1. Abbas al-Jarrah Mosque

Built pre 1870

Demolished in 1965 by the Awqaf

Description: This was a small masjid located in Sinak mahalla of Rusafa and near the Post Office Building. Its name derives from Abbas al-Jarrah, the man who restored it around 1870. According to the locals, it had a small musalla and its roof was constructed with wooden beams. No plans or photographs were found to give any further details about its former appearance.

References: Alusi, published Masajid, p. 141, Jawad and Susa, Dalil, p. 306

2. Abariqi Mosque

Built (originated in Twelfth Century)

Demolished in 1962 by the Awqaf and replaced by an entirely new and different one.

Description: This was a small masjid located in Sinak mahalla and near to Tahrir Square. There are no written references on it, but according to some Awqaf officials and aged locals, its name is derived from a certain contemporary of the celebrated Shaikh Gailani (1077-1166), who was a water-carrier for Gailani's Mosque. Unfortunately, his tomb which survived up to 1962 was built over by the Awqaf when the new mosque was built. No plans or photographs were found and further research is necessary. Its location and a photograph of the new mosque are found in the Inventory under No. 336.

References: Jones, Memoirs, p. 326

3. Adiliya al-Saghir Mosque

Built in c. 1737 by Adila, the daughter of Ahmad Pasha a Wali of Baghdad.

Demolished in the 1960's by the Awqaf and its site is now used as a car park.

Description: This was a small masjid located opposite the old site of the Iraqi Museum in Rusafa on Amin Street. It contained a small musalla and a mihrab, and its portal was adorned with a marble inscription panel. It was restored in 1900. No plans or photographs were found to indicate its former state, but its date is reasonably accurate because Adila built (during the same period) another mosque (Adiliya al-Kabir) which still exists and whose date is certain.

References: Alusi, Masajid, pp. 45-46

4. (Haji) Afandi Mosque

Built probably in Eighteenth Century

Demolished in the late 1950's to make way for the Maidan Square.

Description: This was a small mosque located in alley 64 in Dukan Shnawa mahalla of Rusafa, and adjacent to house 10/64. According to a file kept by the Directorate of Antiquities, it contained a marble inscription panel claiming to belong to the celebrated Tomb of Ahmad ibn Hanbal. However, this panel seems to have been dismissed by officials as false because the original tomb was near Kadhimiya and that was destroyed some centuries ago by a flood. The file does not contain any descriptive details about the mosque itself. No plans or photographs were traced.

References: Directorate of Antiquities, Haji Afandi Mosque File

5. Agha Zada Mosque

Built pre 1900

Demolished in 1920's?

Description: This was a small masjid located in Bab al-Agha mahalla of Rusafa. Details about its former appearance and conditions are not available. It could be another name for Bab al-Agha Mosque which was reported by Jones in 1853 but this needs more research.

References: Jawad and Susa, Dalil, p. 297

6. Ali Afandi Mosque*

Built in 1711 by Ali Afand, a Treasurer (Dafterdar) of Baghdad.

Demolished by the Awqaf and Amanat al-Assima when Jumhuriya Street was driven through Rusafa in 1954, and replaced by an entirely different one near the same site.

Description: This was a small mosque located in Barudiya mahalla of Rusafa. It contained a small domed musalla area and a finely decorated minaret. Further details are found in the Inventory under No. 106. Several photographs of the original mosque were found.

References: Alusi, Masajid, p. 71; Azzawi, Tarikh, Vol. II, p. 235

7. Asma' Khatun Mosque

Built probably in Eighteenth Century

Demolished in 1975 by the Awqaf because it had been allowed to decay extensively.

Description: This was a large, interesting mosque located near Amanat al-Assima building in Jadid Hasan Pasha mahalla of Rusafa. A photograph of its ruined structure was taken by the author and shows its elaborate domed and vaulted sirdab and Musalla. However, there are no plans to give further details about its former appearance. Alusi only mentioned its name and location but gave no details.

References: Alusi, published Masajid, p. 139

8. Atika Khatun Madrasa

Built in 1820 by Atika Khatun

Demolished in 1936 when Ghazi Street (now Kifah Street) was driven through its area.

Description: This was a small madrasa located near Gailani Mosque. It was built by the daughter of Ali al-Naqib, Atika, according to a Waqfiya dated in 1820. No detailed references, or plans, or photographs were found to give any further details.

References: Azzawi, Masajid wa Madaris, pp. 91-106

9. Ayisha Khatun Mosque

Built pre 1900

Demolished in the early 1970's

Description: This was a small masjid located in the Tob mahalla of Rusafa. It was demolished with other buildings in the same area to provide a site for the new National Library Building. No detailed references, or plans or photographs were found to give any details about its date and appearance.

References: Alusi, published Masajid, p. 141

10. Azbaki Mosque*

Built in 1681 and rebuilt in 1818 by Daud Pasha

Demolished in 1962 by the Awqaf and replaced by an entirely different mosque.

Description: Full details are found in the Inventory of this thesis under No. 2 (Figure 28)

References: Azzawi, Tarikh, Vol. V, p. 25, Durubi, Baghdadiyun, p. 229, Alusi, Masajid, pp. 10-11

11. Bab al-Agha Mosque

Built pre-1853

Demolished (probably) in 1920's

Description: This was a small masjid in the suq area of Rusafa. Felix Jones, who surveyed the city in 1853, mentioned its name in his memoirs. It could have been built much earlier than this date but there were no references, plans, or photographs to indicate its date and its former condition.

References: Jones, Memoirs, p. 316

12. Baba Gurgur Mosque

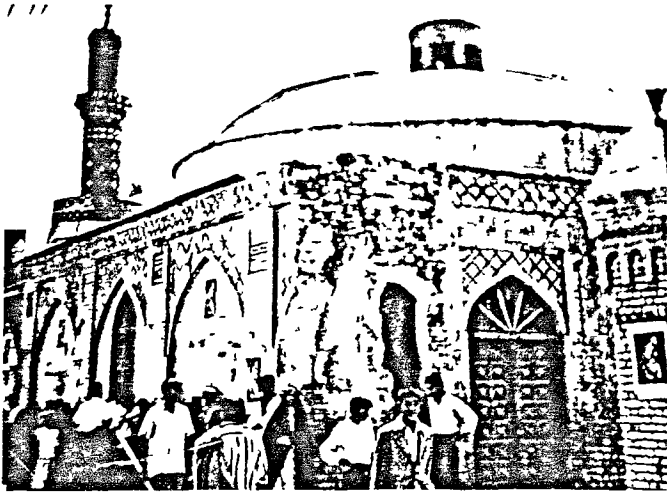
Built (probably) in 1880 or earlier

Demolished in 1972 by the Awqaf for no apparent reason, probably because it was allowed to decay extensively.

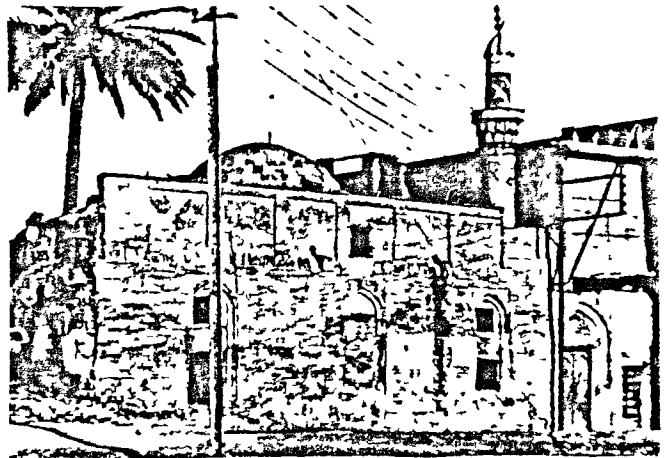
Description: This was a small masjid located in the Maidan mahalla of Rusafa and next to al-Pasha Hammam. It was used as a takya by the Baktashi dervishes and sufists but returned to a mosque in 1882.

There are no plans or photographs to indicate its former appearance.

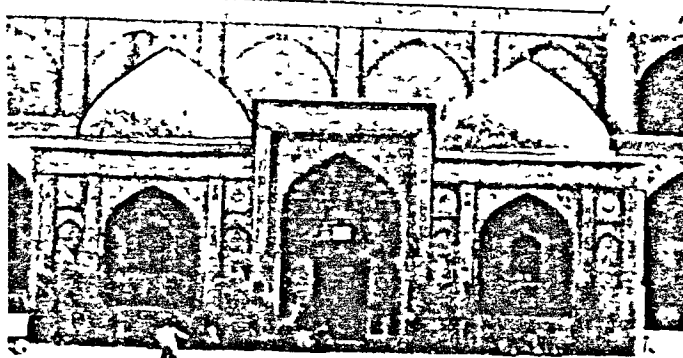
References: Durubi, Baghdadiyun, p. 303, Azzawi, Tarikh, Vol. V, p. 103-4, and Vol. VIII, p. 51



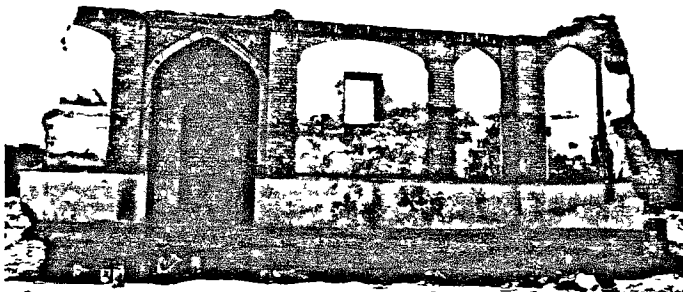
AZBAKI (PRE 1963)



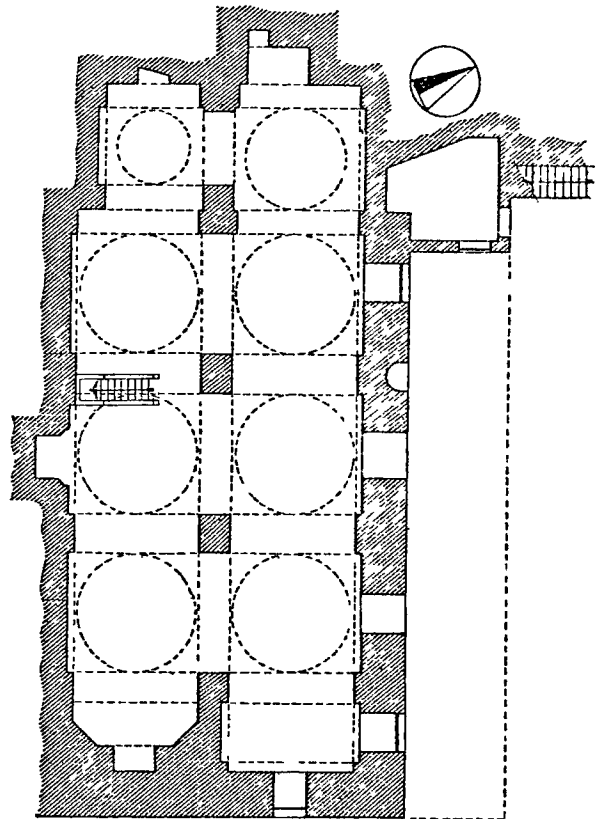
KAHYA MOSQUE



KADHIM'S SONS MAUSOLEUM



AL-TURK MOSQUE



ATTA MOSQUE (PLAN)
(ALSO FIGURE 29 FOR INTERIOR)



MANTIQA (PRE 1951)

FIGURE 28 DEMOLISHED MOSQUES IN BAGHDAD

Sources: Strika and Khalil, D. G. A. , and Author

13. Badawī Takya*

Built (originated in 1682?)

Demolished in 1958 but the tomb was retained by the Awqaf

Description: This was a small takya and masjid located in Ras al-Qarya mahalla of Rusafa and now on Rashīd Street. Durubi states that it was the takya and tomb of Shaikh Kasīb and that a 'Farman' (Ottoman Decree) dated in 1822 relates to its maintenance. In a personal communication with Shaikh Younis al-Samarrai in 1976, however, he stated that the tomb is that of Kasīb ibn Yaqub ibn Shaban ibn Muhammad ibn Ahmad, al-Rifai al-Kadhimi, who died in 1682. The tomb is still revered by many Iraqis. The original building has been replaced by a multi-storey office block and given the name of Badawi. No plans or photographs of the original building were found. Further research is necessary. Its location is shown in Inventory No. 89.

References: Alusi, published Masajid, p. 144; Jawad and Susa, Dalil, p. 297; Jones, Memoirs (1853), p. 313

14. Barazanlı Mosque

Built pre 1908

Demolished probably in the 1950's because of extensive decay

Description: This was a small masjid located in Murabaa mahalla in Rusafa and near Rauf Hammam. Its original date is not known but it was shown on Khoja's map of Baghdad in 1908 and on Zaki's map of 1919. No plans or photographs were found to indicate its former appearance and condition.

References: Jawad and Susa, Dalil, p. 297

15. (Peer) Daud Mosque*

Built Pre 1666

Demolished around 1956 by the Awqaf

Description: This was a small masjid located near Muradiya Mosque in Bab al-Muadham area of Rusafa. It consisted of a small musalla, a porch, and an open courtyard with a garden. The roof of its musalla was wooden. The tomb of Peer (Shaikh) Daud was surmounted by a small dome and was located in its garden. It seems to have been neglected and it disappeared in 1972. According to some aged locals, an Englishman took (or was allowed to take) its original marble fountain which was placed near its well. The site is now used as a rubbish dumping place partly hidden by an Awqaf-owned multi-storey building bearing the name of Peer Daud. No plans or photographs were found to give any further details about its appearance or date.

References: Alusi, published Masajid, p. 140, Jawad and Susa, Dalil, p. 298

16. (Haji) Fethi Mosque*

Built in 1755 by haji Fethi, a dervish sufi from Mosul

Demolished in 1975 by the Awqaf because of neglect and decay

Description: A plan of this mosque prepared by the Awqaf in 1949 shows that it was rectangular in form (15 x 26 m.) and consisted of an open courtyard and a closed musalla with a mihrab. Its frontage was taken up by several shops to pay for its upkeep. Its original domed and vaulted roof structure (and probably other features as well) was replaced by a modern one by the Awqaf in 1922 under the pretext of 'renovation'. Only two interior photographs were found by the author and none of its former exterior.

References: Alusi, Masajid, p. 52

17. Gharabiya Madrasa*

Built in 1681 by Hussain al-Gharabi

Demolished probably in the early 1920's

Description: This was a two-storey peristyle madrasa located near the existing Sayid Sultan Ali Mosque and overlooking the Tigris. No plans or photographs were found to give a glimpse of its former appearance.

References: Durubi, Baghdadiyun, p. 326

18. Hajiba Khatun Mosque

Built pre 1900

Demolished probably in 1937

Description: This was a small masjid located in Imam Taha mahala of Rusafa. It contained a saqaya (font). No other details are available.

References: Alusi, published Masajid, p. 140, Jawad and Susa, Dalil, p. 299

19. Hammam al-Malih Mosque*

Built (rebuilt) in 1688 by Ahmad Pasha Boushnaq

Demolished in 1972 by the Awqaf and replaced by a modern school.

Description: This mosque was located in Hammam al-Malih mahalla of Rusafa and next to the hammam of the same name. According to a sketch plan (undated) by the Awqaf, it occupied an irregularly shaped area of about 1,000 sq. m., and contained a small dome over the musalla and a minaret on its north-western side. It had a sirdab (basement), a large open courtyard with a garden and several small rooms. Its date of origin could go back to the Abbasid period. No photographs were located.

References: Alusi, Masajid, p. 91, Durubi, Baghdadiyun, pp. 337-338

20. Hamudi al-Chalabi Mosque

Built pre 1912

Demolished probably in 1954 when Jumhuriya Street was built

Description: This was a small masjid built by al-Chalabi and located near Khulani Mosque in Ras al-Saqiya mahalla. Its date is not known but it is shown on Rashid Beg's map of Baghdad of 1912. No plans or photographs were found.

References: None

21. Hasab-Allah Mosque

Built probably Nineteenth Century

Demolished probably in 1940's

Description: This was a small masjid located in Taht al-Takya mahalla of Rusafa. There are no detailed references to indicate its former condition and date.

References: Jawad and Susa, Dalil, p. 299; Alusi, published Masajid, p. 140

22. Kahya Mosque (also Amin al-Zand)*

Built (rebuilt) in 1903 by Kamıl al-Zandokan

Demolished in 1962 by the Awqaf for no apparent reason

Description. This was an important and an interesting mosque located in the Maidan mahalla of Rusafa and opposite to what is now the multi-storey Electricity Building. Measured plans of this mosque are not available but several old photographs show that it consisted of a large brick dome which surmounted the main mihrab area of the musalla and a small minaret. The minaret was finished in coloured kashani glazed tiles and contained one platform which was carried by two rows of muqarnas structure. (Fig. 28)

References: Alusi, published Masajid, pp. 59-62, Masajid, pp. 97-103, Jawad and Susa, Dalil, p. 308

23. Kinaan Mosque

Built probably in Nineteenth Century

Demolished in 1965 by the Awqaf and replaced by an entirely different mosque.

Description: This was a small mosque located in Qahwat Shukur mahalla near Bab al-Shaikh of Rusafa. According to some aged locals, the old mosque contained a small squarish musalla, and its roof was constructed with wooden beams. There were two tombs surmounted by two glazed domes and placed in the open courtyard. The tombs were destroyed and built over when the mosque was rebuilt in 1965. There are no detailed references to indicate the names of those buried, nor plans, nor photographs to give any further details about its former date and appearance.

References: Alusi, published Masajid, p. 143, (Inventory no. 333)

24. Maaruf Mosque (Masjid)

Built probably in Eighteenth Century

Demolished in the 1950's by the Awqaf and replaced by a new and an entirely different one

Description: This was a small masjid located in Bab al-Shaikh mahalla of Rusafa. Alusi only mentioned its name and that it was 'old'. No other details are available.

References: Alusi, published Masajid, p. 143, Jawad and Susa, Dalil, p. 309

25. Mahbouba Mosque

Built pre 1900

Demolished probably in 1936 when Kifah Street was cut through.

Description: Very little is known about this small masjid which owes its name to a certain pious lady-Mahbouba. Alusi, who wrote his manuscript on Baghdadi mosques in 1903, mentioned it only by name, and Jawad and Susa who wrote 'Dalil' in 1958 did not know even its location.

References: Alusi, published Masajid, p. 143,
Jawad and Susa, Dalil, p. 308

26. Mekkī Mosque

Built (rebuilt) in 1864 by a certain Abd al-Wahab Daud

Demolished in the early 1970's by the Awqaf

Description: According to Jawad, this was a takya which was first built by Daud but later administered by two brothers, Ahmad and Muhammad who came from Mecca and settled in Baghdad (hence the name). However, Massignon mentioned a mosque in Rusafa by the name of Abu Talib Makkī (d. 986 or 990) which also contained a tomb. He could have been referring to the same mosque but this question needs more research. It was located in Fadhwat Arab of Bab al-Shaikh mahalla of Rusafa, and occupied a squarish site of about 25 x 25 m. in area including an open courtyard and a garden. A tomb placed in a small room and surmounted by a dome was not demolished. No plans or photographs of the mosque were found to indicate its former appearance.

References: Jawad and Susa, Dalil, p. 309 (footnote),
Alusi, published Masajid, p. 143;
Massignon, Mission, Vol. 11, p. 58

27. Mirjaniya Mosque/Madrasa*

Built in 1356 by a governor of Baghdad, Mirjan

Demolished in 1946. On 26th March 1946, the Ministerial Cabinet, which had earlier opposed a plan for its demolition to allow a new alignment and widening of Rashid Street, succumbed to insistent pressures from Amanat al-Assima and most of the mosque was demolished. The only original parts that remain today are the minaret and the portal. This highly irresponsible decision could have been easily avoided by shifting the new alignment a few metres to the west of the mosque. Another possibility, which was not even considered by the authorities, was its rebuilding, brick by brick, on a nearby site. The historic and architectural value of this mosque was well established and recognised by many foreign archaeologists and historians at that time. Its demolition aroused only a little opposition from several Iraqi scholars. Some of its original carved inscriptions are now exhibited in the Iraqi Museum.

Description: A full description of this mosque is found in the main Inventory of this thesis (Vol. II) under the serial listing number 159. (Figure 21)

References: A full list of references on this mosque is found in the Inventory (No. 159), but the main ones are:
Alusi, published Masajid, pp. 79-86, Massignon, Mission, pp. 1-27, illus; Naqshabandi, Jami Mirjan, Sumer, Vol. II, No. 1, pp. 33-54, illus, Saare and Herzfeld, Reise, Vol. I, pp. 45-51, Vol. II, pp. 181-187, Vol. III and Vol. IV for plates. Azzawi, Tarikh, Vol. II, pp. 84-94, p. 173, p. 283, p. 336, Awad, Madrasa Mirjaniya, Sumer, Vol. II, No. 1, pp. 125-126, Jawad and Susa, Dalil, pp. 219-220, illus.

28. Mnawra Khatun Mosque*

Built in c. 1790 by Mnawra, the wife of Sulaiman Pasha Wali of Baghdad
Demolished in 1966 by the Awqaf but the minaret was left intact, and was replaced in 1976 by a modern school

Description: This was a large and interesting mosque located near Hammam al-Malih mahalla and is now on Jumhuriya Street. It had a domed and vaulted musalla area, and its portal was adorned with inscriptions. Further details are found in the Inventory of this thesis under No. 297. (Figure 29)

References: Alusi, published Masajid, pp. 36-37, Jawad and Jamil, Baghdad, p. 273

29. Muhammad al-Alfi Mosque

Built (rebuilt) in 1893 (Origin Pre-1666)

Demolished in the late 1960's because of its extensive decay

Description: This was a large 'Zawiya'(or takya) rebuilt as a mosque in 1893 by Habib Agha al-Dirgazlı. It was located in Sıdriya mahalla of Rusafa and because it was allowed to decay considerably, it was demolished but a tomb still exists on the site. No plans or photographs were found. Its location and photograph of the tomb are found in the Inventory under No. 318.

References: Jones, Memoirs, p. 327

30. (Mulla) Muhamad Mosque

Built pre 1900

Demolished in 1975 by the Awqaf because it was allowed to decay extensively

Description: This was a small masjid located in Bab al-Agha mahalla of Rusafa and on Rashid Street. No plans or photographs were found.

References: Alusi, published Masajid, p. 143

31. (Sitta) Nafisa Mosque*

Built in 1701

Demolished in the late 1960's by the Awqaf and was replaced by an entirely different one

Description: This was a small but interesting mosque located in Karkh and in the mahalla bearing its name. According to Alusi, it contained the graves of several shaikhs but these seem to have been built over by the new mosque. No plans or photographs were found. Further details are included in the main Inventory of this thesis under No. 453.

References: Alusi, published Masajid, p. 145;
Jones, Memoirs, p. 338

32. Nazanda Khatun Mosque

Built in 1846 by Nazanda, the wife of Ali Pasha

Demolished in 1969 by the Awqaf and was replaced by a school

Description: This was a small mosque located near Haidarkhana Mosque in a narrow alleyway off Rashid Street. According to local people, it contained a small musalla and a minaret and was also used as a madrasa. There are no plans or photographs to describe it in detail.

References: These are few and vague. Alusi, published Masa'id, p. 78, Durubi, Baghdadiyun, pp. 339-340

33. Nour al-Din Mosque

Built in pre 1843

Demolished in the late 1960's by the Awqaf

Description: This was a small and well-built mosque located in Awana mahalla of Rusafa. It was also known by the name of Dhahir al-Din. In 1843, a certain Muhammad Nour al-Din restored it and hence its name. No detailed references, plans, or photographs were found to give any further details about its former appearance.

References: Alusi, published Masa'id, p. 81, Jawad and Susa, Dalil, p. 305

34. Numani Mosque*

Built in 1329 or in 1381

Demolished in 1936 by the Awqaf and was replaced by an entirely different mosque on the same site

Description: The date of this important mosque is still controversial. According to Felix Jones, who visited Baghdad in 1853, it was built in 1329 but he did not indicate how he obtained this date, the late Iraqi historian, al-Azzawi, claimed that it was built in 1381 by Husam al-Numani. This mosque is located in Gailani Street in Snak mahalla of Rusafa. It contained a brick minaret which, according to Azzawi, looked very similar to that of Mirjaniya. No plans or photographs were found. Further details are found in the Inventory of this thesis under No. 224.

References: Alusi, published Masa'id, p. 49, Azzawi, Tarikh, Vol. II, pp. 145-146, Jones, Memoirs, p. 328

35. Panja Ali Memorial*

Built in 1330

Demolished in 1917 when Khalil Pasha Street (now Rashid Street) was built.

Description: This was a small Shi'i memorial located near Mirjaniya Mosque and Shorja Suq. It was an important place for Shi'i pilgrimage and its name indicates that the figure of Ali's palm (Kaff) was connected with it. Curiously, Alusi mentions that its large iwan belonged to the celebrated Nidhamiya Madrasa, but he gave no evidence. If so, its loss is a great one. Because no plans or photographs were found it is difficult to describe it. Further details are given in the Inventory of this thesis under No. 146.

References: Alusi, published Masajid, p. 86?, Sarre and Herzfeld, Reise, Vol. I, p. 24 (footnote) and Vol. II, p. 197; Massignon, Mission, p. 65

36. Qamr al-Din Tomb*

Built in Thirteenth Century AD

Demolished in the 1950's

Description: This was a small tomb which apparently belonged to a famous contemporary of the Abbasid Caliphs, Nasir and Mustansir (1180-1242). A small mahalla near Barudiya mahalla was also called Qamr al-Din after his tomb. The tomb itself seems to have been destroyed and replaced by a private house which is rather unusual because it was revered by the locals.

References: Jawad and Jamil, Baghdad, Vol. II, p. 271

37. Qanbar Ali Mosque*

Built in 1480 (Azzawi)

Demolished in 1970 by the Awqaf because it was allowed to decay extensively. It is being replaced by an entirely different one.

Description: This was a large and a very important mosque located in the area bearing its name, off Kifah Street and near Zubaida Square. According to Azzawi and Durubi, it was built in 1480 as was indicated by a Waqfiya (endowment document) seen by the author. No photographs were found. Further details are found in the Inventory under No. 306.

References: Azzawi, Tarikh, Vol. IV, Addenda; Durubi, Baghdadiyun, pp. 359-60.

38. Qazaza Mosque

Built pre 1900

Demolished in 1954 when Jumhuriya Street was driven through Rusafa.

Description: This was a small mosque located in Fanahra mahalla of Bab al-Sahikh area. A mosque by the same name was built by the Awqaf in 'Thubat Madina' of Baghdad. No plans or photographs were found to give any details about its former appearance.

References: Alusi, published Masajid, p. 139; Jawad and Susa, Dalil, p. 308

39. (Shaikh) Rafi' Takya

Built pre 1900

Demolished probably in 1936 when Kifah Street was driven through Rusafa

Description: This was a small takya close to Gailani Mosque and owned by a certain Indian, Shaikh Rafi. There are no plans or photographs to give any details about its former appearance.

References: Alusi, published Masajid, p. 144

40. Rawas Mosque

Built in 1875 by Shaikh al-Rawas who was also buried in it

Demolished in 1952 when Jumhuriya Street was driven through Rusafa

Description: According to Alusi, it was also known by the name of 'Dakakin Hibub'. It was located in Ras al-Saqiya mahalla and consisted of two floors around an open internal courtyard. It had a small musalla on the ground floor, and contained a small dome over the tomb of al-Rawas. Its upper floor was used as a madrasa. The tomb was transferred to Sayid Sultan Ali Mosque when it was demolished. It was renovated in 1895. No plans or photographs were found to indicate its former appearance or condition.

References: Alusi, published Masajid, p. 140

41. (Sayid) Sultan Ali Mosque*

Built in 1383 or 1681

Demolished (partly) in 1934 when Rashid Street was widened

Description: The date of origin of this mosque is still debated and the two dates mentioned above are by Azzawı and Jones respectively. The most interesting architectural elements of this mosque were lost during this demolition - its original minaret and its superbly inscribed portal. A rare photograph of the original facade was fortunately traced - accidentally - by the author. Full details are found in the Inventory under No. 205.

References. Alusi, Masaııd, pp. 48-49, in published version of his manuscript, pp. 41-42, Azzawı, Tarıkıı, Vol. II, pp. 173-174, Jones, Memoirs, p. 313

42. Suq al-Ghazl Mosque*

Built in 1779 by Sulaiman Pasha the Great, Walı of Baghdad

Demolished in 1957 by Amanat al-Assıma when Jumhuriya Street was driven through Rusafa

Description: This mosque was built on the site of the famous Abbasıd Khulafa Mosque (Caliphs' Mosque) and of which the original minaret still exists (Inventory No. 311). It was rectangular in plan of about 17 x 26 m. in overall dimensions, its musalla was surmounted by six shallow domes which were supported on cross-ribbed triangular pendentives and brick piers (Figure 29).

References: Sarre and Herzfeld, Reise, Vol. I, pp. 44-45, Vol. II, pp. 156-160 including a plate and a plan, Durubı, Baghdadiyun, pp. 328-329; Jawad and Susa, Dalil, p. 125

43. Suq Haraı Mosque

Built pre 1900

Demolished in the early 1920's?

Description: This was a small masjid located in al-Haraı Suq in Rusafa. There are no detailed references, plans, or photographs to indicate its former date and appearance.

References: Alusi, published Masaııd, p. 141, Jawad and Susa, Dalil, p. 304

44. Sur Mosque

Built pre 1900

Demolished in 1954 when Jumhuriya Street was cut through

Description: This was a small masjid in Sur mahalla of Rusafa.

Part of its original site is now used by an annex building of the College of Engineering (Mulhaq Kuliyyat al-Handasa). No plans or photographs were found to give any details about its former appearance or date.

References: Alusi, published Masajid, p. 141

45. (Imam) Taha Mosque

Built pre 1853

Demolished in around 1937 when Rashid Street was widened

Description: This was a small but important mosque located in the mahalla bearing its own name in Rusafa. It was a place of pilgrimage especially on Thursdays. According to some aged locals, it was demolished at night under the orders of Arshad al-Umarī, the Mayor of Baghdad. The Awqaf has rebuilt another mosque nearby and gave it the same name. Further details are found in the Inventory of this thesis under No. 145.

References: Jawad and Jamil, Baghdad, Vol. II, p. 274, Jawad and Susa, Dalil, p. 305, Jones, Memoirs, p. 317

46. Tahir Zain al-Abidin Mosque

Built pre 1907

Demolished in 1918 to make way for Rashid Street (then New Street)

Description: This was a small mosque located in Aquliya mahalla of Rusafa. It was shown in Massignon's map of Baghdad in 1907, but there are no detailed references or photographs to indicate its former appearance.

References: Jawad and Susa, Dalil, p. 303 (refers to its as containing the tomb of Shaikh Muhammad who died in 1964)

47. Taht al-Takya Mosque

Built pre 1900

Demolished in the 1950's?

Description. This was a large masjid located in Taht al-Takya mahalla in Rusafa. Alusi only stated that it was restored in 1900 but gave no description of its structure or appearance. No plans or photographs were located.

References: Alusi, published Masajid, p. 139, Jawad and Susa, Dalil, p. 308

48. Tasabil (Dasafil) Mosque

Built (rebuilt) in 1820 by Abu-Yihya Zakariya

Demolished in 1975 by the Awqaf because of its extensive decay

Description: This was a small masjid located in Ras al-Saqiya mahalla of Bab al-Shaikh area of Rusafa. It belonged to the well-known Baghdadi family of al-Khdhairi. No plans or photographs were located to help describe its former appearance.

References. Alusi, published Masa'id, pp. 78-79, Durubi, Baghdadiyun, p. 82

49. Wasil Mosque

Built pre 1900

Demolished in 1959 by the Awqaf and replaced by a new and an entirely different one

Description: This was a small mosque in Qahwat Shukur mahalla of Rusafa. It consisted of a small musalla of a wooden roof, and an open courtyard. It still contains a tomb in a small room said to be that of Shaikh Muhamad Wasil. No plans or photographs were found. Further details are found in the Inventory under No. 362.

References: Alusi, published Masa'id, p. 143

50. Yamani Mosque

Built probably in Nineteenth Century

Demolished in 1954

Description: This was a small masjid located near Tahrir Square and opposite what is now the Ministry of Information. It was built by a certain Burhan al-Din al-Yamani and was demolished when Jumhuriya Street was driven through its area. A new mosque bearing the same name was built by the Awqaf in Zafaraniya area of Baghdad. No plans or photographs were found to indicate its former appearance or date.

References: None

51. Yasin (also Yas) Mosque

Built pre 1900

Demolished in the 1940's?

Description: This was a small masjid built by Sayid Yasin and located in Ras al-Qarya mahalla of Rusafa near Ihsa Mosque. There are no detailed references, plans or photographs to give any details about it.

References: Alusi, published Masa'id, p. 143

(2) Karkh1. Abdulla al-Nokha MosqueBuilt pre 1853Demolished in the late 1960's when Haifa Street was driven through KarkhDescription: This was a small masjid located near Shaikh Ali Mosque in Suq Hamada mahalla of Karkh. Jones only mentioned it by name and there are no detailed references to give any description of its former appearance or date.References: Jones, Memoirs, p. 3392. Adwan MosqueBuilt pre 1900Demolished in the late 1960's when Haifa Street was driven through KarkhDescription: This was a large masjid located in Fahama mahalla of Karkh. There are no detailed references to indicate its former date or appearance.References: Alusi, published Masa'id, p. 145, Jawad and Susa, Dalil, p. 3073. Allawi al-Juss MosqueBuilt in 1837 by a certain 'Abd al-Qadir'Demolished probably in the late 1920'sDescription: This was a small masjid located in Ras al-Jisir mahalla of Karkh. It was probably demolished in the late 'twenties when a new bridge was constructed. No plans or photographs were found to give any details about its former appearance.References: Alusi, published Masa'id, pp. 130-131, Jawad and Susa, Dalil, p. 307; Massignon, Mission, p. 644. Allawi al-Noura MosqueBuilt in 1762 by Abdulla Beg al-ShawiDemolished probably in the late 1920'sDescription: This was a small masjid located in Ras al-Jisir mahalla of Karkh. It consisted of a small musalla surmounted by a dome, and with an open courtyard. It was probably demolished because it was in the way of a proposed new bridge. No plans or photographs were found to give any more details about its former appearance.References: Alusi, published Masa'id, p. 131; Massignon, Mission, p. 64

5. Amin Mosque

Built pre 1853

Demolished probably in the 1960's when Haifa Street was driven through its area

Description: This was a small masjid located in 'Darbunat Tantal' of Suq hamada mahalla of Karkh. It owes its name to Mulla Muhammad Amin, the man who built it. No plans or photographs were found to indicate its appearance or date.

References: Jones, Memoirs, p. 338

6. Atta Mosque*

Built in 1808

Demolished in the early 1970's and replaced by a new one

Description: This was a small interesting mosque in Karkh and in the mahalla bearing its own name. Because it was allowed to decay extensively, the Awqaf demolished it and replaced it by an entirely modern and different mosque. The original mosque consisted of a small musalla, a porch and an open courtyard. The musalla was surmounted by eight domes supported on low, thick and octagonal pillars in the middle (Figures 28 and 29). There was no minaret. A plan and two photographs of its interior show its elaborate structure and architectural value, these are found in Strika and Khalil's article shown below.

References: Alusi, published Masajid, p. 145, Jones, Memoirs, p. 338, Strika and Khalil, Monuments, Mesopotamia (1973-74), p. 270, with a measured plan and two interior photographs.

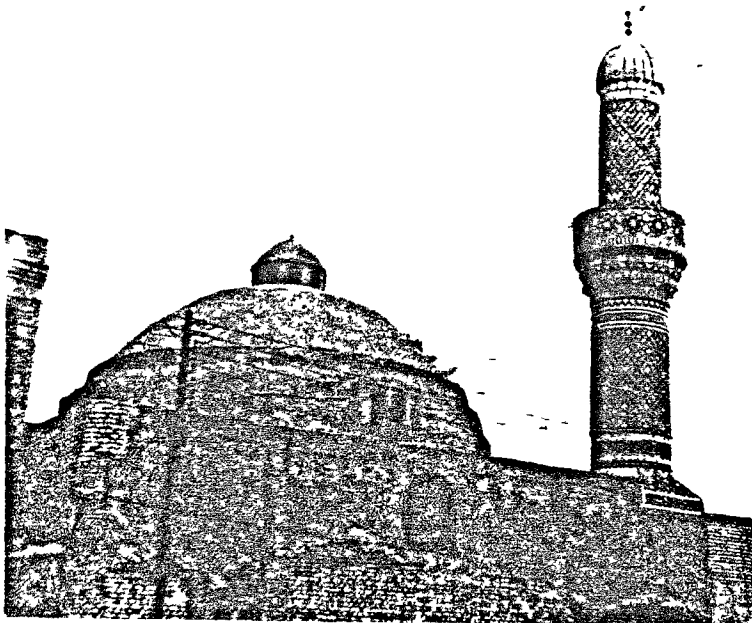
7. Baigat Mosque

Built pre 1853

Demolished probably in 1940's

Description: This was a small masjid located in Baigat mahalla near Hanan Mosque in Rusafa. There are no written references about it indicating its date or former description.

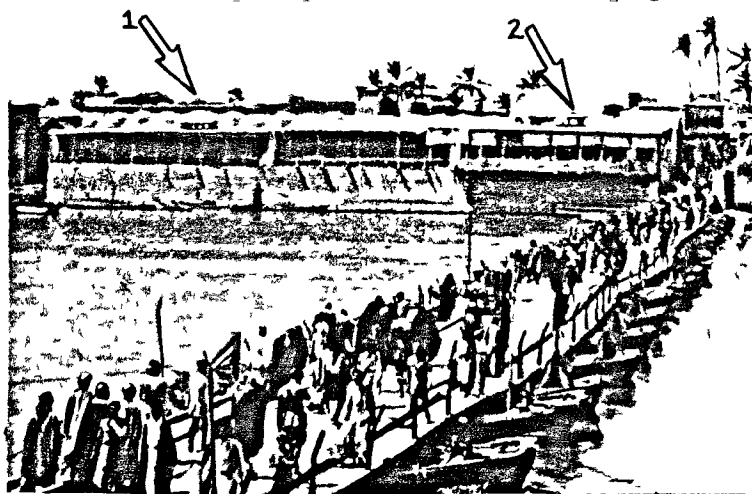
References: Jones, Memoirs, p. 338 (only mentioned by name)



MNAWRA KHATUN MOSQUE



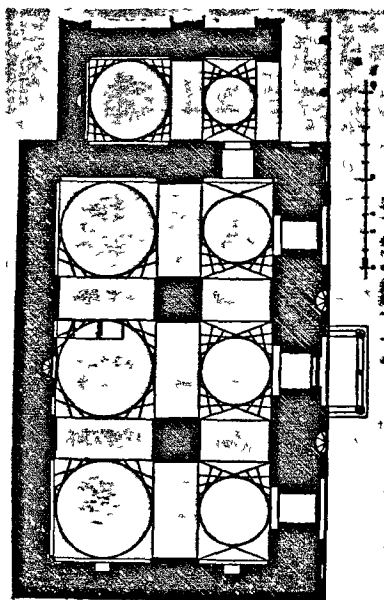
ATTA MOSQUE . MIHRAB & MINBAR



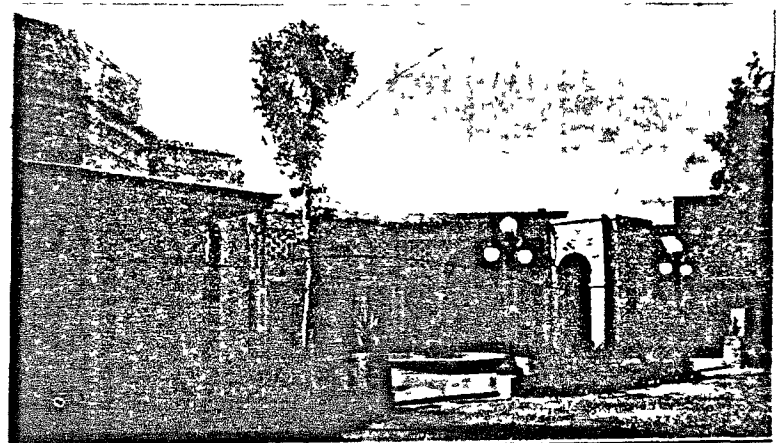
1 BAB AL-SIF SUQ (DOMED ROOF SHOWN BY ARROW 1)
2 BAIRUTI QAHWA (SHOWN BY ARROW 2)



ATTA MOSQUE : DOMED ROOF



SUQ AL-GHAZL MOSQUE
(PLAN BY HERZFELD)



A Western View of the Royal Palace

FIGURE 29 DEMOLISHED BUILDINGS IN BAGHDAD

Sources: Herzfeld, Strika and Khalil, and Author

8. (Shaikh) Bashar Mosque*

Built (originated) in Tenth Century

Demolished in the early 1950's when a new road was driven through its area.

Description: This was a small but important historic mosque located in Karkh and in the mahalla bearing its name. It contained the tomb of a famous Abbasid religious shaikh, Bashar, who lived in the tenth century (AD). Another mosque was built nearby which is also called Shaikh Bashar Mosque. Further details are in the Inventory under No. 471. No plans or photographs were located.

References: Jawad and Jamil, Baghdad, p. 261

9. Hammam Shami Mosque*

Built pre 1853

Demolished in 1966 by Amanat al-Assima when Haifa Street was driven through Karkh

Description: This was a small masjid located near the famous hammam bearing its name and in the Fahama mahalla of Karkh. Jones only mentioned it by name but gave no other details. There are no plans or photographs to indicate its former appearance or date.

References: Jones, Memoirs, p. 338; Jawad and Susa, Dalil, p. 301

10. Hanan Mosque*

Built in 1696

Demolished in 1945 when a new road was driven through Ras al-Jisir area in Karkh. It was replaced by a new one in 1946.

Description: This was a large and important historic mosque in Karkh. When it was demolished by Amanat al-Assima in 1945, the Awqaf replaced it by an entirely modern and different mosque near the original site. No plans or photographs were found to indicate its former state or appearance. Further details are in the Inventory under No. 478.

References. Alusi, Masajid, p. 134, Durubi, Baghdadiyun, p. 345

11. Ibn Ubaid Mosque

Built pre 1853

Demolished probably in 1920's

Description: A small masjid located in Karkh. Jones only mentioned its name but gave no further information. No plans or photographs were found.

References: Jones, Memoirs, p. 338

12. Jibourī Mosque*

Built in 1813 and rebuilt in 1877

Demolished in 1966 by the Awqaf and rebuilt in an entirely different style

Description: This was a large mosque located in Mishahda mahalla of Karkh. It was allowed to decay considerably then it was demolished and rebuilt by the Awqaf. No plans or photographs were found to indicate its former appearance. Further details are in the main Inventory under No. 420.

References: Alusi, Masaḥid, p. 127; Jones, Memoirs, p. 337, Massignon, Mission, pp. 64-65

13. (Mulla) Kadhīm Mosque

Built pre 1853

Demolished probably in the 1920's

Description: This was a small masjid located in Karkh and mentioned by Jones only by name. No plans or photographs were found to indicate its former appearance or date

References: Jones, Memoirs, p. 339

14. Khanīnī Mosque

Built (rebuilt) in 1875 by Abdulla Salih al-Khanini

Demolished in the 1950's by the Awqaf and replaced by a new and entirely different one

Description. This was a small masjid located in 'Taraf Baruda' of Suq al-Jadid in Karkh. Alusi mentioned that it was an 'old' mosque without giving any further details. No plans or photographs were found to indicate its former appearance.

References. Alusi, published Masaḥid, pp. 124-125

15. Mahmoud Souza Mosque

Built pre 1853

Demolished 1940's?

Description: This was a small masjid located in Karkh. Jones only mentioned its name and its exact location is still unknown. No plans or photographs were found.

References: Jones, Memoirs, p. 338

16. Mantiqa Mosque*

Built (originated in 658)

Demolished in 1951 by the Awqaf and replaced by a new and entirely different mosque

Description: Historically, this was one of the most important mosques in Baghdad. Full details are found in the Inventory of this thesis under No. 917. A plan and several photographs of the Mosque before its demolition are available. Although the structure of this Mosque probably belonged to the Ottoman period, its loss and replacement by an exceedingly unsightly one is a most irresponsible act by the Awqaf. (Figure 28)

References: Massignon, Mission, pp. 102-103 (with a sketch plan of the Mosque in 1908), Khalilī, Kadhıman, Vol. I, pp. 18-21, Strika and Khalil, Monuments, Mesopotamia (1973-74), pp. 270-271, including a plan and a photograph of the new mosque.

17. (Hajj) Muhamad Mosque

Built pre 1853

Demolished probably in the 1920's

Description: Jones only referred to this small masjid by name. No plans or photographs were found to indicate its former appearance.

References: Jones, Memoirs, p. 338

18. (Mulla) Numan Mosque

Built pre 1853

Demolished probably in the 1940's?

Description. Jones only mentioned its name and did not even indicate its location in Karkh. There are no other references which might give details about its former appearance and history.

References: Jones, Memoirs, p. 338

19. Ras al-Jisr (Banat al-Hasan) Mosque

Built pre 1853

Demolished in 1960 by Awqaf and Amanat al-Assıma

Description: This was a small masjid located near Shuhada Bridge. It contained a tomb (with a screened window on to the street) claiming to belong to Banat al-Hasan. No plans or photographs were found to give any details about its former description.

References: Jones, Memoirs, p. 338 (only mentioned by name); Jawad and Susa, Dalil, p. 297, p. 302

20. (Mulla) Sharif MosqueBuilt pre 1853Demolished probably in the 1920'sDescription: This was a small masjid in Karkh mentioned by Jones only by name. No plans or photographs were found to give any details about its former description.References: Jones, Memoirs, p. 33921. Sandal Mosque*Built (originated) in 1196Demolished in 1942 by the Awqaf and replaced by a new and entirely different oneDescription: This was a large and important mosque located in the mahalla bearing its own name in Karkh. According to Jawad, it goes back to 1196, the year of Sandal's death.

Further details are found in the Inventory of this thesis under No. 465. No plans or old photographs were found.

References: Alusi, published Masajid, p. 113; Jawad and Jamil, Baghdad, Vol. II, p. 260; Durubi, Baghdadiyun, pp. 318-319
Jones, Memoirs, p. 33622. Shawaf MosqueBuilt pre 1853Demolished probably in 1940'sDescription: This was a small masjid located in Suq Hamada mahalla of Karkh. There are no detailed references to indicate its former description. No plans or photographs were found.References. Alusi, published Masajid, p. 145, Jones, Memoirs, p. 338

23. al-Sif Mosque*

Built (originated) in 936

Demolished in 1960 by Awqaf and Amanat al-Assima

Description: This was a small but historically very important mosque because it contained the Tomb of al-Asha'ari (d. 936), the famous Sunni Scholar. In his manuscript on the mosques of Baghdad, Azzawi seems to have agreed with Alusi's assertion that the tomb was that of al-Ashaari. However, Jawad disagreed and gave a somewhat unconvincing historical literary source indicating that the tomb was built in Musharat al-Rawaya several hundred metres upriver. It seems that this mosque, which overlooked the Tigris in Karkh, was in fact a part of a large khan by the same name. It was restored by Daud Pasha in 1820 but was burnt down in 1920 and was again restored in 1921. The last restoration was commemorated by an inscribed panel executed by the famous calligrapher, Mahmoud al-Thana'i, on a font (Saqaaya). The available references do not describe the appearance nor the structure of the mosque or tomb. No plans or photographs were found or located to give any further details.

References: Alusi, published Masajid, pp. 129-130; Jawad and Susa, Dalil, p. 304; Jawad and Jamil, Baghdad, Vol.I, p. 262, Massignon, Mission, p. 59, pp. 104-105 including the text of the inscriptions.

24. Suq Hamada Mosque

Built pre 1853

Demolished in 1950's?

Description: This was a small masjid located in the mahalla bearing its name in Karkh. It was only mentioned by Jones by name and there are no other detailed references to give any details about its former date or appearance.

References: Jones, Memoirs, p. 338; Jawad and Susa, Dalil, p. 304

25. Thani Mosque

Built pre 1853

Demolished probably in 1920's

Description: This was a small masjid in Karkh mentioned by Jones only by name. There are no other details about its location or appearance.

References: Jones, Memoirs, p. 339

(3) Aadhamiya1. Bishr al-Hafı Mosque*Built in 840?Demolished in 1961

Description: This is a small mosque containing the tomb of a famous sufist, Bıshr al-Hafı (d. 840). While the tomb may well go back to 840 the mosque itself was probably rebuilt many times before it was demolished by the Awqaf in 1961 and was replaced by an entirely different one. A plan and several old photographs of the old mosque were found. Further details are found in the Inventory under No. 542.

References: Aadhamı, Jamı Aadham, Vol. II, pp. 38-44; Massignon, Mission, pp. 78-80 with a sketch plan in 1908

2. Ismail al-Nouh MosqueBuilt in c. 1850

Demolished in 1925 when the old Bridge of Boats was set up between Sıfina mahalla and Kadhımıya

Description: This was a small masjid located in Sıfina and overlooked the Tıgrıs. It contained a small domed musalla and two courtyards. No plans or photographs were found to give further details about its former state or appearance.

References: Aadhamı, Jamı Aadham, Vol. II, pp. 13-17

3. (Shaikh) Jalal MosqueBuilt in pre 1753

Demolished in 1953 when the new Bridge of al-Aimma was constructed

Description: This was a small mosque (masjid) located in the Shıyoukh mahalla of Aadhamıya. According to Aadhamı, a 'Tapu' document signed in 1753 was found indicating the existence of this mosque then. It consisted of a rectangular musalla, an arcaded porch, and a large open courtyard with a garden. It contained the tomb of Shaikh Jalal which was placed in a small square room and surmounted by a dome. Its frontage was converted into several shops in 1928 to provide for its upkeep. No plans or photographs were found.

References: Aadhamı, Jamı Aadham, Vol. II, pp. 80-81, p. 173, p. 293

(4) Kadhimiya1. Kadhim's Sons Mausoleum*

Built probably around 1838, by a certain Ottoman military officer, Salim Pasha

Demolished in the early 1950's for no known reason but probably because its historic authenticity was doubted by the responsible authorities

Description: This was a small mausoleum located inside the great courtyard of Kadhimain Mosque. It was known by the name of Dharih al-Farqadin, or the tombs of the two sons of Kadhim, Ibrahim and Jaafar. Old photographs indicate that it was surmounted by two small domes and that its walls were decorated by fine glazed kashani tilework (Figure 28).

References: Azzawi, Masajid wa Madaris, an original manuscript by the author kept at the Iraqi Scientific League (Majma Ilmi Iraq), pp. 47-52; Khalili, Kadhimain Vol.I, p. 159, Alusi, published Masajid, pp. 116-117

2. Turk Mosque (also Mirza Hadi)*

Built in c. 1800

Demolished in 1975 to implement an ill-advised part of a plan for Kadhimiya by Polservice, ironically for conserving the cultural heritage of this historic core. Its site is now being used as a car park.

Description: This was a large and well-built mosque located very near the western gate of Kadhimain Mosque. Old aerial photographs show that it had a domed roof structure and that its entrance was located on its northern end. No plans or photographs were located. The author just managed to photograph its interesting portal days before its final disappearance. (Figure 28)

References: None

C. CHURCHES(1) Rusafa1. al-Athraa Church (Virgin's Church)*

Built in 1640 by the Armenian George Nazaritian

Demolished in 1970 and replaced by a new and entirely different church

Description: This was a small Armenian Orthodox Church located in Gog Nazar mahalla of Midan in Rusafa. According to a typed paper by the Prelacy of the Armenian Diocese of Iraq (1975), it was built by Nazaritian, who was an officer in the Ottoman Army and who brought some of the remains of the 'Forty Martyrs' from Sabastia in Turkey and incorporated them within the western walls of the church. It was the oldest church in Baghdad and its replacement is a great loss. Its location and photographs of the new church are found in the Inventory under No. 108.

References: Babu-Is'haq, Kanais Baghdad, Sumer (1964), pp. 285-289

2. al-Thaluth al-Muqadas Church (Holy Trinity)*

Built in 1850

Demolished in 1975 by Amanat al-Assima because of its extensive state of decay

Description: This was a large Armenian Orthodox Church located in Aqd al-Nasara and near Shorja Suq in Rusafa. No plans or interior photographs were found to give details about its former description.

References: Babu-Is'haq, Kanais Baghdad, Sumer (1964), pp. 301-302

D HOUSES(1) Rusafa1. Ahmad Sayid Isa House*

Built in 1906

Demolished probably in the 1940's

Description: This was a large house located in Rıwaq area of Shorja mahalla of Rusafa. Although no plans were found, the seventeen photographs obtained from the Directorate of Antiquities, indicate its outstanding architectural qualities (Figure 30). Its date was found by a close examination of one of the photographs which shows it painted as 1324 (1906) on a corner of an inscription frieze. It is of interest to note that Reuther, who published his doctoral thesis on Iraqi houses in 1910, called this house Sayid Abdulla's, who was probably the original owner.

References: D.G.A. Photographic Section, Baghdad, Reuther, Vohnhaus, p. 74, p. 85, Jawad et al, Baghdad, p. 344, pp. 402-405

2. Ali al-Ber House*

Built probably around 1850

Demolished probably in 1936 when Kifah Street was built

Description: This was a small but interesting house probably located near Qushal mahalla. No plans were found, but three interior photographs were obtained from the Directorate General of Antiquities and these show its former outstanding architectural interest and especially its detailing and ornamentation (Figure 31).

References: D.G.A. , Photographic Section

3. Fatima Khan House*

Built probably around 1840

Demolished in 1936 when Kifah Street was built

Description: This was a small traditional courtyard house located in Fadhil mahalla of Rusafa. No plans were found but several photographs obtained from the D.G.A. show its outstanding architectural detailing and ornamentation, especially its ursi window and ceilings. (Figure 31)

References: D.G.A. , Photographic Section

4. German Consul's House*

Built probably around 1840's

Demolished probably in the 1930's

Description: This was a large house of considerable architectural interest. It was located between Naqib's House and Sultan Alı Mosque in Rusafa, overlooked the Tıgrıs, and was occupied in the early 1900's by the German Consul, Richarz. Several photographs, collected by the author from various sources, show its rich detailing and ornamentation. No plans were found. (Figure 31)

References. Reuther, Vohnhaus, p. 85, pp. 61-62, pp. 84-85, p. 104

5. Hussain Pasha House*

Built probably around 1820's

Demolished probably in the early 1930's when Rashıd Street was widened

Description. This was one of the largest and most important private houses in Baghdad. According to a map of Baghdad prepared by Zaki in 1919, it was located in the Maidan mahalla of Rusafa. It was fortunately accurately measured by the indefatigable Reuther in c. 1908. His plans (Figure 76) show that its 'haram' part measured some 17 x 28 m. and its 'diwankhana' 28 x 45 m. These very large areas indicate the importance of its former Turkish owner. It was rich in ornamentation and outstanding architectural detailing and its loss is a great one.

References: Reuther, Vohnhaus, p. 29, with plans and figures

6. Jaafar Razaq House*

Built probably in 1850

Demolished probably in the 1940's

Description: This was a large house located in Bab al-Agha mahalla of Rusafa. Although there are no plans, the several photographs which were obtained from the D.G.A. indicate its outstanding architectural interest. In particular, its interior and the ornamentation of its ceilings and ırsıs. It was also known by the name of 'al-Malaıka House'. (Figure 31)

References: Jawad et al, Baghdad, p. 344 (the photograph shown is wrongly titled as that of Astarabadi's), p. 346, p. 347, p. 410

7. Manahim House*

Built probably around 1880's

Demolished probably in 1954 when Jumhuriya Street was driven through its area

Description: This was a small house located in the Shorja mahalla of Rusafa. Plans and photographs by Reuther show that it measured 32 x 32 m. with an internal courtyard.

They also show its outstanding architectural detailing and richness of decoration. (Figure 30)

References. Reuther, Vohnhaus, pp. 20-24, p. 68, p. 82, p. 109

8. Muhammad Kubba House*

Built probably around 1880

Demolished probably in 1936 when Kifah Street was driven through Rusafa

Description: This was a large house located in Rusafa (exact location is still unknown) of outstanding architectural interest.

The one photograph that was obtained from the D.G.A. shows its richly ornamented ursis and detailing. (Figure 31)

References: D.G.A. , Photographic Section

9. Nawab House* (Old British Residency)

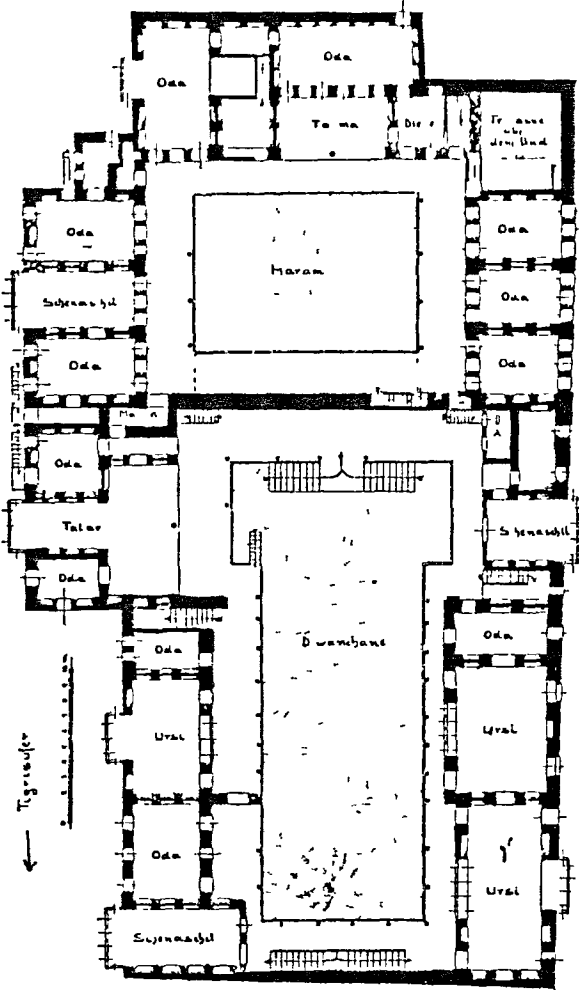
Built around 1850

Demolished probably in the early 1930's

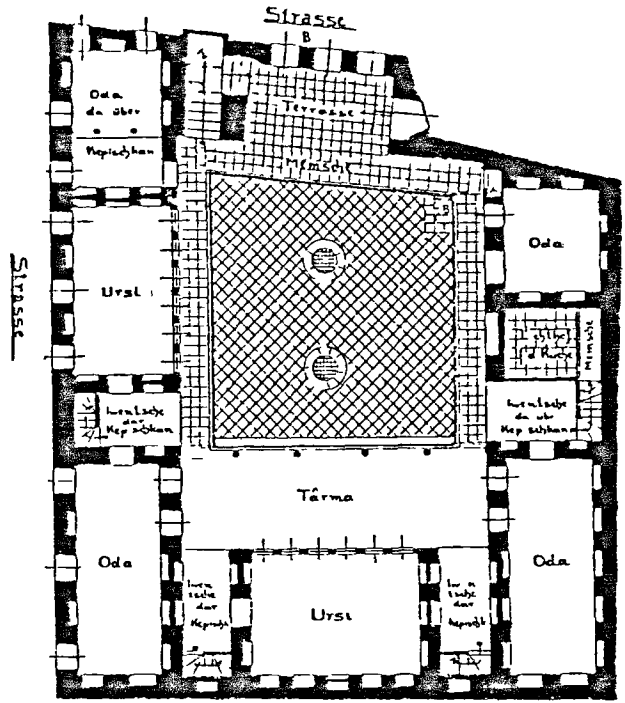
Description: This was a large house located in Sayid Sultan Ali Aqd in Rusafa, off Mustansir Street overlooking the Tigris.

It must not be confused with the other house of the same well-known family in Karkh. It was of outstanding architectural qualities and measured some 35 x 62 m, including two distinct parts - a haram and a diwankhana. According to Reuther, who measured it in 1908, it was then used as a hotel. It was one of the most distinguished houses in Baghdad and its loss is regrettable indeed. (Figure 30)

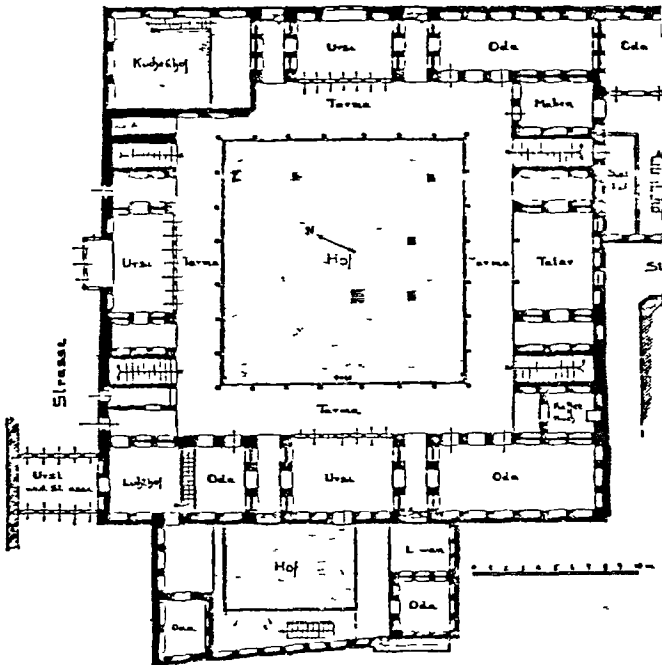
References: Jawad et al, Baghdad, p. 342; Reuther, Vohnhaus, p. 17, p. 18, p. 61, pp. 107-109



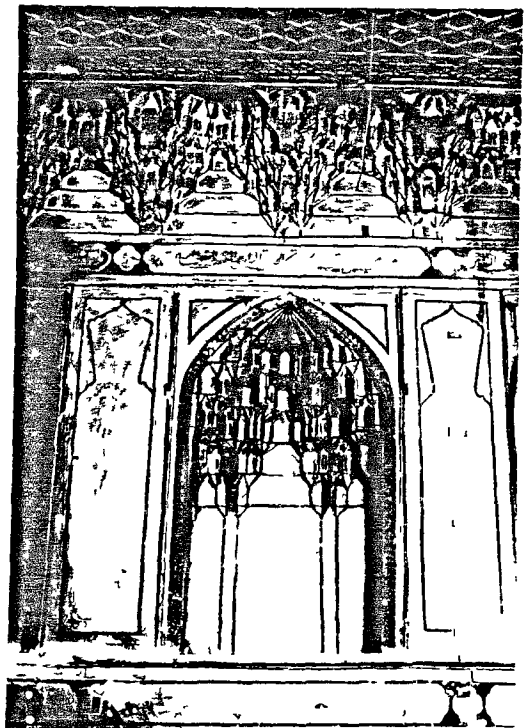
NAWAB HOUSE: 1ST F PLAN (REUTHER)



1ST F PLAN (REUTHER)



MANAHIM HOUSE: 1ST F. PLAN (REUTHER)



AHMAD SAYID ISA HOUSE: MUQARNASED NICHES & FRIEZE

10. Rashid Jubran House*

Built probably around 1880

Demolished in 1954 when Jumhuriya Street was driven through its area

Description: This was a large and a very richly ornamented house. It was located in Aqd al-Nasara and near the Latin Church in Rusafa. No plans were found, and the one photograph which was located by the author indicates its outstanding architectural qualities. The data relating to the existence of this house and its demolition was obtained from a personal communication with Georges Awad (a prominent Iraqi historian) on 23rd June 1975. (Figure 31)

References: None

11. Sayid Yihya House*

Built around 1840's

Demolished in 1961 because of its extensive decay

Description: This was a large and distinguished house located near the old site of the Iraqi Museum in Rusafa. Three photographs, obtained from the D.G.A. , show that it was demolished in August 1961 and that it was of outstanding architectural interest. No plans were prepared before its demolition despite the fact that it was only a few metres away from the Directorate of Antiquities. (Figure 20)

References: D.G.A. , Photographic Section

12. Shakur House*

Built probably around 1850

Demolished probably in 1954 when Jumhuriya Street was driven through its area

Description: This was a most interesting house located in the Tawrat mahalla of Rusafa. Plans and photographs by Reuther in 1908 show that it was about 18 x 20 m. in overall dimensions including a small square courtyard. Although it was not sizeable by the standards of rich Baghdadis, it was nevertheless of superior architectural detailing and design. (Figures 30 and 82)

References: Reuther, Vohnhaus, pp. 34-36, p. 84, p. 118

13. Subhi Darwash Ali House*

Built probably around 1840's

Demolished in the early 1950's

Description: This was a large courtyard house located in Imam Taha mahalla of Rusafa. The eleven photographs, obtained from the D.G.A. , show its outstanding architectural interest, especially in its interior ornamentation and detailing. It was demolished because of its extensive decay, but unfortunately was not measured. (Figure 31) 31

References. D.G.A. , Photographic Section; Jawad et al, Baghdad, p. 411

14. Zubaida House*

Built probably around 1840

Demolished probably in 1954 when Jumhuriya Street was built

Description: This was a large house located in Rusafa, probably in Taht al-Takya mahalla. Photographs by Reuther in 1908 show its outstanding architectural interest, especially in detailing and ornamentation of its interior. No plans were found.

References: Reuther, Vohnhaus, p. 54, p. 61, p. 72

(2) Karkh1. Salih al-Milli House*

Built probably around 1890

Demolished probably in the 1940's

Description: This was a large and interesting house located in Bab al-Sif mahalla of Karkh and overlooking the Tigris. The three photographs, obtained from the D.G.A. , show the richness of its interior, especially of its ursis and ornamentation. No plans were prepared. It is comparable to the existing Mumin's House listed by the author as No. 474 in the Inventory of this thesis. (Figure 31)

References: D.G.A. , Photographic Section

(3) Aadhamiya1. al-Khdhairi House*

Built probably around 1800

Demolished in the 1940's

Description: This was a large and a very interesting house. Although its location was not recorded on the four photographs, which were obtained from the D.G.A. , it was probably Aadhamiya. The photographs show its rich ornamentation and outstanding architectural detailing. No plan or exterior photographs were found. (Figure 31)

References: D.G.A. , Photographic Section

(4) Kadhimiya1. Abd al-Ghani House*

Built probably around 1840

Demolished in 1975 by Amanat al-Assima as part of a clearance project

Description: This was a most outstanding house. It was located in Tell mahalla of Kadhimiya and numbered 103/48. The author managed to take several photographs before it was finally demolished. It contained a large internal courtyard with a garden, and its plan was designed as a complete 'hosh muraba' or peristyle, typical of rich Baghdadi traditional houses. (Figure 30)

References: None

2. Baqir al-Sihail House*

Built around 1840

Demolished in 1976 by Amanat al-Assima to make way for a car park suggested by Polservice

Description: This was a small but very interesting house located very close to the south-western corner of Kadhiman Mosque. It had several very richly and uniquely ornamented oriel windows, and its interior was also of outstanding detailing and architectural interest. No plans were prepared but the author managed to take many photographs before its final disappearance. (Figure 31)

References: None

3. al-Jashi House*

Built probably around 1840

Demolished (abandoned) in the early 1970's. It is now too ruined to be restored.

Description This was a small but very interesting house located in Tell mahalla of Kadhimiya, and numbered 45/45. According to a short report written by an architectural student in Baghdad, "it was built by a famous master-mason (usta) called Kadhim and it took him about one and a half years to build and cost its owner some 150,000 Turkish Liras." The same student prepared several excellent measured drawings (Figure 31).

References: Jassim Hasan, Measured Drawings and Report, 1962, kept at the architectural library in the College of Engineering, Baghdad

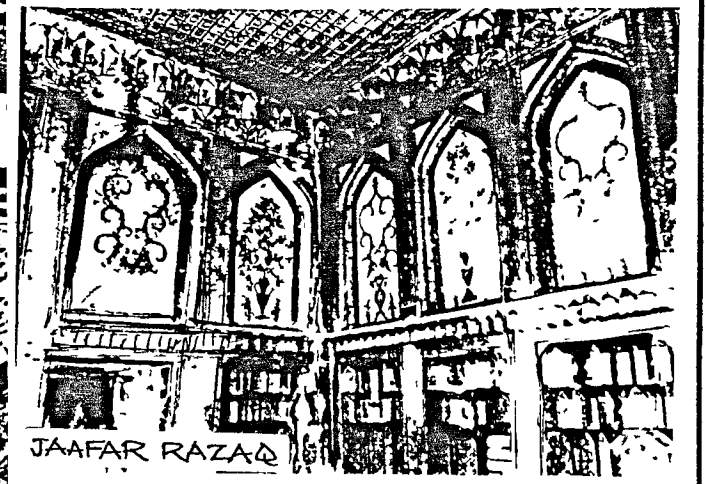
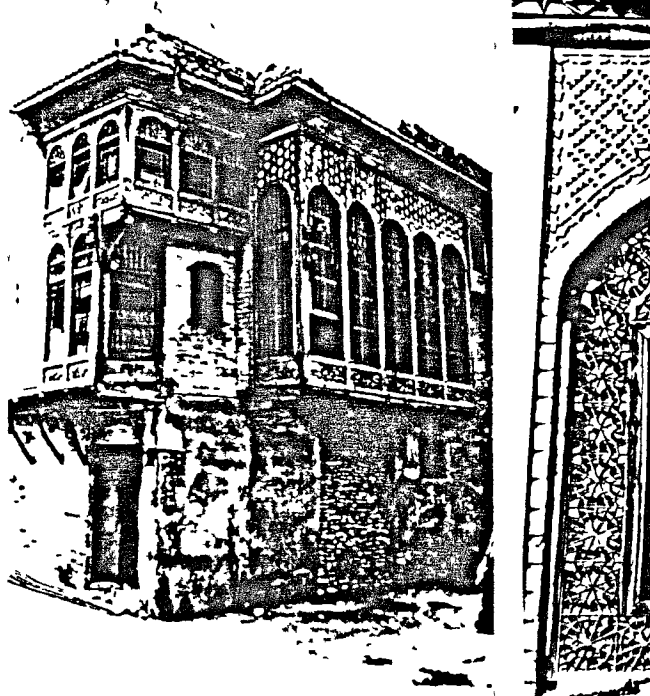
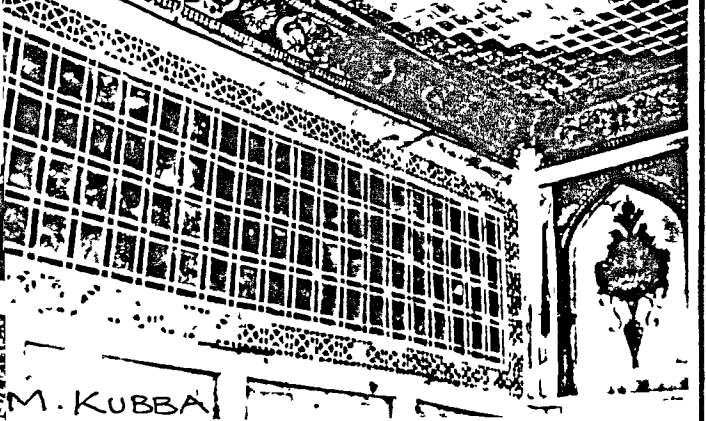
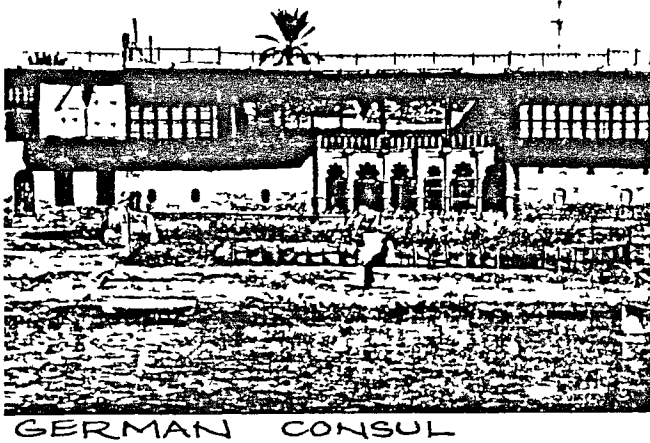
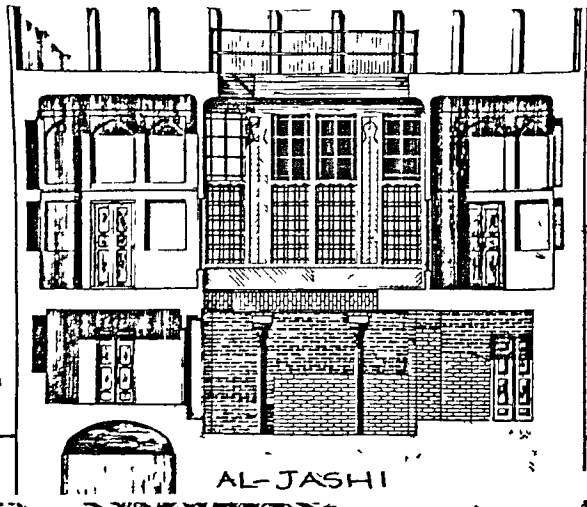
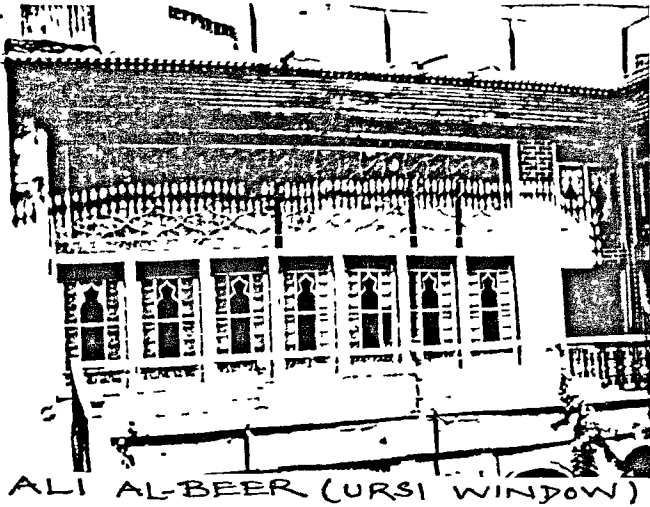
4. Majid al-Saachi House*

Built around 1840's

Demolished in 1974 by Amanat al-Assima as part of a clearance programme

Description: This was a large, and one of the most interesting, houses in Kadhimiya. It was located in Tell mahalla and behind al-Aaraji Mosque. The author managed to take several photographs before its final disappearance. It contained a large open courtyard with a garden, numerous rooms, and a superbly vaulted sirdab basement. No plans were prepared before its demolition. (Figure 31)

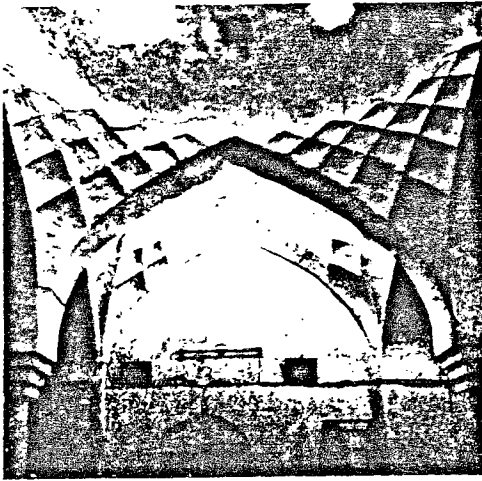
References: None



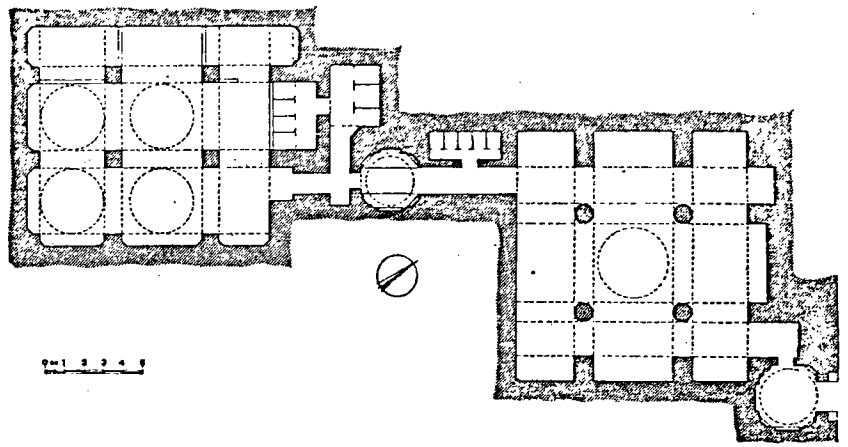
SUBH (URS)

FIG. 31 EXAMPLED SINCE 1917

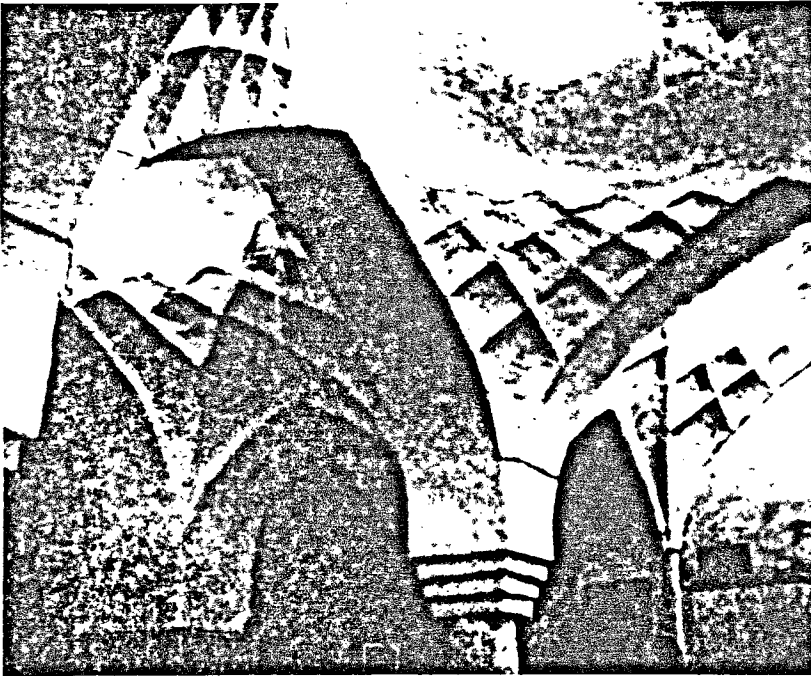
E. HAMMAMS(1) Rusafa1. Aifan Hammam*Built pre 1853Demolished probably in 1936 when Kifah Street was driven through RusafaDescription. This was a small hammam located in Fadhil mahalla of Rusafa and reported by Jones in 1953. There are no written details about it and no plans or photographs were found.References: Jones, Memoirs, p. 3162. Haidar Hammam*Built in 1650 (Durubi)Demolished (partly) in the early 1960'sDescription. This was one of the most outstanding public baths in Baghdad. According to a 'waqfiya' found by Durubi, this hammam was built in 1650 which makes it of valuable historic interest. It was partly demolished in the early '60's and is now used by a textile workshop and several retail shops. Fortunately, it was measured and photographed before its alteration. Further details are found in the Inventory under No. 78. (Figure 32)References: Durubi, Baghdadiyun, p. 398, Jones, Memoirs, p. 313, Strika and Khalil, Monuments, Mesopotamia (1973-74), pp. 290-291 with a plan3. Gumrug HammamBuilt pre 1853Demolished in the mid-1930'sDescription: This was a small hammam located in Bab al-Agha mahalla and adjacent to Mustansiriya Madrasa (southern side). It was demolished in the 1930's when Mustansiriya was first restored by the D.G.A. No plans or photographs were found to give its former description.References: Jones, Memoirs, p. 318



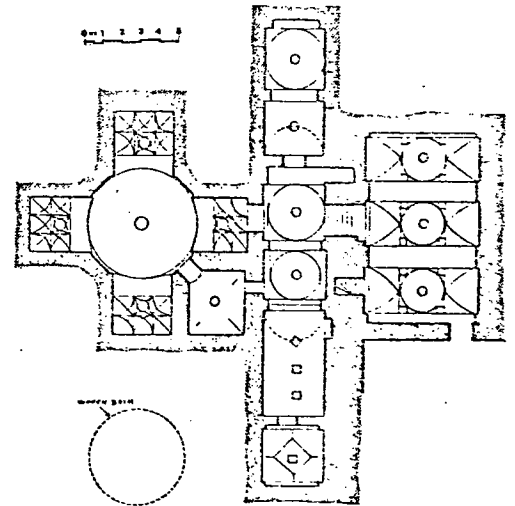
JAWADAIN HAMMAM: DOMED AND ARCHED INTERIOR



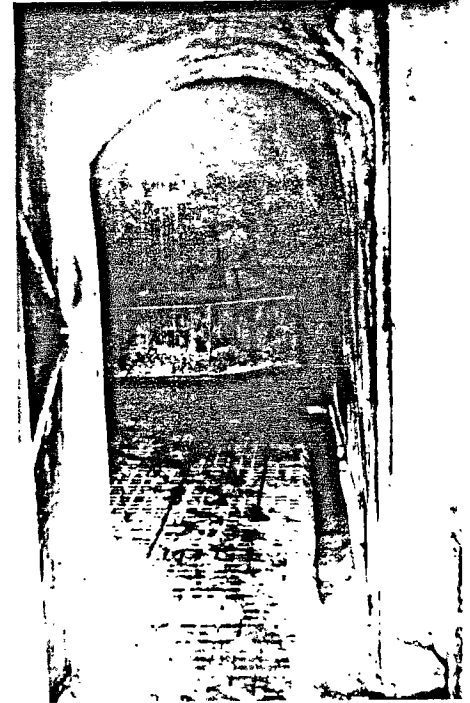
JAWADAIN HAMMAM: PLAN. (BY STRIKA & KHALIL)



JAWADAIN HAMMAM: DOMES ON COLUMNS AND CROSS-RIBBED TRIANGULAR PENDENTIVES.



HAI DAR HAMMAM (PARTLY DEMOLISHED): PLAN (BY STRIKA & KHALIL).



SHAMI HAMMAM: DOMED AND VAULTED INTERIOR (PHOTOGRAPHS BY I. ABDALI)

FIGURE 32 EXAMPLES OF DEMOLISHED HAMMAMS IN BAGHDAD

4. Kachu (also Kachachiya) Hammam*

Built pre 1853

Demolished probably in 1946 when Rashid Street was widened

Description: This was a large hammam located in Jadid Hasan Pasha mahalla of Rusafa and on Rashid Street and near to what is now Suq al-Amana. According to some aged locals, it was below ground level and was domed in the typical hammam architecture of Baghdad. No plans or photographs were found to indicate its former description.

References: Jones, Memoirs, p. 317

5. Panja Ali Hammam*

Built pre 1853

Demolished probably in the early 1920's when Rashid Street was completed

Description: This was a small hammam located near Panja Ali Memorial which was near Mirjaniya Madrasa in Rusafa. No plans or photographs were found to give any details about its former description.

References: Jones, Memoirs, p. 317

6. Pasha Hammam*

Built probably around 1720

Demolished in 1962 and its site was taken by a governmental multi-storey office block (Estate Bank)

Description. This was perhaps the most outstanding hammam in Baghdad and its loss is a great one indeed. Its date of origin is not known, but it is suggested by the author that it was probably built by Hasan Pasha (1704-1724) who built the nearby mosque and Sarai Buildings. Further details are found in the Inventory of this thesis under No. 6. From the original hammam, which probably included both men's and women's sections, only a domed central hot room remains. No plans or photographs of the original hammam were prepared.

References: Jones, Memoirs, p. 321 (He only mentioned it by name)

7. Qadhı Hammam*
Built around 1700?
Demolished in 1945 and replaced by a multi-storey building
Description: This was an interesting hammam located in Mustansır (Nahar) Street and adjacent to the Sharia Courts. According to Durubı, it belonged to a certain Shamsı and Layla Khatun in the form of a 'Thırrı' waqf (hereditary type of waqf abandoned since 1955 in Iraq). There are no plans or photographs to indicate its former description.
References: Durubı, Baghdadıyun, p. 398
8. Qanbar Alı Hammam*
Built pre 1853
Demolished probably in 1936 when Kifah Street was driven through its area
Description. This was another hammam reported by Jones in 1853 and located near the famous Mosque with the same name. Again, no plans or photographs were traced to indicate its former description.
References: Jones, Memoirs, p. 314
9. Raıı Hammam
Built pre 1853
Demolished probably in the 1920's
Description. This was a small hammam located in Sinak mahalla of Rusafa and probably near Bab al-Sharqı. It was reported by Jones in 1853 but he gave no details about its date nor its appearance. No plans or photographs were found.
References. Jones, Memoirs, p. 329
10. Shorja Hammam*
Built probably pre 1700
Demolished in 1938 and replaced by modern shops
Description: According to Durubı this was an 'old' hammam located in the middle of Shorja Suq of Rusafa and belonged to the well-known Baghdadı family of al-Wıtrı. It was also mentioned by Jones in 1853 but there are no plans or photographs to indicate its former description.
References: Durubı, Baghdadıyun, p. 398, Jones, Memoirs, p. 327

11. Sur Hammam

Built pre 1900

Demolished probably in 1936 when Kifah Street was cut through Rusafa

Description: This was a small hammam located in Fadhil mahalla of Rusafa and was shown on Zaki's map of Baghdad in 1919. No records, plans or photographs were traced.

References. None

(2) Karkh1. Jisir Hammam*

Built pre 1853

Demolished in 1960 when Amanat al-Assima developed its area as a car park and Law Courts.

Description: This was a small but interesting hammam located near Shuhada Bridge in Karkh. It was mentioned by Jones in 1853 but he gave no other details apart from its name. No plans or photographs were traced.

References: Jones, Memoirs, p. 339

2. Shami Hammam*

Built probably pre 1600

Demolished in 1966 by Amanat al-Assima when Haifa Street was driven through Karkh

Description: This was one of the most interesting hammams in Baghdad and its ruthless demolition is a great loss. It was reported by Jones in 1853 but he gave no details about its date or description. Ironically, it was 'registered' by the D.G.A. as of architectural value, and although several protests were lodged to Amanat al-Assima, the D.G.A. finally succumbed and it was demolished in 1966. It is saddening to learn that even when the D.G.A. had the advance knowledge of its demolition this valuable hammam was not measured or photographed. (Figure 32)

References: D.G.A., File No. 522, Jones, Memoirs, p. 339

(3) Aadhamiya1. Aadhamiya Hammam*

Built in 1535 by Sultan Salim

Demolished in 1970 by Amanat al-Assima when the surroundings of al-Aadham Mosque were cleared

Description: This was a very interesting mosque located in Shiyoukh mahalla of Aadhamiya and adjacent to Bishr al-Hafi Tomb-Mosque. According to Aadhami, it was about 450 sq. m. in area and of typical Islamic hammam design. a disrobing room, intermediate room, and a central hot room with recessed iwams and surmounted by a dome pierced by small skylights. Its water was originally carried from the Tigris by means of a water wheel (Kard) and a three-metre high aquaduct. This historic hammam was restored in 1868 and its aquaduct demolished in 1923 when modern water-supply was provided for the area. Its demolition is a great loss indeed and it is unfortunate that neither the Awqaf, which owned it, nor indeed the Directorate of Antiquities, which had a clear legal responsibility to protect it, felt obliged to even record it or photograph it before its demolition. However, if further research is made, its former plan and description could be reconstructed. Some of the local photographers or interested historians might have an old photograph of it.

References: Aadhami, Jami Aadham, Vol.II, pp. 210-212

(4) Kadhimiya1. Amir Hammam*

Built probably pre 1700

Demolished (abandoned) in the early 1950's and then partly demolished and partly taken up by shops

Description: This was an outstanding hammam in Kadhimiya and probably the largest in Baghdad. It was located in Qattana mahalla and east of Kadhimain Mosque. An oblique aerial photograph of the area, taken in the late 1940's, shows its extensively domed roof consisting of more than forty domes of varying sizes, and a rectangular overall form. Some of its original structure was traced by the author in some of the shops which are also using its former marble slabs and wall panelling for their shop furniture. No plans or photographs were found.

References: Khalili, Kadhimain, Vol.I, p. 178

2. Jarmuqa Hammam*

Built in c. 1890

Demolished (abandoned) in the 1920's and now replaced by modern buildings

Description: This hammam was built by Shaikh Mahdi al-Jarmuqi around 1890 and located in Shiyoukh mahalla near to what is now Kadhimiya Hospital. No plans or photographs were traced to give details about its former description.

References: Khalili, Kadhimain, Vol.I, p. 178

3. Jawadain (also Shah Zada and Mirza Hadi) Hammam*

Built around 1800

Demolished in 1974 by Amanat al-Assima to make way for a car park suggested by Polservice

Description: This was a large and interesting hammam located in Shiyoukh mahalla and near the western walls of Kadhimain Mosque. It consisted of a men's section and a women's section partly separated by the (demolished) Turk Mosque. Fortunately, it was measured and photographed by an Italian archaeological team before its final disappearance. (Figure 32)

References: Strika and Khalil, Monuments, Mesopotamia (1973-74), p. 270, with a plan and plates

F. SUQS(1) Rusafa1. Haidarkhana Suq

Built probably pre 1700

Demolished in 1917 when Rashid Street (then Khalil Pasha Street) was driven through its area

Description: This was a vaulted suq located in Haidarkhana mahalla of Rusafa and was adjacent to the Mosque of the same name (this is clearly shown by several old photographs of the mosque). It was restored by Daud Pasha in 1818. No plans or photographs were traced to indicate its former description.

References: Coke, Baghdad, p. 298

2. Mustansiriya Suq (also called Suq al-Haraj)*

Built in 1673 by Hussain Silahdar Pasha, rebuilt in 1818 by Daud Pasha

Demolished in 1974 by the D.G.A. when Mustansiriya Madrasa was cleared of its surrounding fabric. Its origin may well go back to the Abbasid period when it was called the 'Tuesday Market' or Thilatha Suq. It was about 130 m. in length and about 5 m. in width, consisted of small shops on either side, and was roofed by a series of domes supported by pointed arches and pendentives. There exist several photographs and a plan for this suq. (Plate found in Inventory No. 40).

References. Kronic, Protection, pp. 4-5

3. Qaplaniya Suq*

Built (rebuilt) in 1818 by Daud Pasha

Demolished in 1974-1976 period by the Awqaf and replaced by a new and a different pseudo-Islamic Suq

Description. This was a small suq of outstanding architectural interest. It was located near Qaplaniya Mosque and specialised in the sale of rugs and carpets and was particularly popular with foreign tourists. It was about 80 m. in length and some 4 m. in width, consisted of typical small shops on either side, and was roofed by domes supported by pointed arches and pendentives. Its demolition, according to some Awqaf officials, was made purely for commercial purposes because it could have been easily restored to its original condition. The rents from the new shops are more than ten times the old ones (from fifty to five hundred Dinars per year). It is also of interest to learn that the D.G.A. had agreed to this demolition. (Figure 100 and plate in Inventory

References: None

card no. 41)

(2) Karkh

1. Bab al-Sif Suq*

Built probably pre 1700

Demolished in 1960 by Amanat al-Assima to make way for a car park and Law Courts.

Description: This was a suq of outstanding architectural interest. It was located in Bab al-Sif area of Karkh and contained probably the largest Khan in Baghdad, also named Bab al-Sif, and the famous Bairuti coffee-house. It was about 100 m. in length and L-shaped in plan with the Khan in the corner. Old photographs, traced by the author, show its superbly domed roof and monumental gate. Its demolition was largely unnecessary because the car park and the court buildings could have been built nearby without being obstructed by this Suq. It was not recorded or photographed before demolition. (Figure 29)

References: None

G. KHANS(1) Rusafa1. Bab al-Muadham Khan

Built in 1876

Demolished probably in the 1940's

Description: This was a large khan located in Bab al-Muadham mahalla of Rusafa and near the ex-Royal Hospital. According to Durubi, it was built in 1876 as shown in its waqfiya. There are no plans or photographs to give any details about its former appearance.

References: Durubi, Baghdadiyun, p. 396

2. Barazanli Khan

Built probably around 1850

Demolished in 1940 and replaced by the multi-storey Damarchi Building

Description: This was a large khan located in Banks Street near the northern end of Mustansir Street in Rusafa. It was built by Salih Chalabi al-Barazanli and consisted of rooms around a large open courtyard. There are no plans or photographs to give any more details of its former description.

References: Durubi, Baghdadiyun, p. 396

3. Dija] Khan*

Built probably around 1650

Demolished in c. 1930

Description: According to Durubi, this khan, which was located in Shorja Suq, was "one of the old khans of Baghdad". It was demolished when partly destroyed by a fire in c. 1930. It was then replaced by a modern building with shops. No plans or photographs were traced by the author.

References: Durubi, Baghdadiyun, p. 397

4. G'ghan Khan*

Built in 1590 by Sultan Murad

Demolished: gradually taken over by shops and converted in 1936

Description: This was perhaps the most outstanding open khan in Baghdad and its loss is a great tragedy indeed. Its date was seen by Herzfeld (in 1910) inscribed on its monumental portal. Its title is derived from the name of G'ghala Zada the Great, a local Governor, who was known in Europe as 'Cicala'. It was about 42 x 68 m in overall dimensions and located very near Mustansiriya Madrasa in Rusafa. It consisted of two floors built around an open courtyard and, until its major conversion to shops in 1936, it was about two metres under ground level which indicates its old age. It is now almost totally destroyed and replaced by Danial Suq and only some of its original elements can be traced. No plans or interior photographs were found to give further details about its former appearance and research is needed to reconstruct its original form and trace its history.

References: Saare and Herzfeld, Reise, Vol. II, p. 198, Jawad and Jamil, Baghdad, Vol. II, p. 14; Jawad, Niebuhr, Sumer (1964), p. 51; Ashab, Baghdad, pp. 729-731 with a plan of the modern Suq, Azzawi, Tarikh, Vol. IV, pp. 128-129

5. Jani Murad Khan*

Built in 1685 by Haji Murad

Demolished probably in the late 1950's

Description: According to Durubi, this large khan was located in Shorja Suq in Rusafa and was built by Murad in 1685 as is shown by its waqfiya. It consisted of two floors built around an open courtyard. The ground floor contained some twenty rooms, and the upper floor twenty-three rooms including a small mosque. Its 'thiri' (hereditary) waqf was dissolved in 1955 and was probably demolished soon after this date. No plans or photographs were traced to give any more details.

References: Jones, Memoirs, p. 335; Durubi, Baghdadiyun, p. 397

6. Makhzum Khan*

Built in 1699 by Muhammad Ahmad Hafidh al-Makhzum

Demolished probably in the early 1960's

Description: It was located at the eastern end of Bazazin Suq and on Rashid Street, and was also called al-Nakhla Khan, perhaps because there was a large palm-tree in its courtyard. Its 'thiri' waqf was dissolved in 1955 which was probably the reason for its demolition. There are no plans or photographs to give its former description.

References: Durubi, Baghdadiyun, p. 395

The following khans, all in Rusafa, were reported by Jones in 1853. He only mentioned them by name and gave no details about their date of origin as he did for some mosques. They do not exist now and were demolished probably between 1920 and 1950, the period of road construction and urban renewal. It should also be said that some of these khans were not demolished outright but gradually taken over by shops and warehouses and their names then changed. Their names, which are listed alphabetically, are followed by their location and then by the relevant page number in Jones' Memoirs:

7. Adiliya Khan, Mustansir Street, p. 318
8. Affus Khan, Bab al-Agha, p. 334
9. Ahmad Agha, Bab al-Agha, p. 335
10. Andrieh Hanna Khan, Ras Qarya, p. 336
11. Bakir Khan, Bab al-Agha, p. 335
12. Breesam Khan, Bab al-Agha, p. 334
13. Daftardar Khan, Bab al-Agha, p. 318 (replaced by the multi-storey Awqaf Building in the early 1960's)
14. Dunigchiya Khan, Jadid Hasan Pasha, p. 324
15. Hassan Beg Khan, Maidan, p. 321
16. Haya] Khan, Bab al-Agha, p. 335
17. Illı Yakı Khan, Bab al-Agha, p. 335
18. Juss Khan, Ras Qarya, p. 336
19. Kittan Khan, Bab al-Agha, p. 335
20. Madhmawı Khan, Bab al-Agha, p. 319
21. Masbagha Khan, Bab al-Agha, p. 318
22. Miamilchiya Khan, Bab al-Agha, p. 335
23. Muhammad Baqal Khan, Ras Qarya, p. 336
24. Rimah Khan, Bab al-Agha, p. 333 (now replaced by a modern building)

25. Sultan Hamada Khan, Bab al-Agha, p. 335
26. Tamur Khan, Bab al-Agha, p. 318
27. Titin Khan, Bab al-Agha, p. 333
28. Yaqub Khan, Qaplaniya Suq, p. 319

(2) Karkh

1. Bab al-Sif Khan*

Built probably around 1700

Demolished in 1960 by Amanat al-Assima to make way for a new car park and governmental buildings

Description: This was one of the largest khans in Baghdad, probably the largest. It measured about 100 x 100 m in plan and was located on the banks of the Tigris in Bab al-Sif mahalla in Karkh. It consisted of two floors built around an open courtyard. It was unfortunately not recorded or photographed before its demolition and its description here is deduced from old aerial photographs with the author. Further research is necessary to trace its history as well as its form. It is quite possible that some of the locals or interested historians might have photographs of this interesting khan.

References: None

(4) Kadhimiya

1. Kabuli Khan*

Built probably around 1850

Demolished in the 1940's

Description: This was a large khan located about 350 m. south of Kadhimain Mosque. It was built by a rich Afghani, named Afdhal Khan, and measured about 60 x 140 m. in area. It consisted of two parts, each of which had its own courtyard and was in two floors. It is of interest to note that it was the first headquarters for the Iraqi Army (Fawj al-Imam Kadhim). It was replaced by multi-storey office buildings with shops. No plans or interior photographs were traced but several aerial photographs show its former imposing size and outstanding architectural quality.

References: None

H. HOSPITALS(1) Rusafa1. Dar al-Shafa Hospital*

Built in c. 1360 by Mirjan, a local Governor of Baghdad

Demolished in the 1940's

Description: This was a hospital built by Mirjan Abdulla Abd al-Rahman al-Uljayiti around 1360. He also built the existing Mirjan Khan and the partly surviving Mirjaniya Madrasa. It was located on the bank of the Tigris and near Khafafin Mosque in Rusafa. According to Alusi, who wrote his book on Baghdadī mosques in 1903, this hospital was then being used as a coffee-house called Qahwat al-Shatt and also Qahwat al-Masbagha. According to Durubi, it continued to be used as a coffee-house until the late 1940's and was then abandoned and demolished.

Unfortunately, none of the authors who mentioned it and lamented its loss attempted to describe its appearance or interior. No photographs were located by the author and further research could reveal interesting facts. Its loss is particularly great because no hospital has survived from the Abbasid or Medieval or even late Ottoman periods in Iraq. Since its exact location is now known, the Directorate of Antiquities should initiate a programme for excavating its site in order to reconstruct its historical development and perhaps deduce its former plan.

References: Alusi, Masajid (manuscript), p. 85, Durubi, Baghdadiyun, pp. 388-389; Azzawi, Tarikh, Vol. II, p. 94

I. OTHERS(1) Rusafa1. al-Bilat al-Malaki (Royal Palace)*

Built probably around 1900

Demolished in 1974 and is being replaced by a club for army officers.

Description: This was a large palace located on the Tigris in Kasra area of Rusafa. It was used by King Faisal I as his official residence during the 1920's and was used by various governmental departments throughout its later life. No plans were traced by the author but one rather faint old photograph shows its interesting Islamic style and picturesque landscape. Indeed its loss is regrettable because it would have made an excellent museum for Iraq's past Royalty. It is quite probable that it has been photographed by many and further research should locate some of these photographs.

References: None (Figure 29)

(2) Karkh1. Bairuti Qahwa (Coffee-House)*

Built probably around 1800

Demolished in 1960 by Amanat al-Assima together with Bab al-Sif Suq off which it was located

Description: This was one of the largest and most famous coffee-houses in Baghdad. Its name is derived from Haji Muhammad who had come from Beirut in Lebanon and settled in Karkh in 1897. It overlooked the Tigris and was partly cantilevered over the river. There are no plans or photographs to give any further details about its former interior (Figure 29).

References: Durubi, Baghdadiyun, pp. 390-391

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3. Saba SHIBER,
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al-Murshid ila Mawatn al-Athar wa al-Hadhara (Arabic)
Baghdad, Ministry of Information, (Sixth Journey), p. 13
7. Ibid, (Fourth Journey), pp. 34-36
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9. Ibid.
10. Warren, Conservation, p. 20
11. Chapter VII of this thesis
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20. J. M. ROGERS,
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21. Abd al-Razaq al-HASANI,
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22. Ibid.
23. Ibid.
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Taqyim Numw al-Iqtisad al-Iraqi (Arabic), Baghdad, 1972(?)
Vol. II, p. 382

CHAPTER V

THE EXISTING PROTECTIVE MACHINERY

5.1 Introduction

Conserving cultural property is essentially a multi-disciplinary activity. The large volume and variety of Iraq's heritage has consequently meant that the responsibility for its protection, maintenance and presentation is shared by several agencies, each of which deals with a specific aspect. Functionally, the existing machinery can be divided into five broad groups:

1. Preservation, Restoration and Presentation (Museums and Exhibitions). Mainly carried out by the Directorate of Antiquities.
2. Town and Country Planning. Carried out by Amanat al-Assima for Baghdad, and by the Directorate of Planning for the rest of Iraq.
3. Religious Buildings: Mosques and other Islamic buildings are administered by the Ministry of Awqaf.
4. Tourism: is the responsibility of the Tourism Administration.
5. Research and Education: Carried out by the Unesco Regional Centre for the Conservation of Cultural Property in Arab States, located in Baghdad, and by the Iraqi Universities.

The preceding chapter has highlighted the alarming scale of destruction in spite of the existence of these 'protective' agencies. A critical analysis of each individual agency, therefore, is necessary in order to diagnose the defects and specific loopholes which have allowed, and are still allowing, such destruction to take place. It should also be pointed out that non-governmental private organisations which are directly concerned with the protection of heritage, such as the Civic Trust in Britain and Cosa Nostra in Italy, do not exist in Iraq¹.

Professional societies, such as those for engineers (including architects), archaeologists and historians, have hitherto shown very little effort in even attempting to exert the sort of pressure and lobbying which their European counterparts have so effectively demonstrated. Indeed, the

unfortunate lack of 'watch dog' groups and amenity societies has resulted in the near-total unaccountability of official action. Major blunders and follies such as the factory in Samarra might have been otherwise averted.

5.2 Directorate General of Antiquities

The interest in Mesopotamian archaeology first came mainly from the various European travellers, adventurers, and 'diggers', who were all hoping to get their share of antiques and other curiosities. However, this interest took a more academic complexion during the nineteenth century when famous individuals such as Layard, Rawlinson, Rich, and Dieulafoy, made more serious efforts to document historic evidence. The first two decades of the twentieth century witnessed accelerated but much more systematic archaeological expeditions by German, British and American teams. The foundation of an Iraqi museum by the indefatigable Miss Gertrude Bell in 1923 was a tremendous step and a milestone in the history of Mesopotamian archaeology. She was also instrumental in the drawing-up of the first 'Antiquities Law' of 1924, of which the Antiquities Law of 1936 was, more or less, a revised edition. In spite of the fact that a considerable amount of cultural property found its way to various European museums the positive contribution of the West to the better understanding and documentation of Mesopotamian archaeology should never be underestimated.

Since its foundation in 1923, the Directorate of Antiquities has now become a large organisation employing some six hundred people of wide-ranging skills. It has become the main establishment in charge of protecting, maintaining, and presenting both movable and immovable cultural property in Iraq. Administratively, it is subordinated within the framework of the Ministry of Information. Its organisational structure was laid out by Regulation No. 46 of 1958 and is shown in Figure 33. As its title implies, the basic function of the Directorate is the protection of 'Antiquities' - a term defined in the Antiquities Law No. 59 of 1936 as follows² (Appendix 1):

"(Antiquities) - mean anything made or formed by the hands of man before 1700 AD, and the year 1118 AH, such as buildings, caves, coins, sculptures, manuscripts, and such objects as are illustrative of sciences, arts, crafts, literature, religion, customs, morals, and politics in past ages."

As a consequence of this somewhat arbitrary legal date most domestic architecture, urban areas and buildings of modern historic or architectural interest are unfairly excluded from legal protection.

A provision is, however, included in this law which makes it possible for the Ministerial Cabinet to invoke an order to safeguard a particular building erected after AD 1700³:

"The council of Ministers may pass a resolution to the effect that any building erected after the year 1118/1700, shall be considered as an ancient building, if the Council have reason to believe that its preservation is necessary for public utility on account of its historical or artistic value. Such resolution shall be published in the Government Gazette and the building in question shall thus be reckoned as an ancient building as provided for in this Law and shall be subject to the provisions of the Expropriation Law."

An amendment, passed in 1974⁴, made it possible for the Minister of Information to use this provision on his own without involving the whole Cabinet. This accommodation for more recent buildings is important, but its use has been minimal. The author has failed to trace more than a couple of cases where this provision was used. The Directorate deals mainly with archaeological sites, ancient monuments, and movable cultural property. The existing Law does not cover groups of buildings nor urban areas of historic or architectural merit. The clear emphasis on archaeology is, perhaps, understandable, but this does not even extend to the important field of urban archaeology. Urban areas come under the jurisdiction of local planning authorities and, although these two aspects of heritage are inter-related, the official co-ordination between them remains at a very minimal level.

The tasks facing the Directorate of Antiquities are enormous and require correspondingly enormous efforts. It is beset by typical problems of bureaucracy, inadequacy, and a general lack of authority. The existing legal framework within which it is allowed to operate is hardly adequate

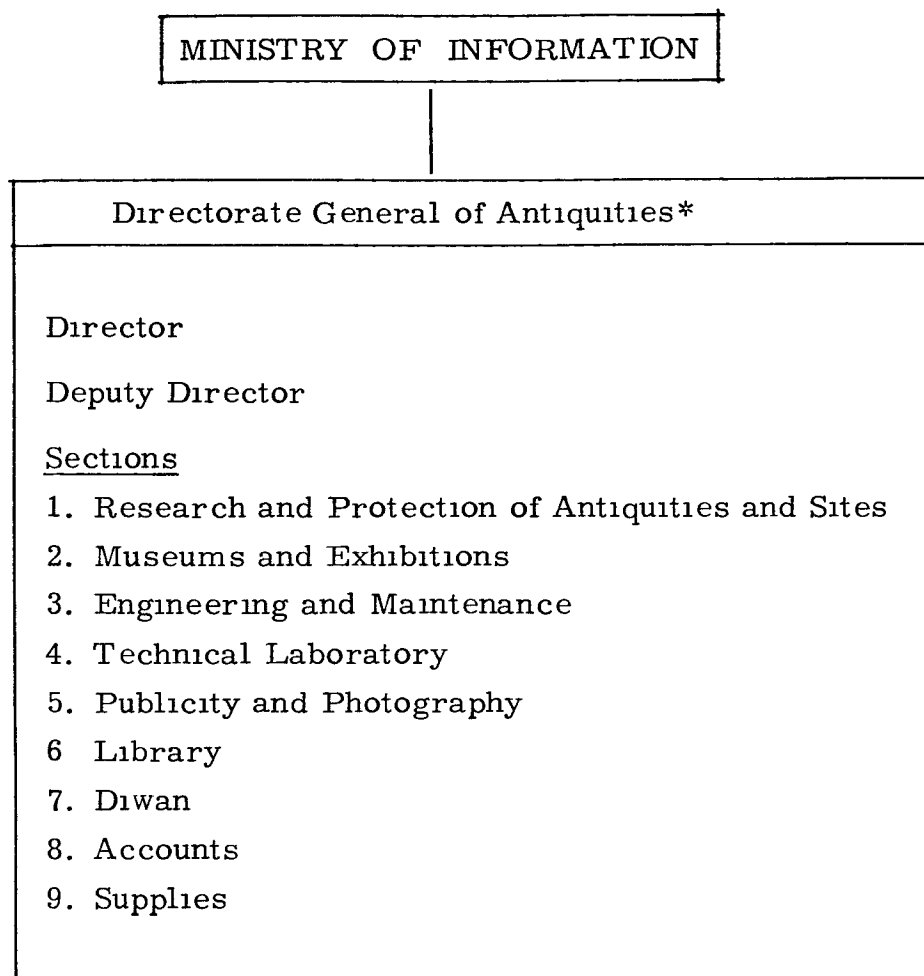


FIGURE 33 THE ADMINISTRATIVE STRUCTURE OF
THE DIRECTORATE GENERAL OF ANTIQUITIES

Source Directorate-General of Antiquities, Regulation
No. 40 of 1958 (first edition), Baghdad, 1967

NOTE. *The total number of its staff in 1977 is 601.
Out of this total there are 179 qualified archaeologists
of whom 12 hold Doctorates and 27 Master's Degrees.
There are three Sub-Directors in charge of research
into specific historical periods, Prehistoric,
Assyrian, and Islamic. These figures were
collected by author in January 1977.

to overcome these sorts of problems. The Antiquities Law of 1936 itself is now hopelessly outdated, over-generalised, neither providing sufficient incentives for private owners of architecturally or historically important buildings, nor sufficient financial penalties against infringements. For example, article 55 provides for a punishment to whoever destroys cultural property with imprisonment for a period not exceeding one year, or with a fine not exceeding 200 Iraqi Dinars, or both⁵. There is not a single provision for financial incentives such as tax reliefs and grants to owners of important buildings to help them meet maintenance costs. The present legislation is more biased in favour of protecting movable cultural property, excavation of sites, and traffic in antiquities, than with buildings and areas of cultural interest.

Perhaps one of the most serious defects in the present legislation is the fact that it does not provide for the preparation and maintenance of a national inventory of cultural heritage. It has already been shown that, without such a basic prerequisite, the destruction of heritage will go on largely ignored and even unnoticed. The listing of monuments and buildings, and the designation of conservation areas will not, alone, guarantee their survival. It is naive to believe so. But it will at least make legally known what and where to conserve. At present, the Directorate merely registers archaeological sites and monuments and then announces them in the Official Gazette. Clearly, this should not be confused with listing which involves, inter alia, grading, full documentation, and legal and other controls. Gazzola⁶, a well-known Italian conservationist, affirmed the urgent necessity of the inventory in his Unesco report about the question of protecting the heritage in Iraq

"The first task of the Directorate of Antiquities should be to draw up an inventory of all immovable cultural property (buildings and sites) to be protected, indicating the type of protection to be considered, this would provide a clear and exhaustive archaeological map of the country. Only when this stage has been completed will it be possible to assign a place to the programme for the restoration and presentation of the monuments and sites within the country's overall development plan."

Other problems that reduce the capacity of the Directorate to cope with its vast tasks include: the lack of an adequate number of experienced and qualified staff; insufficient facilities for documentation and research, and the lack of sufficient funds to finance the maintenance or protection of a large volume of badly neglected sites and buildings of cultural interest. While essentially prestige-projects, such as the proposed reconstruction of Babylon, is allocated twelve million Dinars, the annual budget of the whole Directorate itself is slightly less than one point twenty-five million Dinars⁷ (Table 23).

The lack of a coherent and consistent philosophy of restoration is another glaring shortcoming of the Directorate. Numerous examples were cited in the previous chapter which illustrated this particular form of loss of heritage. Ill-considered, insensitive and speculative restoration can be nearly as destructive as demolition itself. Too often, important historical monuments and buildings have been 'restored' without adequate historical bases as evidence, and new materials used in such a way as to make them almost indistinguishable from the original. Bernard Fielden⁸, who is the Surveyor to the fabric of York Minster and a distinguished conservationist, puts his views on preservation and restoration:

"It is important to understand both the building and the reasons for its preservation, the more important the building, the more painstaking must be the background work, and the more likely it is that individual decisions will have to be justified. The integrity of a building as architecture depends on its design and its fabric, full knowledge of which, in their primary and secondary aspects, may require documentary research besides physical examination and 'opening up'. A building may either be conserved in its existing state, with secondary developments reflecting the whole life of the building, or conservation may include restoration to a former appearance on the basis of a design, which like an historical event, has to be reconstructed from evidence "

Since the early decades of this century, the technological progress in preservation and restoration has been considerable. The high degree of scientific discipline and sophistication developed in museums' laboratories and other research centres call for an equally consistent and sophisticated approach to the question of the protection of the historic

TABLE 23 Allocations of Five-Year Plan (1970-75) to Directorate General of Antiquities (Development Programme)

Operations	Total Allocation Forecast in I. D.	Allocations for Year 1974/5 in I. D.
<u>1. Excavations and Restorations</u>		
Babylon	100,000	10,000
Hatra	30,000	8,000
Nineveh	20,000	2,000
Kufa	25,000	5,000
Samarra	40,000	6,000
Nimrud	20,000	4,000
Yasin Tepe	60,000	10,000
New excavations	25,000	5,000
<u>2. Equipment</u>	42,000	13,000
<u>3. Museums</u>		
Research	90,000	25,000
Sulaimaniya Museum	195,000	31,000
<u>4. Mustansiriya Restoration</u>	30,000	15,000
<u>5. Purchase of Land</u>	313,000	220,000
Totals	677,000 I. D.	134,000 I. D.

Source: Directorate General of Antiquities, Baghdad

- NOTES:
1. The sum of 12,000,000 Iraqi Dinars had been allocated for the reconstruction of Babylon project by the central government
 2. The annual budget of the Directorate for the year 1974/5 was 1,242,230 Iraqi Dinars (Source: Sumer, Vol. 30 (1974))

built environment. In general, the principle of 'conservative repair' should be followed in preservation. This involves two essential criteria:

1. That original fabric is sacrosanct and should not be damaged, and that after removal of extraneous matter it should be preserved so as to arrest the natural process of decay, and,
2. That any new material added for preservation or consolidation should be distinguishable from the original so that the artistic or historic evidence is not falsified.

The process of restoration, also a highly specialised technique and involving the replacement of missing parts, must be preceded by an architectural and historical study of the building, and must stop at the point where conjecture begins. Restoration sometimes involves the important question of what to do with the contributions of different periods to a monument or a building. According to the Venice Charter (Article 11)⁹, the valid contributions of all periods to the building must be respected, since unity of style is not the aim of restoration. In order to minimise errors and reduce value-judgement, the evaluation of the importance of such contributions and the decision as to what may be destroyed or retained should not rest solely on the individual in charge of the work.

"The revealing of the underlying (fabric) can only be justified in exceptional circumstances and when what is removed is of great (cultural value), and its state of preservation good enough to justify the action."¹⁰

It may be argued that these criteria are so self-evident that their inclusion within the protective legislation is unnecessary. While this may be true in general, it is also arguable that, in view of the numerous ill-advised restoration work in Iraq, there is a real need for some sort of statutory control over such operations. Of course, the lack of adequate numbers of qualified and experienced restorers and conservationists is one important reason that can be attributed to this problem. It may be more appropriate for the Directorate of Antiquities, therefore, to concentrate its effort more on preservation than restoration. Moreover, in view of the existence of a large number of sites, monuments and historic

buildings that are in need of immediate attention, preservation is ideally suited as a first-aid measure. Only when the Directorate manages to increase its pool of technical human resources will it be in a position to initiate a wide-scale programme of restoration. As for reconstruction, this should be generally ruled out a priori. The proposed reconstruction of the ziggurat of Babylon, for example, should be deferred in favour of preserving the hundreds of threatened sites in the country.

The nature of ancient archaeological sites, which at present constitute the majority of officially-registered immovable cultural property, presents special difficulties. Here, the problem is not where to excavate because there are thousands of unexcavated sites but, rather, how to ensure the preservation of a site once it is excavated and exposed to the elements. At present, Iraqi and foreign archaeologists fill the excavations with sand, or just leave them open to the mercy of nature which can be a 'destruction sentence'. Jedrezejewska¹¹, reported her deep concern at this particular problem and suggested.

"A paragraph might be added to present Laws of Antiquities making the directors of archaeological missions responsible for maintaining the necessary equilibrium between excavation and the amount of protection, so that no easily perishable structures will be left exposed without treatment. In this way we shall no longer encounter the 'tragedy of Nimrud' and other places, a tragedy which will repeat itself in the city of Seleucia, neatly cleaned this year (1968)."

She then rightly suggested that until methods for the stabilisation of mud-bricks are finally worked out, all excavations should be stopped immediately, and all the efforts and funds directed to the preservation of sites already exposed. However, since her report in 1968, numerous new excavations have been allowed.

Another restorative technique, anastylosis, the reassembling of existing but dismembered parts, has also been extensively used by the Directorate in several important sites, especially Hatra and Ukhaidhir. The Directorate, according to several Unesco specialists on conservation, has unwisely exceeded the use of anastylosis for reconstruction purposes. Here, the restoration of a monument is justified providing it is carried out systematically and expertly. The degree of restoration according to

anastylosis is, however, still a matter of debate among conservationists, but it should preferably stop where the original parts of the monument are no longer found. Expressing his reservations about the restoration work in Hatra, Gazzola reported¹²:

"It is not merely a question of anastylosis, as might be thought at first sight, on the contrary, a great many new elements have to be added before an original piece can be set up again, and its original position is not always known with certainty. The recompositions already completed (in Hatra) are rather questionable and the work as a whole is liable to be criticised by the specialists. The importance and renown of the site is such that it is a centre of world attention."

One of the important tasks of any protective agency is the way archaeological sites and historic monuments are presented to the public as well as foreign tourists. As far as the presentation of movable cultural property in museums is concerned the work of the Directorate has been admirable. In contrast, its presentation of many important sites and monuments deserves serious criticism. The majority of such sites and monuments lack informative signs and routing instructions, and often museums are insensitively designed and badly located within the archaeological area itself, e. g. Babylon.

The preceding critical analysis of the work of the Directorate leads to the suggestion of several recommendations. At the administrative level, there seems to be a real need for the creation of a separate section to deal with preservation, restoration and presentation. This should help to stop the existing fragmentation of efforts among the various sections. There is also a need for the setting up of a highly-qualified advisory body to discuss, approve, or reject proposed works of excavation, preservation, restoration and presentation. The qualified staff required for these new bodies could be recruited from other Iraqi sources such as universities, or from Arab and other countries through bilateral or private agreements.

At the legislative level, there is an urgent need to revise the existing Law of Antiquities. The new legislation should provide for the preparation of a national protective inventory, including listing and grading of cultural property; development control, including demolition control of listed buildings and spatial intrusion of important monuments, tax reliefs and other forms of incentives to owners of listed private property, and an appreciable increase in the penalties against infringements.

At the financial level, there is a real need for a considerable increase in central government funds to the Directorate. Only then will it be able to meet its ever-increasing responsibilities and attract the much-needed skilled personnel. These general and other pertinent specific recommendations are elaborated in Chapter IX.

5.3 Urban Planning Authorities

Urban planning and development control activities are carried out mainly by the Directorate General of Planning and Engineering. This Directorate, which is located in Baghdad, deals with all rural and urban settlements in Iraq (Figure 34). The Capital itself enjoys a special municipal status and its municipality and planning are discussed in Chapter VII.

The highly centralised system of urban planning in Iraq means that local municipalities have little role to play in the decision-making process regarding their own environment. Urban planning itself is still widely regarded by most municipalities as a 'design' activity, and the possession of a 'master plan' is often seen as a kind of panacea for the treatment of their local problems. However, there has been an appreciable shift towards a more realistic approach and, since 1970, economists, sociologists, and regional planners have been recruited by the Directorate in order to achieve this purpose. Nevertheless, physical planning in Iraq is still largely unsynchronised with national development planning nor is it based on any realistic fiscal policies.

Local authorities and municipalities expect master plans to lead to a significant improvement and a quick solution to their urban problems. They are soon dismayed at the lack of progress and discover that these 'paper' designs are too broad and abstract to be of any immediate value. Full of extrinsic and irrelevant Western planning notions, and not co-ordinated with national and regional development programmes, they often lead to more problems and bottlenecks than otherwise. The absence of planning standards, lack of standardised 'module' ordinance survey maps, lack of detailed statistical data, and above all, lack of detailed

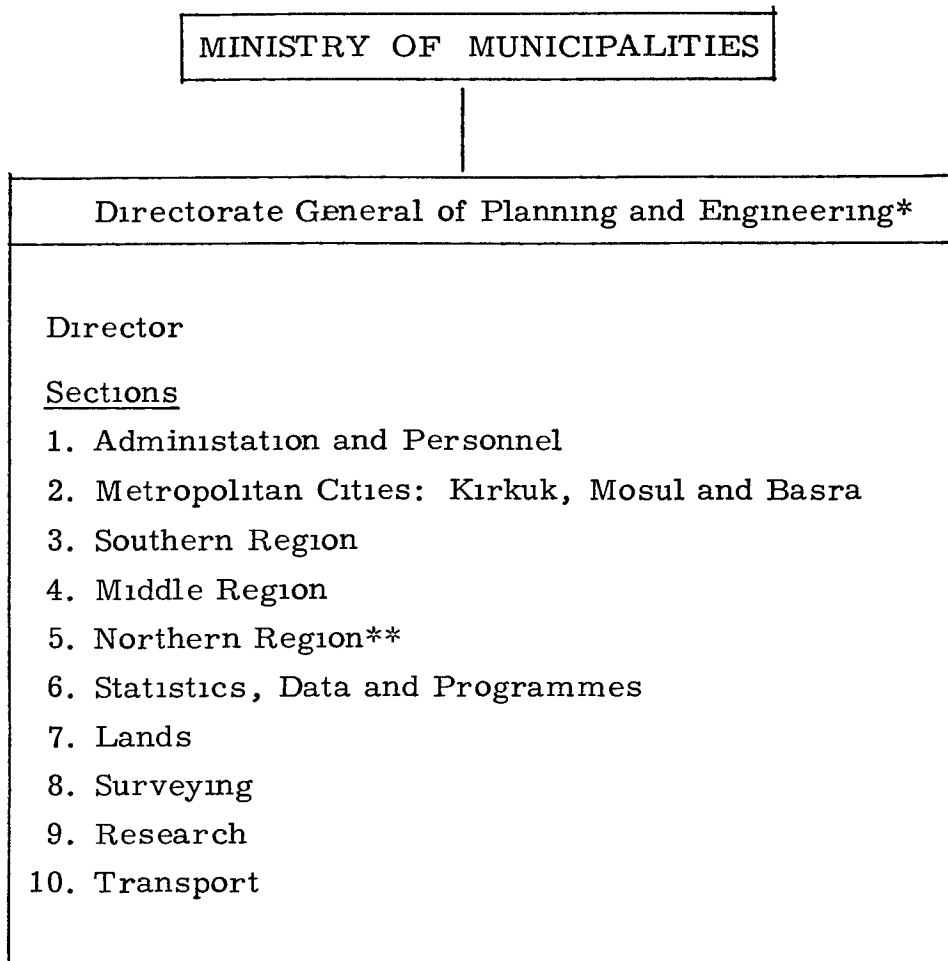


FIGURE 34 THE ADMINISTRATIVE STRUCTURE OF THE DIRECTORATE GENERAL OF PLANNING AND ENGINEERING, BAGHDAD

Source: Data was compiled by author in Baghdad, December 1976

NOTES: *The total number of its staff is about 80, out of which there are 26 qualified planners (engineers and architects) and 5 non-engineer research planners.
 **A new planning unit has been set up in Arbil with 2 planners to deal with the planning of the Kurdish region of Iraq.

planning legislation, all add up to produce an incoherent and bizzare picture. Shafi, a United Nations planning consultant with five years of experience in Iraq, reflected¹³:

"...In retrospect, I am inclined to reflect that planning in Baghdad is akin to a dream sequence reminding one of Alice in Wonderland. The institutional and administrative framework, as well as fiscal planning, is yet unheard of"

(personal communication, 1974)

The legal framework of planning in Iraq is mainly based on two provisions: the Law of Municipalities No. 165 of 1964 and the Roads and Buildings Regulations No. 44 of 1935 and Amendments. The Law of Municipalities is primarily related to the procedural and administrative aspects of local municipalities.

Only one clause is included in this Law that relates to the conservation of historic areas. It calls on every municipality to take conservation into account when preparing a master plan for its city¹⁴:

"...Designating road networks and organising the various services so that modern growth ensures the conservation of historic urban heritage of the city, with the necessity of enhancing its beautiful townscape and buildings and places of religious or archaeological sanctity...."

These few words represent the only legislation related to conservation. The Roads and Buildings Regulations and the proposed Building Law do not consider historic buildings or areas at all. Clearly, to believe that the above-mentioned few lines are sufficient to ensure the protection of heritage in Iraq is far too optimistic and naive.

The sporadic efforts of a few enthusiastic individuals within the Directorate have led to the preparation, largely by foreign planning firms, of one conservation study for the historic citadel of Arbil, and development plans which included general conservation studies, for Mosul, Basra and Kirkuk. These studies and firms were as follows

1. Conservation Study for Arbil's Citadel (1970)

Colin Buchanan and Partners, and Iraq Consult.

2. Development Plan for Mosul (1972)

SCET International (Paris), and Dar al-Imara (Baghdad).

3. Development Plan for Basra (1972)

Llewelyn-Davis and Partners

4. Development Plan for Kirkuk (1973)

Doxiadis Associates

All of these studies have been submitted and although their concern with conservation is very encouraging indeed, it remains to be seen whether their plans will be implemented. So many studies have been shelved in the past that it is legitimate to ask such a question. Arbil and Karbala are two examples that are critically reviewed here: Arbil as an example of a study prepared by a planning firm, and Karbala as one prepared by the Directorate itself.

5.3.1 Arbil Citadel

The city of Arbil, whose name means the 'Four Gods' (Arba-Allu) in Assyrian, is perhaps one of the oldest cities in the Near East. The existing citadel (Qala'a) of Arbil is of considerable archaeological interest and many Assyriologists believe that its interior must contain some significant ancient evidence. It cannot be excavated easily because it is inhabited by more than 3,000 people today¹⁵. It is roughly circular in plan, occupying an area of some eleven hectares, and its height of about twenty-five metres gives it supreme physical as well as visual dominance over the rest of the city. (Figure 35)

In 1970, the Iraqi architectural firm of 'Iraq Consult' was invited by the Directorate and the (now defunct) Ministry of Northern Affairs to carry out a 'Feasibility Study' for the 'Preservation, Conservation, and Revitalization' of the Qala'a of Arbil¹⁶. The 140-page report, which was jointly produced with Colin Buchanan and Partners, was procured within a period of less than five months. However, it seems that most of the actual field-work and the presentation was done by three Iraqi architects, none of whom had any previous experience in planning or conservation.

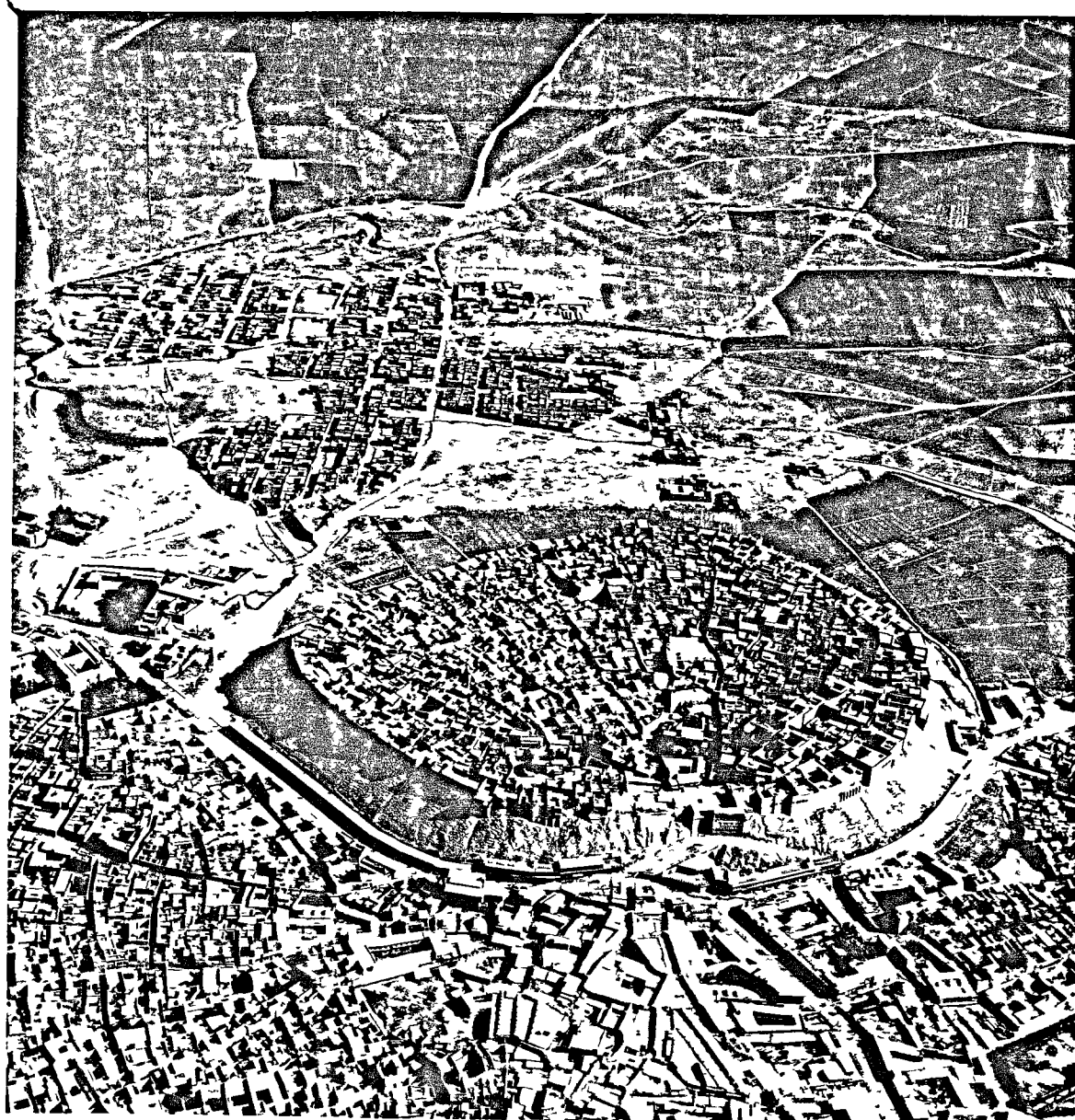


FIGURE 35 THE HISTORIC CITADEL OF ARBIL

Source of Photograph: Aerofilms Limited

The rather grandiose title of the report did not truly reflect the nature and scale of the firms' effort. For instance, their conservation survey, usually a key part in any conservation study, was in fact conducted as a building survey that was concerned with the physical condition of buildings within the citadel and not with their architectural or historic interest. They claimed that because the citadel was almost devoid of any cultural interest they had to resort to investigating structural conditions and, incredibly, attempted to justify their action as follows¹⁷:

"when dealing with a city which is rich in its variety of old and valuable buildings, a highly sophisticated approach is undoubtedly required; however, we feel the standards adopted in such cities would be inappropriate in a place like Qala'a. There are several reasons for this: from our preliminary investigations we found that, although there were no buildings older than nineteenth century, against any set of criteria none could be classified as satisfactory on all accounts... Thus, in our survey of building condition, we were forced to use a fairly simple system, in essence each building was classed as either structurally adequate, inadequate, or better than adequate."

Thus, their ill-conceived survey criteria resulted in the exclusion of the majority of buildings of cultural interest purely on account of their 'structural inadequacy' or their not being older than the nineteenth century. Consequently, only sixteen houses out of a total of five hundred and fifty (2.9%) were found to be 'better than adequate' and also of cultural interest. There is nothing in the protective legislation in Iraq to prevent a building which is built after 1700 from being legally protected providing it is approved by the Minister of Information as having definite cultural interest. In fact, by degrading the majority of buildings within the citadel the consultants perhaps defeated the very purpose of the study.

To revitalise the socio-economic life of the citadel community, some twenty new buildings were proposed, including a museum, a hotel, shops, and the reconstruction of the South Gate to house a Kurdish centre and an institute for historical research. However, the consultants failed to indicate the specific location of these new buildings and, instead, their plan (Figure 36) showed that the area to be redeveloped would have probably involved the demolition of nearly

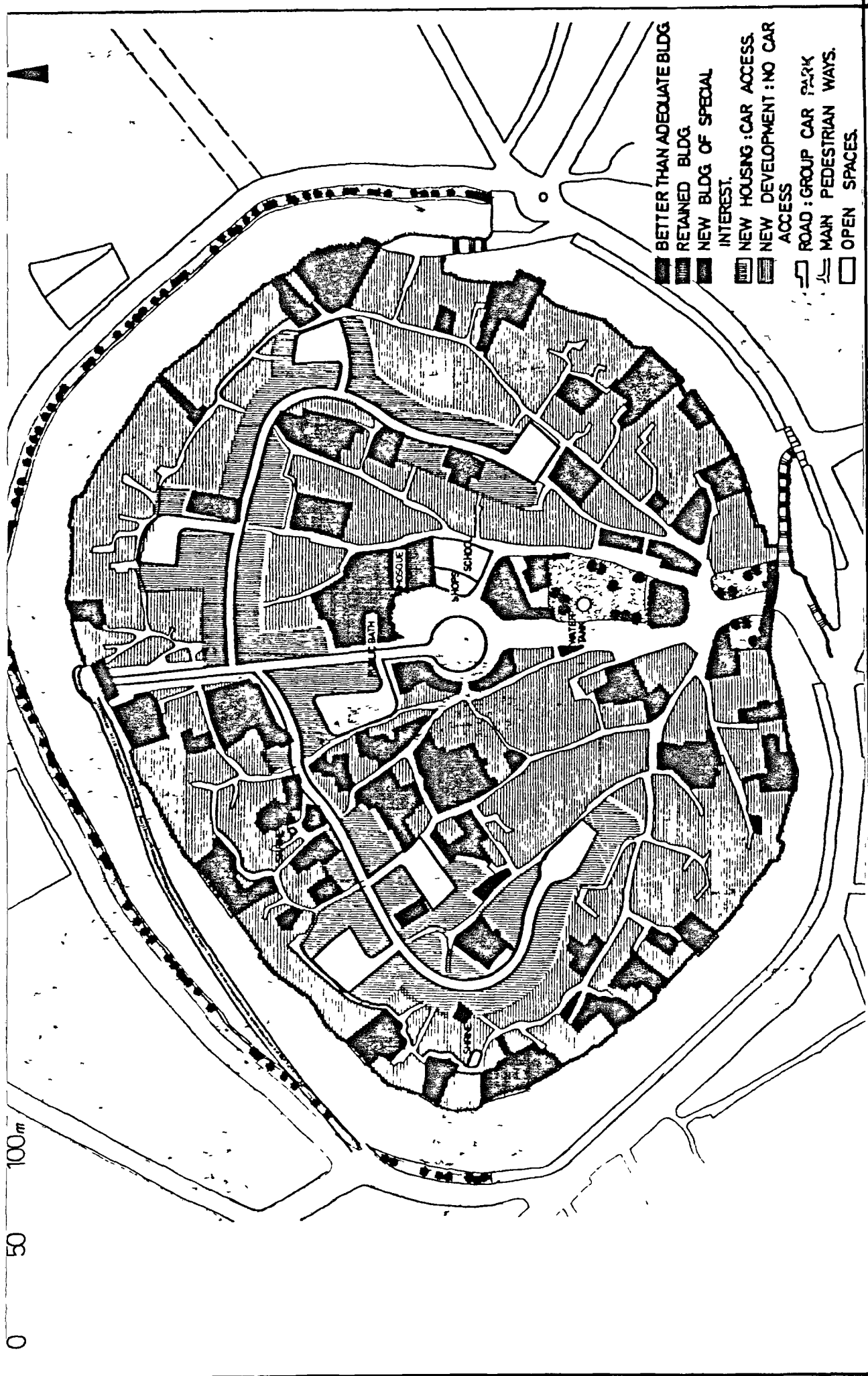


FIGURE 36 ARBIL CITADEL - PROPOSED LAND USE

Source: Colin Buchanan and Partners and Iraq Consult

eighty per cent of the typical 'before-and-after' sketches indicating the dramatic improvement of their proposals. The consultants proposed that the displaced population (which would result from their extensive redevelopment) should be rehoused by the government outside the citadel or in subsidised housing within. Ironically, they claimed that "selective conservation is best suited for the citadel because it is more logical and in keeping with the aims of the study"¹⁸. They recommended the establishment of a special section in the local municipality to be in charge of implementation whose cost was estimated at three point four million Dinars in 1971. There was no indication as to how the cost is to be met, nor any reference to the legal aspects of their proposals whatsoever.

In conclusion, the study was too generalised to be of practical value. It failed to document the historic buildings and called for a very extensive redevelopment of the citadel. The report, which was produced in English and not translated into Arabic, was understood only by the few who could read it. Not surprisingly, therefore, it was soon shelved and the citadel has even been allowed to fall into further decay.

5.3.2 Karbala Old Town

Karbala is one of the historic cities in Iraq that possess very important Islamic shrines which attract a considerable number of pilgrims every year. Its known history began in AD 680 when Hussain, the son of Imam Ali, was killed in a battle in this area. He was buried here and, consequently, his grave gradually attracted Shi'i pilgrims from all over the Islamic World. This, typically, acted as a powerful incentive for permanent human settlements which made Karbala a fully-fledged town. The existing old town is roughly circular in shape, occupying an area of about fifty-seven hectares, and of a diameter of about eight hundred metres. As with most other historic Iraqi towns, Karbala was surrounded by high defensive walls which also helped to contain its physical growth. (Figure 37)

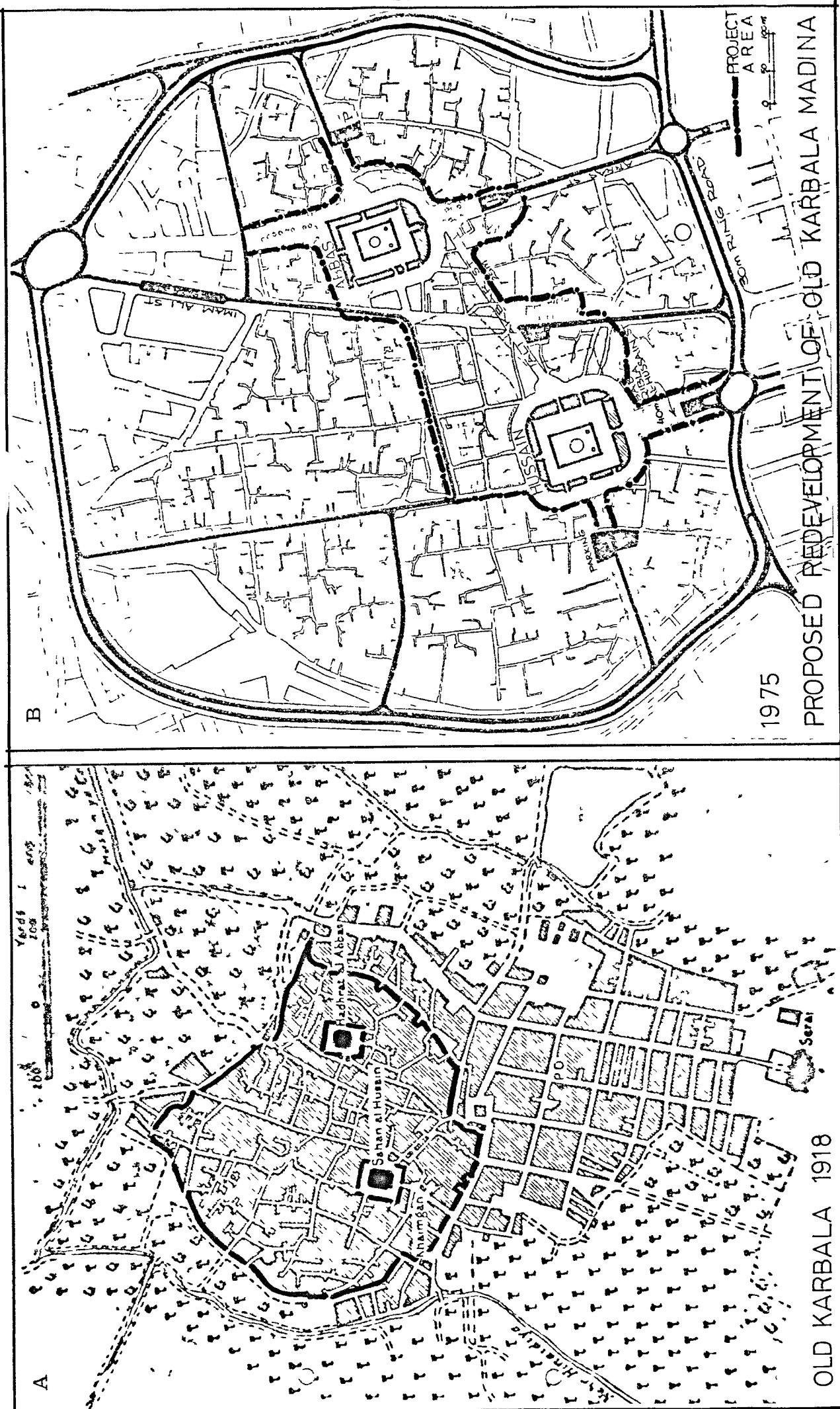


FIGURE 37 KARBALA IN 1918 AND ITS PROPOSED DEVELOPMENT IN 1975

Sources: A. British Naval Intelligence B. D. G. of Planning and Engineering, Baghdad

However, with the demolition of the walls in the 1920's the town quickly expanded in its southern direction and modern development was allowed to destroy much of its traditional historic fabric. As usual, the main cause of destruction was large-scale and ruthless new road and road-widening schemes. The physical and visual dominance of the two historic mosques of Hussain and Abbas was drastically reduced. The two mosques are now almost entirely surrounded by multi-storey commercial and office blocks. Overcrowding and poverty led to the acceleration of the decay and neglect of these historic areas. An average population density of about four hundred inhabitants per hectare has led the local authority to believe that the modernisation of the traditional area was the only way to solve this problem.

In 1956, Doxiadis Associates were asked by the Iraqi Government to study the problems facing this town and propose a master plan for its future development. It is not certain whether the brief, which was prepared by the Development Board, contained any reference to the protection of Karbala's heritage or not. It seems likely that it did not. However, the total absence of any proposals regarding this very important historic town on the part of the consultants was unjustifiable. In fact, not only did they ignore its architectural and historic heritage but, worse still, they strongly advocated the demolition of most of the core¹⁹:

"The existing conditions in the old part of the town where congested habitation, lack of sanitary facilities, dilapidated and very old houses, the resulting health conditions etc. , characterize it as one with the lowest standards in Iraq, a standard which cannot be uplifted by the implementation of any kind of amelioration activities without radical and expensive measures."

It really is very curious how these consultants failed to appreciate any architectural or historic value in the old town of Karbala. Perhaps conservation was not in vogue back in 1958, but surely this particular town with its obvious potential for pilgrimage and tourism, the richness of its religious and vernacular architecture, represented a special case for consideration. Perhaps this glaring failure was due to the fact that the planners did not even conduct a survey of the old town or any part of it.

The foreign planners misread the essence of the traditional urban core when they thought that it was too densely built-up. The town had to be compact because it was confined within the old walls, and the high residential density of the traditional layout was a logical solution to hot, dry climates. It provided the maximum of shade and protection from the fierce sun and the narrow alleyways were for pedestrians and not cars. All this may seem elementary, but it is quite surprising even today to find many planners wrongly interpreting the essential character of the Islamic town²⁰:

"These houses around the core of the city are compactly built in the form of a solid building mass, haphazardly criss-crossed by many narrow streets... very old houses and dilapidated houses which are built on very narrow streets, a lot of which are dead-end, or on very small plots, in many cases without a street frontage, result in very high densities... most roads are so narrow that they cannot serve any traffic other than pedestrian."

The consultants recommended that the entire old town should change its function and gradually become dedicated to religious functions only. Naturally, this very impractical proposition was not implemented, but it is fair to say that Doxiadis's plan was instrumental in the loss of a great many buildings of architectural or historic value.

By 1970, Karbala had been allowed to expand in so many directions that it led the Directorate to prepare a new master plan. This new plan provided for the protection of the old town but did not elaborate on its detailed conservation. In 1974, the Governor of the Muhafadha of Karbala approached the Directorate on the question of redeveloping the historic fabric between the two main mosques of Karbala. The main reason for this new proposal was not the protection of heritage but "to create a direct physical and visual bond between the two mosques". The real intention of the local authority was to demolish most of the buildings that lie between the mosques irrespective of their value. The Governor managed to muster central government support and was allocated the sum of seven million Dinars to implement this project.

This massive but basically unnecessary project was given to only one architect-planner working at the Directorate. In a 33-page report, he proposed three different alternatives for the redevelopment of the

prescribed area. This area covered some twenty-two hectares out of a total of nearly fifty-seven which represents the area of the whole old town²². Again, as was the case with Mosul, the study area represented only a part of the total old town (Figure 37). This partial approach is obviously contrary to the objectives of comprehensive planning and should, therefore, be avoided especially when historic areas are concerned. All three alternatives involved a considerable amount of demolition only some of which was perhaps justifiable. But the most serious defect of this project was the fact that it did not stipulate the preparation of a conservation survey for the historic area. The only survey that took place was a physical condition investigation which classified buildings as good, medium, fair, and bad. This is akin to the defunct Arbil conservation study, also based on a building condition and not a conservation survey.

It is utterly indefensible to carry out a major redevelopment programme on one of the most historic and architecturally interesting areas in Iraq without first having the detailed knowledge of what is involved. Karbala's historic core possesses some of Iraq's finest examples of vernacular architecture and the implementation of this proposal will inevitably result in the destruction of a considerable portion of the historic area.

In conclusion, the Directorate of Planning and Engineering is still beset by many serious, outdated and Westernised planning attitudes. It has not proved itself as an effective guardian over historic towns in Iraq. The existing urban planning legislation is hardly sufficient to deal with the scale and urgency of present problems. There is an immediate need to introduce new comprehensive urban planning legislation including specific references to the question of urban conservation of Iraq's historic towns. Historic areas should be surveyed, documented and declared 'Conservation Areas'. All modern development and demolition within these areas should be strictly controlled. The new legislation should also make it obligatory to co-ordinate such activities with other related government bodies such as the Directorate of Antiquities and Awqaf. Finally, legislation alone cannot be sufficient and, unless it is coupled with the determination of Iraqi planners, supported by public will, to protect their own heritage, it will have little or no effect.

5.4 Ministry of Awqaf

In Iraq and other Islamic countries, mosques, religious schools, and most other buildings of religious significance, are usually owned by the 'Awqaf' institution. According to the traditions of Islam, a 'waqf' property, be it movable or immovable, is perpetually of God, inalienable, not transferable, and any income from which is tied to the Awqaf as a charitable investment for the good of the community (Figure 38). Waqf endowment is probably unique to Islam and is said to have originated since the days of the Prophet or even earlier²³.

The increasing accumulation of waqf property had inevitably resulted in the development of detailed and comprehensive legislation to help administer its vast volume. Under the Abbasids, certain judges (Qudhat) were appointed for this purpose. The Ottomans consolidated the institution of the Awqaf by even more legislation, administered it from Istanbul with the local Wali acting as its effective head. The endowment was officially recognised in a hand-written legal document called 'Waqfiya', often elaborately inscribed with immaculate Arabic calligraphy. The waqfiya usually included, among other things, details about the original ownership and its date. Consequently, the availability of this document is obviously very helpful for the architectural historian and conservationist.

Today's organisation of Awqaf can be traced back to the days of the British occupation of Iraq in 1917-1918. The British created an Awqaf Secretariat in Baghdad and appointed Richard Coke, who had written two books on the history of Iraq, as a consultant director. He served from 1918 to 1930 and played an active role in the restoration of several important mosques and historic buildings in Iraq²⁴. In 1920, the Provisional National Government established the first Ministry of Awqaf²⁵ and, since then, there have been numerous administrative and legislative changes almost corresponding with every change of government. However, since 1970, the Awqaf has been directly linked to the Diwan of the Presidency of the Republic and is now an important Ministry in its own right.

A. Charitable (Khairi)

Endowed for charity such as mosques, schools, libraries, etc.

B. Hereditary (Thiri)

Usually estates held over for the descendants of those making the bequest. This type was dissolved in 1954 because it was used by the rich families to perpetuate their wealth and also to evade taxes (Law 28, 1954)

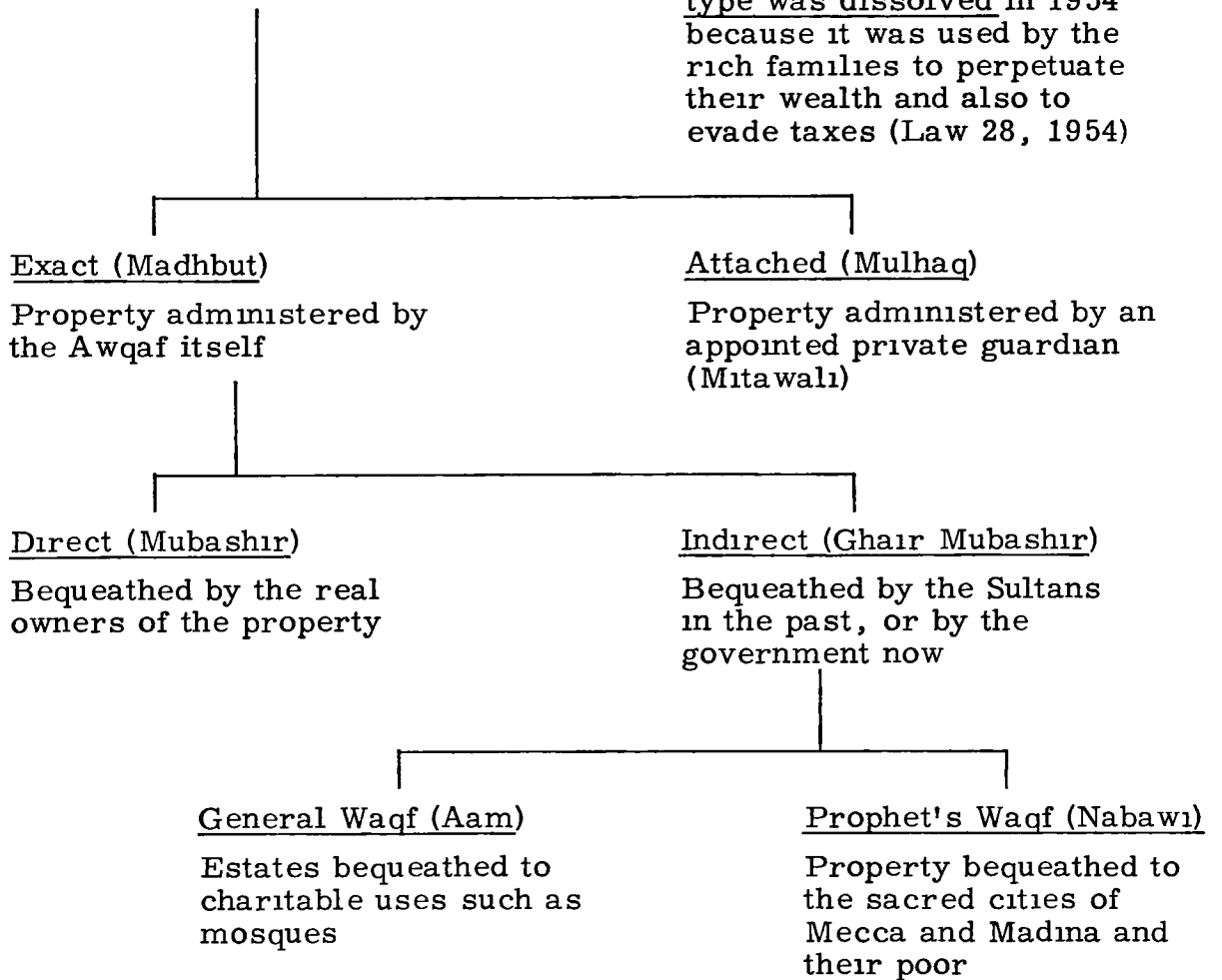


FIGURE 38 THE DIFFERENT TYPES OF WAQF PROPERTY IN IRAQ

Sources:

Kingdom of Iraq: Iraqi Directory, Baghdad 1936, p. 124
 Directorate of Awqaf: Nashrat al-Awqaf, Baghdad, 1958, pp 5-11
 Republic of Iraq: Iraqi Directory, Baghdad, 1960, p. 269
 Diwan al-Awqaf: The Awqaf in three years, Baghdad, 1974

The Awqaf today is a large organisation employing well over two thousand people of various skills and disciplines (Figure 39). Its real-estate wealth must run into hundreds of millions of Iraqi Dinars but exact figures are not available. It has been, since the early 1950's, very busy building up its stock of commercial and residential blocks. In Baghdad alone it was estimated in a United Nations report in 1971, that it owns more than ten thousand dwelling units²⁶. Its annual income has increased from about three hundred thousand in 1946 to well over two million Iraqi Dinars in 1976 (Table 24). Most of this income is spent on the construction of new apartment blocks and staff salaries. An examination of unpublished account records at the Awqaf, by the author, revealed that only about sixty thousand Dinars was spent on the maintenance of mosques (both modern and old) in Baghdad in 1975²⁷. This somewhat meagre sum represents less than three per cent of the total budget of Awqaf and clearly shows its scant regard for the protection of Islamic heritage.

One of the most serious defects in the existing Awqaf legislation is that they do not refer, in any way, to the vital question of protecting historic religious architecture. It has never been stated clearly, either in its laws or any other official Awqaf documents or guidelines, that it has a duty to maintain faithfully the historic and architectural authenticity of its buildings. In fact, the only reference to such issues is found in the Law of Antiquities (article 7) which reads as follows²⁸:

"Mosques, masjids, synagogues, churches, convents, monasteries, and other ancient buildings, owned or constituted in waqf, in the occupation of persons de facto or de jure whether registered in Tapu or being of proved ownership or waqf, either by legal deeds or by royal decrees, shall continue to be in the occupation of the owners or the guardian provided they are used for the purpose for which they have been built, subject to the supervision of the Antiquities Department from time to time. The owner or guardian thereof shall be responsible for carrying out any necessary preservation or repair work. Should the guardian or owner prove to be incapable of doing so, the Department of Antiquities shall carry out the necessary preservation or repairs, provided that the owner or guardian abandons his right of occupation to that Department."

This somewhat tough article has seldom been used by the Directorate of

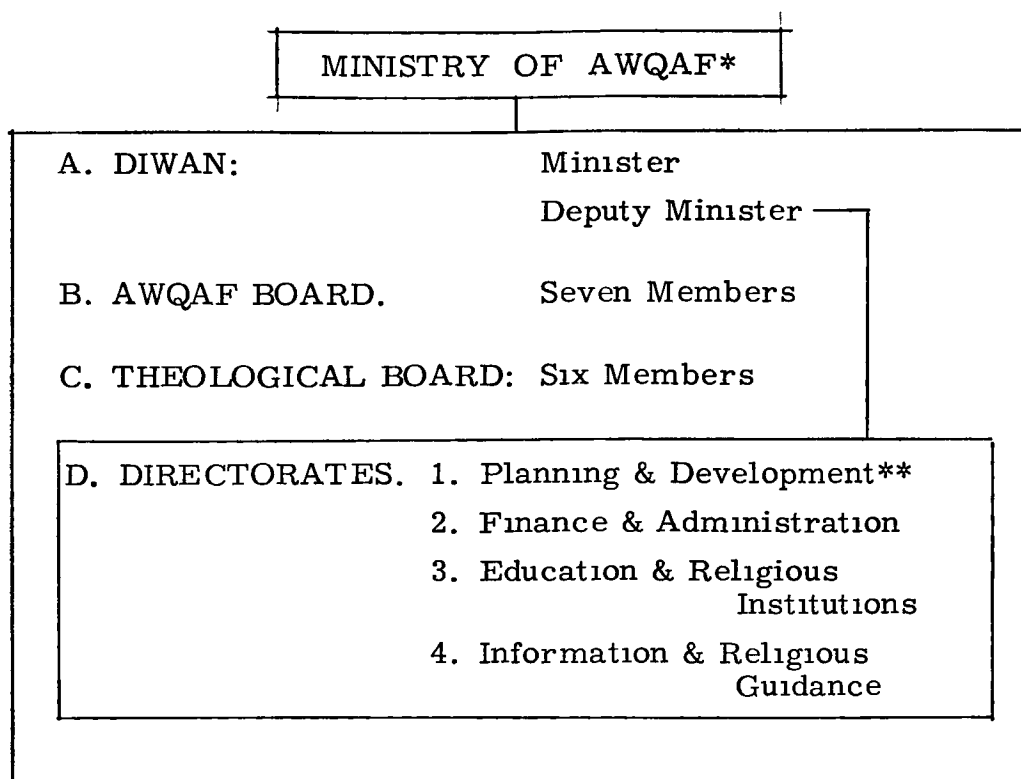


FIGURE 39 THE ADMINISTRATIVE STRUCTURE OF THE AWQAF MINISTRY (1977)

Sources: Law of Awqaf 78 of 1976
Official Gazette No. 2538 of 5.7.1976, Baghdad,
 Law of Budget of Awqaf No. 15 of 1976
Official Gazette No. 2513 of 9.2.1976, Baghdad,
 Data on number of employees in Baghdad was compiled
 by the author in Baghdad, December 1976

NOTES. *In 1976, the Ministry of Awqaf had some 2325 officials and employees in all Iraq. In Baghdad alone, it had 167 staff including 19 engineers, and 65 workers and daily employees.

**The details of the administrative structure of Awqaf are found in Regulation No. 8 of 1977. However, as far as maintenance and restoration of waqf property are concerned, this is the responsibility of the Engineering Section which consists of the following sub-sections: Design, projects outside Baghdad, projects in Baghdad; and maintenance.

Antiquities and, therefore, remains largely ineffective. The author's conservation survey of Baghdad had revealed that the majority of mosques, masjids, madrasas and tombs, are either very badly neglected and decayed by the Awqaf, not protected by the Antiquities under this article, or rebuilt entirely differently by the Awqaf. Numerous examples have already been given in the inventory of lost heritage which clearly shows that the Awqaf was the agent for demolishing many a fine mosque in Baghdad.

The reasons for this irresponsible disregard for Islamic architectural heritage by the Awqaf are varied. First, as is the case with other 'protective' agencies, it lacks the necessary skilled staff to carry out the required preservation or restoration of its vast wealth of fine buildings. The whole Ministry employs only nineteen engineers, none of whom is qualified or experienced in Islamic or general architectural preservation or restoration²⁹.

Second, the Ministry is far more preoccupied with its modern buildings - both commercial and residential - than the 'unprofitable' activity of conservation. This fact was clearly demonstrated by the demolition of Qaplanı Suq³⁰ and by the meagre amount of expenditure which is annually spent on restoration in comparison with its other activities. Third, its existing laws and regulations do not even mention the question of protecting the Islamic heritage. In fact, these laws do not apparently recognise the existence of such heritage. Fourth, reasons such as sheer ignorance, apathy, and even folly, must also be included here to explain this tragic but avoidable destruction by the Awqaf.

To illustrate the glaring inadequacy of this Ministry, some examples of serious defects are given. Since its establishment in 1918, the Awqaf has been in charge of administering and 'guarding' hundreds of mosques and other very important historic buildings in Iraq. Yet, in 1977, it has yet to prepare a documentative catalogue of such buildings. It does not possess even the simplest form of systematic documentation of these buildings, by photographs for example. It has not prepared a single proper measured drawing for any of its mosques since its foundation. Some mosques have 'files' but these sometimes include

TABLE 24 The Annual Revenue and Expenditure of the Ministry of Awqaf

Year	Revenue	Expenditure
1946	312,045	238,889 I. D.
1947	338,530	286,444
1948	386,745	401,102
1949	388,132	444,550
1950	400,146	348,451
1951	396,120	368,453
1952	425,781	350,935
1953	468,304	390,178
1954	434,672	423,812
1955	443,887	458,999
1956	408,412	415,424
1957	470,360	553,500
1958/9	599,010	?
1959/60	690,390	?
1976	2,173,000*	2,158,000

Source: Directorate of Awqaf: Bulletin of Awqaf, Baghdad, 1958, pp. 54-5, Iraqi Official Gazette No. 2513 issued on 9. 2. 1976

NOTE: *This figure includes the amount of I. D. 638,000 from the Ministry of Finance

only one basic sketch plan and hardly any other information that could be of use to a future restorer.

The vast Awqaf library, which boasts thousands of rare books and valuable manuscripts, contains only one book that refers to the mosques of Baghdad, written by Alusi in 1903 and not by the Awqaf. The total absence of any research into the important issue of the preservation and restoration of Islamic architecture in Iraq is very regrettable indeed. The Awqaf does not possess a restoration workshop equipped by a permanent team of skilled workers and restorers. Instead, most 'restoration' work is usually advertised as a tender and given to the lowest bidder. Moreover, this 'restoration' often means simply demolishing the old building and replacing it with a modern and entirely different one. Thus, many historic mosques and buildings, together with their authentic inscriptions, ornamentation, decoration, and also furnishings, have been irretrievably lost.

In conclusion, the Ministry of Awqaf is a very rich organisation with a very poor record. In its sixty years of official existence it has yet to show its concern for the protection of its vast heritage of religious architecture. There is an immediate need for the incorporation of the protection of heritage in its legislation. Restoring and maintaining the authenticity of its historic buildings should also be clearly and explicitly stated either in its Laws or regulations and treated as a top priority. Its good financial status gives it a rare opportunity to attract conservationists from Iraq as well as other countries in order to set up a specialist department in charge of its heritage. This department should be equipped with photogrammetric and other documentative apparatus to enable it to record its heritage accurately and speedily and keep a constantly updated inventory of its cultural property in Iraq.

There is a real need to create a specialist workshop for training young students and building workers in the skilled arts of Islamic architecture and restoration. The training should include theoretical as well as practical demonstrations of traditional building techniques, Islamic ornamentation, calligraphy, and 'kashani' tile glazing. This workshop should be augmented by recruiting the few surviving old master-masons

(Ustas) who are best suited to transfer their rapidly dying skills to young hands. This workshop could also be linked to a materials bank for storing old building materials and architectural elements for re-use instead of destroying them.

The creation of an Awqaf museum should also be contemplated. This museum should not only exhibit the available rare copies of the Quran and other superbly illuminated manuscripts, at present kept hidden in the library, but also any detached waqf property of historic or architectural interest such as wooden minbars, mihrabs, glazed tiles, carpets, and calligraphy.

Last, but not least, the Awqaf must be made aware of its tremendous cultural heritage and its responsibility for its protection. Co-ordination and co-operation with other official protective bodies is a prerequisite for a more effective and comprehensive approach towards conserving the cultural heritage of the nation.

5.5 Tourism Administration

This official agency is also subordinated to the Ministry of Information and is therefore administratively related to the Directorate of Antiquities. Tourism in Iraq is a relatively recent and small activity despite the long knowledge of the existence of numerous famous archaeological sites and monuments as well as large areas of outstanding natural and landscape interest. According to a consultative report on tourism in Iraq³¹, the average number of non-Iraqi tourists is about half a million per annum, of which Arabs account for nearly eighty per cent³². The report also showed that since 1965 the flow of tourists has been steadily increasing at an annual rate of four point five per cent, but concluded that the Administration has not yet fully exploited Iraq's potential for tourism.

In many countries, conservation is directly linked and planned with tourism, but it seems that this obvious relationship is not well recognised in Iraq. It should be noted that the Tourism Administration is not primarily concerned with conservation, it is neither legally bound to do so, nor has it the skilled staff to fulfil its share of protecting the nation's heritage. Its main concern lies in the provision of accommodation and information for tourists. However, in meeting these needs this agency has hitherto shown little sensitivity or care towards the heritage. Many important archaeological sites, historic towns and villages, have been harmed by sporadic and insensitive development including hotels, rest houses, restaurants and other social facilities designed in a modern idiom totally unsympathetic with their historic surroundings. Babylon and Ctesiphon are two tragic examples of this particular problem.

This agency must be made more aware of the fact that it is directly beneficial to tourism to provide accommodation by upgrading and restoring old buildings, to remove eyesores, and to clean up and enhance historic areas. The encouragement of tourism, especially cultural tourism, is a potent force which can help local communities to develop a pride in the distinctive qualities that attract other people to their area. This should not only help to invigorate the stagnant economy of many such areas but could also gather more public support for, and participation in, conservation.

5.6 Regional Centre for Conservation of Cultural Property in Arab States

In 1970, the general conference of Unesco adopted a resolution for the establishment in Baghdad of an Arab regional centre for the conservation of Arab heritage. The specific aims of this centre were stated as follows³³:

- "1. To train specialists and qualified persons in preservation of cultural property,
2. To carry out experiments and research with a view to finding solutions to problems of preservation of cultural property in all Arab countries, and,
3. To establish a large library and a modern technical laboratory."

The Centre, which was set up in 1972, is now administered by an independent governing board consisting of representatives from: the Iraqi Ministries of Information, Education, and Higher Education and Scientific Research, each Arab state that contributes to the Centre, Unesco; and any other international organisation that contributes to the Centre. The Iraqi government provided the premises, furniture, operating costs, and also promised to erect a new building for the Centre at a cost of 750,000 Dinars³⁴, and to pay for all Iraqi staff and trainees. In turn, Unesco agreed to provide experts and technical assistance, scientific equipment and textbooks, and offered ten grants for students from member states.

The Centre has organised several courses since its foundation and trainees came from various Arab countries. Lectures were given by a number of well-known conservationists in Europe, and included 'The role of architects in the conservation of monuments and sites' and practical visits and demonstrations. However, in its five years of existence, the Centre has yet to recruit on a permanent basis even one conservationist. In an interview with its Director³⁵, the author was told of the desperate need to recruit skilled and experienced staff and of the need for photogrammetric equipment. Because of the lack of architect or planner-conservationists, the emphasis so far has been largely on preserving movable cultural property, notably manuscripts. Very little has been, or is being, done to document or study immovable cultural property. It is legitimate to conclude that, perhaps with the exception of Iraq, the Centre has not yet received the whole-hearted support of other Arab states.

5.7 Educational Institutions

Educational institutions can and should play an important role in protecting the national heritage and propagating the ideas of conservation. Universities, which are usually equipped with large libraries and technical laboratories, are perhaps especially suited to give courses and research in conservation. However, only a few universities in the world offer such specific studies, and the majority offer studies that are closely related to conservation such as archaeology, architecture and planning.

The College of Arts in Baghdad offers degrees and postgraduate research in history and archaeology. Historical studies tend to be mostly related to historic developments and specific events or characters and do not include architectural history. The courses of the Archaeology Department are generally more concerned with the specific technical aspects of ancient archaeology, such as excavation and preservation of sites. Very little is taught on the important field of urban archaeology and a development in this direction is needed. Postgraduate research in this College is similarly unconcerned with conservation or its closely related topics. Out of the several hundreds of Master's thesis submitted here only four were on architectural history and two on urban history³⁶.

The School of Architecture (of the Engineering College) is another important institution which can play a key role in popularising conservation amongst architectural students. Here, restoration of historic buildings is not taught and conservation remains absent from the syllabus. Moreover, although architectural history is included there is relatively little emphasis on local and traditional architectural history or techniques. In this connection, Hassan Fathi, the internationally-known Egyptian architect, rightly accuses Arab universities of neglecting the good lessons to be taken from traditional architecture³⁷:

"Arab architecture is completely ignored in the curricula of design and theory of architecture and often considered to be 'exotic' in general histories of the subject. The result is continued, widespread examples of the most inappropriate designs - witnessed in almost all cities of the Near East, such as Cairo and Baghdad - while the traditional buildings are being mercilessly demolished."

One very good project, sadly discontinued a few years ago, was that architectural students were obliged to prepare detailed measured drawings of local buildings of cultural interest. These drawings are now badly kept at the library and an appreciable number of them has either been looted or damaged by bad storage. The author was allowed to photograph most of them in 1975 and, since then, many have been destroyed or lost when the library was moved to a new building.

The lack of co-ordination between the various protective agencies has led to a wasteful fragmentation and duplication of their efforts to record the heritage. For example, the historic Haidarkhana Mosque in Baghdad has been independently measured and drawn by a student, by a surveyor for the Awqaf, by another surveyor for the Directorate of Antiquities, and by an Italian team of conservationists. This is an awful waste of human effort and, in view of the scarcity of measured drawings, these efforts could have been directed towards recording other unmeasured buildings. It should be borne in mind that because of the intricate and ornate nature of most Islamic buildings, it is often difficult and time-consuming to prepare accurate measured drawings. It is also important, therefore, to employ photogrammetric techniques so that the finer details are faithfully and speedily recorded.

The Centre for Urban and Regional Planning (of the Engineering College) was set up - with the help of Sheffield University Department of Town and Regional Planning - in 1972 to offer graduates a two-year 'High Diploma' course on planning. However, since its foundation, the Centre has had an uncertain future. This is being caused mainly by the, perhaps unreasonable, refusal of Baghdad University to recognise the Diploma as a Master's degree, which would have made it more attractive to Iraqi applicants. The present syllabus does not include conservation as a subject in its own right and despite this defect it is encouraging to find three theses on conservation in Iraq. This suggests the popularity of conservation amongst students and it would be positively beneficial to introduce it as a full subject. Other measures could include collective student projects on conservation and the preparation of studies of certain historic areas in the country. This Centre could also co-operate with the Unesco Conservation Centre in Baghdad and organise joint seminars, lectures and field studies.

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23. Abd al-Razaq al-FAYADH,
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24. Jaafar al-KHAYAT,
Iraq's Modern History (Arabic), Beirut, 1971, p. 304
25. FAYADH, Awqaf, p. 8
26. United Nations Educational and Social Office in Beirut,
Urban Land Policies and Land Use Control Measures in
the Middle East, Beirut, 1971, p. 2
27. Figure was obtained by examining the special register which
contains maintenance expenditure on mosques in Baghdad for 1975.
28. Directorate General of Antiquities,
Law of Antiquities, p. 4
29. This figure was obtained by the author from the Personnel Section
of the Awqaf in 1976.

30. Refer to the inventory of lost heritage in Chapter IV under Qaplanı Mosque in Rusafa.
31. Omnium Technique de L'Urbanism (Paris), National Tourism Development Plan, Paris, 1974, part 7, p. 41, p. 51
32. Ibid.
33. Regional Centre for the Conservation of Cultural Property in Arab States, a pamphlet on its work, Baghdad, 1975, pp. 10-11.
34. Ibid.
35. Dr. Adil NAJI, was interviewed by the author in 1975 and 1976
36. These figures were found from library by author in 1976
37. Hassan FATHI,
Constancy, Transposition and Change in the Arab City,
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PART II

B A G H D A D

- Chapter VI Baghdad: Its History and Morphological Evolution
- Chapter VII Baghdad Today: Its Historic Cores and Planning
- Chapter VIII The Conservation Survey and Inventory of Cultural
Heritage

CHAPTER VI

BAGHDAD: ITS HISTORY AND MORPHOLOGICAL EVOLUTION

6.1 Introduction

A general review of the morphological evolution and development is essential for the understanding and appreciation of the existing heritage of Baghdad. It therefore follows that systematic and effective conservation policies cannot easily be formulated nor can protective measures be taken without a basic knowledge of the historic perspective of the City and of the relevant documents and literature. Baghdad's history can be divided into the following distinct periods:

1. Early Abbasid (762-946)
2. Buwaihid (946-1055), Persian influence on Caliphate
3. Seljuqid (1055-1152), Turkish influence on Caliphate
4. Late Abbasid (1152-1258)
5. Ilkhanid (1258-1338), Mongolian occupation
6. Jalairid (1338-1411)
7. Turkoman (1411-1468-1508), Black Sheep and White Sheep Dynasties consecutively
8. Safavid (Persian). 1st Stage: 1508-1523
2nd Stage: 1529-1534
3rd Stage: 1622-1638
9. Ottoman (Turkish) 1st Stage: 1534-1622
2nd Stage: 1638-1917
10. British Mandate (1917-1932)

Baghdad has had a long and disturbed history with much building at times of eminence but great destruction in between, due to frequent floods, fires, and devastation by conquerors but recently by the work of developers. Whereas the earlier historical periods are scarcely documented and from which very little evidence remains today, the later periods, especially since the eighteenth century, are reasonably well-known and documented and from them numerous books, travellers' accounts, maps, and buildings survive (Tables 25-27) (Figures 43 to 50).

6.2 Historical Background

Available archaeological evidence suggests that the site of Baghdad was occupied by various settlements long before the Arab conquest of Mesopotamia. The famous 'Michaux Stone', found by a French physician living in Baghdad in 1780, referred to a Babylonian city named 'Bak-da-du' in the twelfth century BC¹. A legal document of Hammurabi's time (1800 BC) and other Assyrian inscriptions also refer to the same city².

The region of Baghdad, located within the narrowest strip between the Tigris and Euphrates Rivers, was amongst the most fertile in the Near East. Its strategic location commanded several important trade routes as well as numerous navigable water canals. Other considerations, such as climatic, political and economic factors, were recognised by the Arab Abbasids who chose it for the site of their new capital.

The second Abbasid Caliph, al-Mansur (762-775), began to build his famous Round City (also known as 'Madinat al-Salam' or City of Peace) in AH 145/AD 762. The city, which took some four years to complete, was built on the west side of the Tigris between present-day Kadhimiya and north of Karkh. So much has been written about it that it will suffice here to describe its general form only. It consisted of three concentric functional zones separated by three defensive walls and intervallums (Fasils), and crossed by four roads radiating from the Caliph's Palace and Mosque at the centre. The space between the inner wall and middle wall was allocated for residential use and was divided into four equal quadrants by vaulted markets (Suqs) which spanned the full distance between these two walls. Security and tribal hierarchy were so important that the residential quarters were apparently allocated by Mansur himself on a strict and segregated tribal basis (Figure 40).

The circular form of Baghdad was a remarkable example of town planning but not an Arab innovation as was suggested by some contemporary writers. Circular cities, such as Hatra, Uruk and Madain, were not unfamiliar in the Near East and could have influenced the architects of

مَدِينَةُ الْمَنْصُورِ الْمَدَوَّرَةُ

تقديمه الدكتور صلاح مواد والدكتور احمد سرور

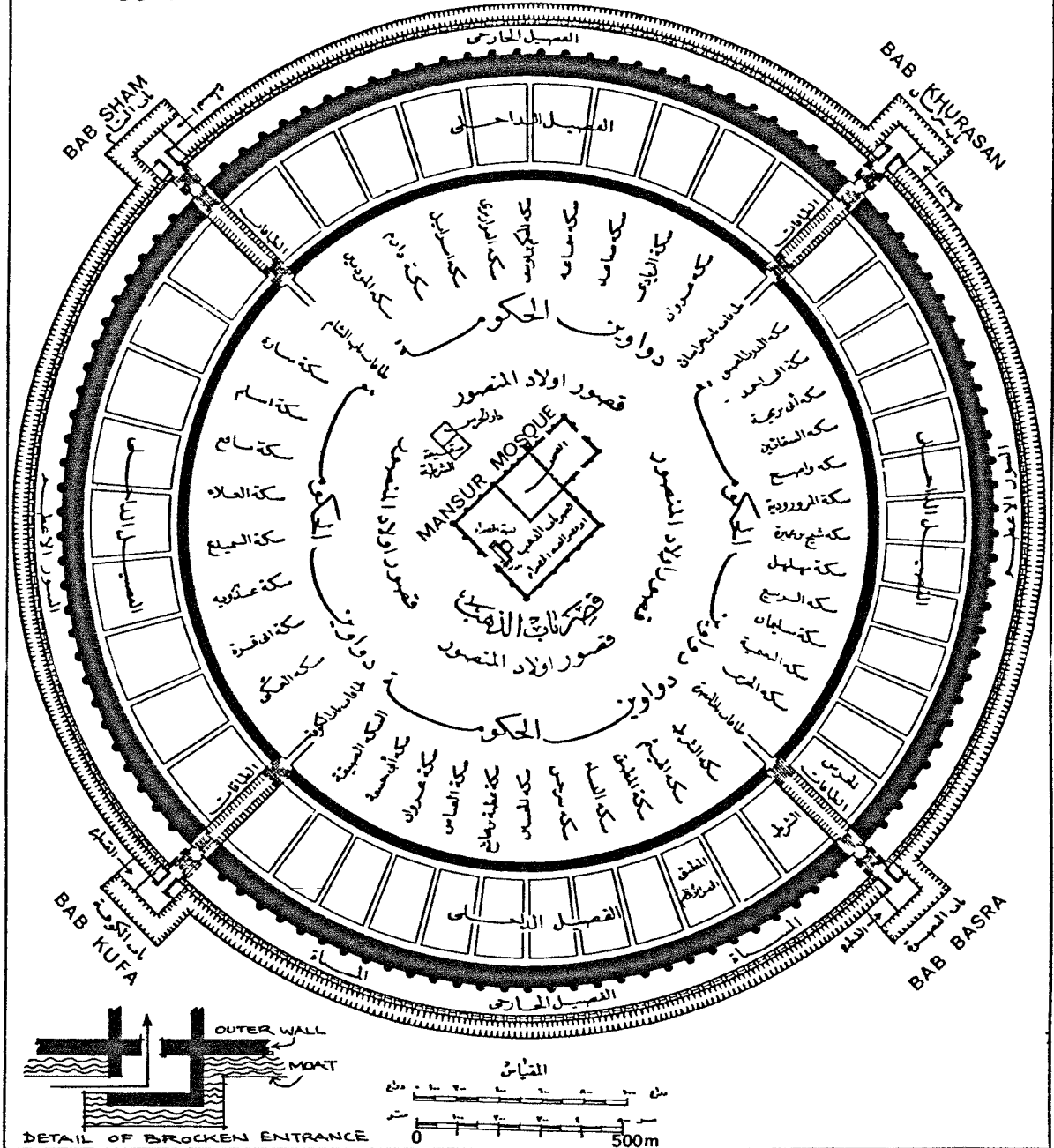


FIGURE 40 THE ROUND CITY OF BAGHDAD

Source: Jawad and Susa

Mansur³. However, an interesting innovation was the L-shaped or 'broken' entrances of the four gateways of the city. These entrances had been deliberately so designed as to force the attacker to turn his direction to the left, thereby exposing his normally unprotected right side to the defenders. It is of interest to note that this device was also used in domestic buildings to provide privacy until the 1920's when it was discarded in favour of a straight type of entrance.

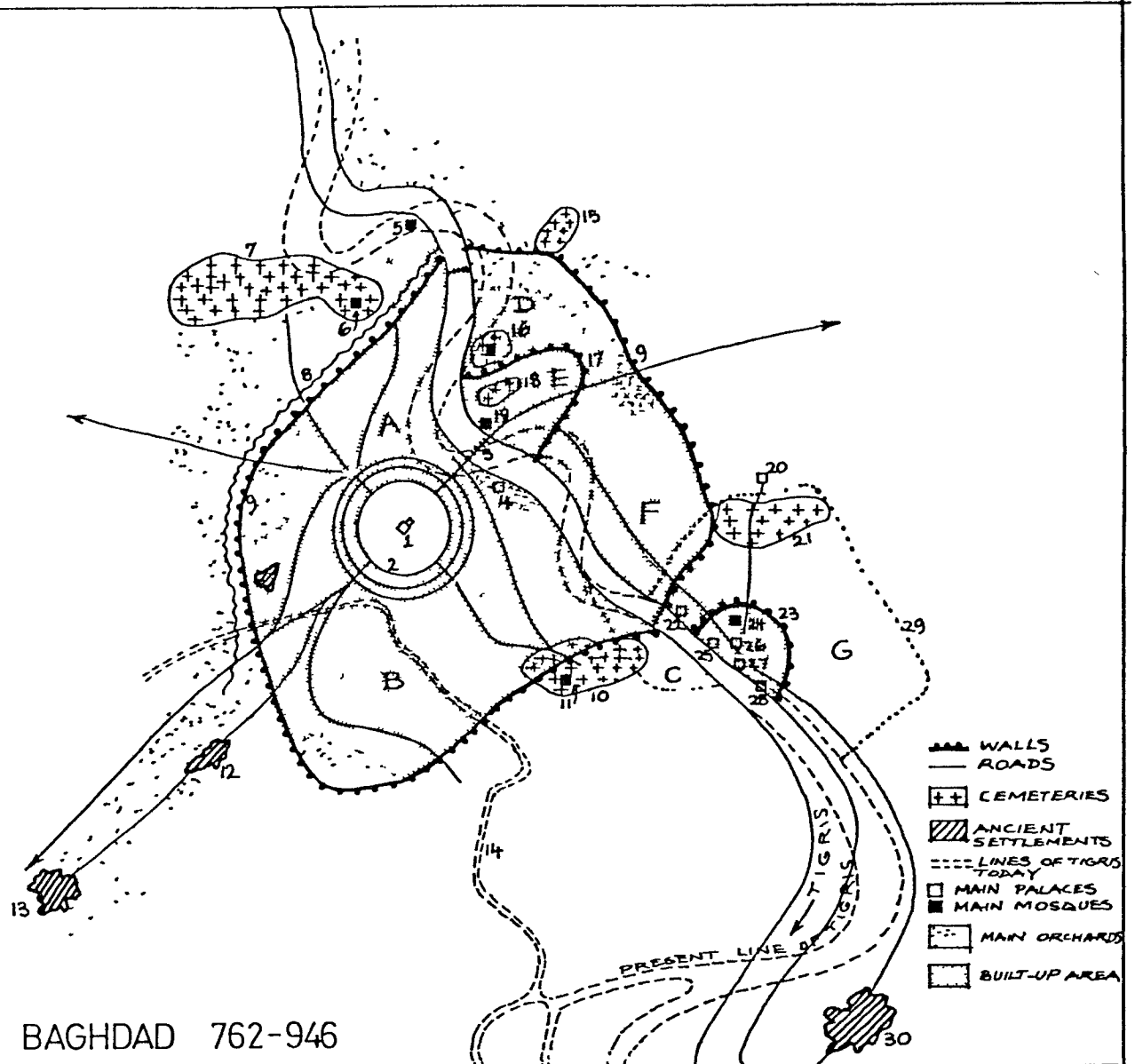
The limited capacity⁴ of the Round City to accommodate future growth inevitably resulted in gradual but vast extramural expansion. This expansion first developed southwards but soon spread to the other side of the Tigris. In 768, Mahdi, the son of Mansur, was given a large area on the east side of the river to lodge his large army. This essentially tactical move by the Caliph was to have a lasting morphological influence on later Baghdad. The new military settlement, which was called Rusafa (not to be confused with today's historic core of Rusafa), was located opposite the Round City and near the important shrine of Abu Hanifa. By AD 946, the seat of the Abbasid government and centre of gravity had shifted from the west side to the east side - a fact which still persists today. Several surviving tomb-mosques and cemeteries help urban historians to trace the spatial dimensions and functional patterns of the city during this early period. These include:

Tomb-Mosque of Kadhımain (Quraish Cemetery)

Tomb-Mosques of Maaruf, Junaid and Hallaj (Shonaziya Cemetery)

Tomb-Mosque of Aadham (Khaizaran Cemetery)

The climax of Baghdad's history and material wealth was reached during the reign of Harun al-Rashid (786-809) and his immediate successors. During this phase, the eastern side extended from Shamasıya (now Silaikh) to the southern boundary of Mukharrım (Figure 41). The western side of the city grew in all directions but mainly south and southwest and almost reached as far as al-Muhawal settlement. During the early Abbasid period (762-946), Baghdad became one of the most important capitals of the East and its intellectual functions were actively supported by the Caliphs. The celebrated University of Bait al-Hikma was widely renowned as a centre for science and knowledge.



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| 20 AL-THURAIYA PALACE | |

FIGURE 41 BAGHDAD BETWEEN AD 762 AND 946

Sources: Jawad and Susa, Le Strange, Lassner

Important works such as those by Herodotus, Ptolemy, Pliny and Strabo, were translated into Arabic and later rediscovered by Medieval Europe⁵.

The short-lived transfer of the Caliphate to Samarra by Mutasim, which lasted for only fifty-six years (836-892), signalled the decay of Baghdad. Because of Samarra's existing monuments and sites, urban historians have been able to gain useful insights into Abbasid architecture and planning, especially when no similar evidence exists in Baghdad from this early period. When Mutamid returned from Samarra to Baghdad in 892 he chose to live on the eastern side and the western side was allowed to diminish in size and significance.

During this unstable phase, Mustain (865-866) fortified both sides of the city by semi-circular walls but these seem to have been destroyed by floods in the early decades of the tenth century. The eastern side of the city included, inter alia, the pre-Islamic Tuesday Market (Suq al-Thalatha) whose linear feature can still be traced in today's commercial centre of Rusafa, and numerous outstanding Palaces such as Taj, Firdaws, Barmaki, and Hasani. Most of these important Palaces as well as other buildings were later surrounded by a semi-circular wall and the enclosed area became known as Dar al-Khilafa (Royal Precinct). The surviving minaret of the Mosque of the Caliphs, though rebuilt several times, gives direct physical evidence of the existence and site of this royal complex. (Figure 41)

The Buwaihid period, which lasted for about one hundred and ten years (946-1055), was characterised by general unrest and weak government. The city shifted gradually southwards and settled, much reduced in size, roughly where modern Rusafa and Karkh are today. Floods destroyed the Round City and the Walls of Mustain, while famines drastically reduced the population⁶. However, several important buildings were built by the Persian Buwaihids during this period. These included several hospitals (Maristans) such as al-Adhdi; palaces such as the Maaziya, built in 961 at Shamasiya, Munis al-Mudhafar Palace in Suq al-Thalatha, and the Buwaihid Palace in Mukharrim near today's Sarrafiya⁷.

The Turkish Seljuqs who ruled Iraq for another century (1055-1152) exerted a more lasting morphological influence on the city than their predecessors. To this day, the existing form, function and spatial distribution of the old city can be easily traced in Rusafa. The most important physical feature, the defensive wall which surrounded the eastern side, can now be identified by following the road pattern of its outer areas. The wall continued to provide protection against floods as well as attacks for more than eight centuries but was unfortunately demolished by Midhat Pasha in 1869. The wall is generally attributed to the reign of Caliph Mustadhkir who built it between 1095 and 1118. During this Seljuqid period, the extramural quarters of Shamasīya (Older Rusafa) and Mukharrim seem to have been abandoned and then probably withered away or demolished. Three bridges, constructed of boats, spanned the Tigris at its narrowest width. The bridges, two of which were known as the Thalatha Suq and Bab al-Qarya were later replaced by a single one moored to a location that was, more or less, continuously maintained until its replacement by a modern iron bridge in 1941⁸. The outstanding buildings of this period included⁹.

Nidhamīya Madrasa, built in 1066 and located in Thalatha Suq. It lasted until the mid fifteenth century.

Sultan Mosque, built in 1092 and located in today's Alwadhiya

Abu Hanifa Madrasa, built in 1966 and still exists though in a different and modern fabric

Muafaqiya Madras, later replaced by the existing Sarai Buildings

Tutushiya Madrasa, later replaced by Wazir Mosque.

The Abbasids soon recovered their power from foreign domination and lasted for another century (1152-1258) which has been called the Abbasid Renaissance. The famous Arab traveller, Ibn Jubair, visited Baghdad in 1184 and his account helps to reconstruct some of its physical aspects¹⁰. He wrote that in spite of the ruinous state of the walled western side of Baghdad it still had seventeen self-contained mahallas, each of which possessed its own hammams, suqs and mosques. He also saw the Mansur's Mosque of the Round City, the Aadhdī Hospital, and the Tombs of Karkhī and Kadhīmān. According to Jubair, the eastern side had four gateways, over thirty madrasas, three friday-mosques and many tombs including those of Abu Hanifa and of the Caliphs¹¹.

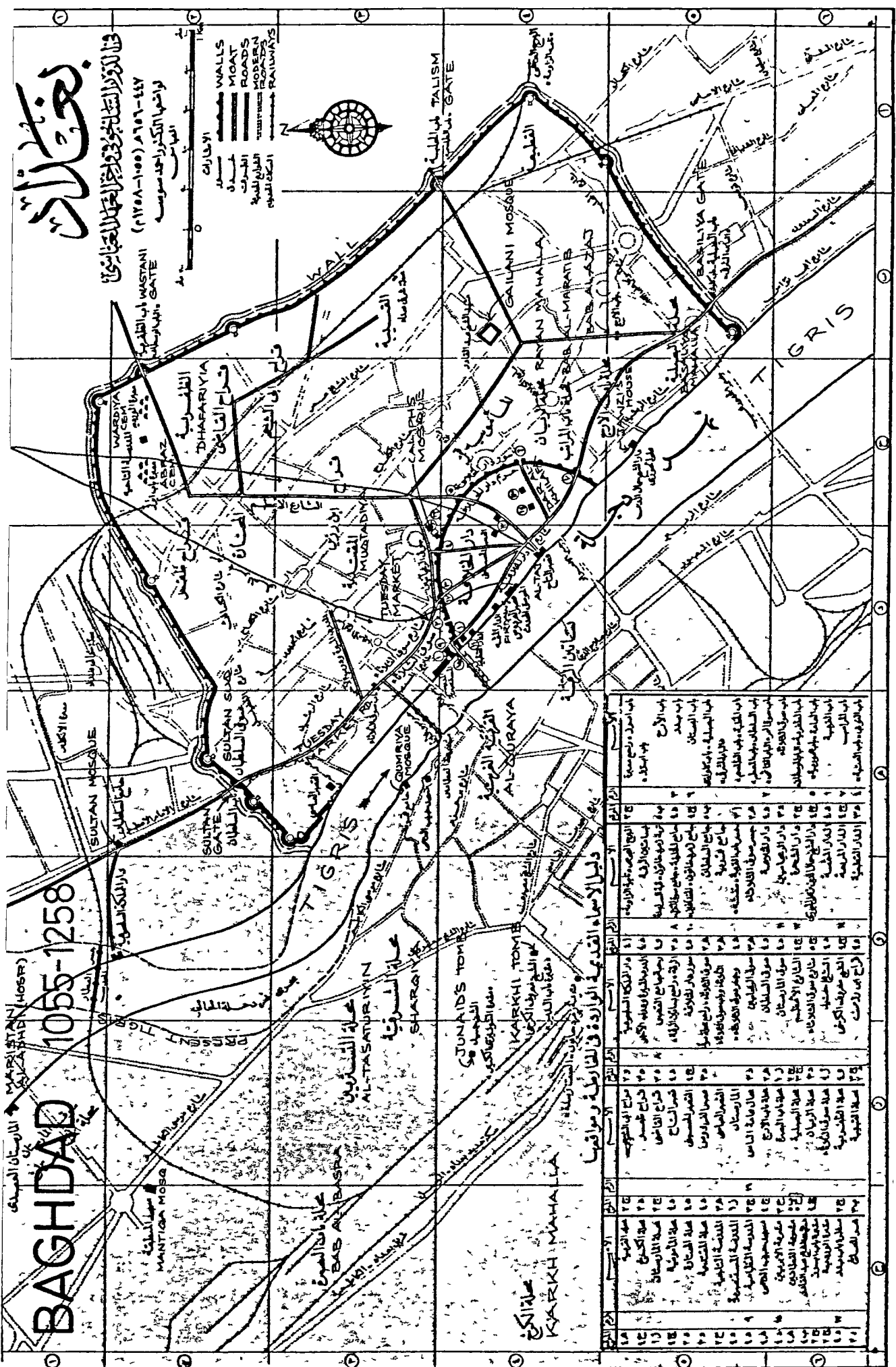


FIGURE 42 BAGHDAD DURING THE SELJUQID PERIOD 1055-1258

Source: Susa

During the last decades of this period, the city was seriously damaged by fires and floods, the worst of which was the flood that occurred in 1217¹². Despite this devastation, several buildings and monuments exist today to witness the magnificent architectural achievement of the Late Abbasid period. (Figure 42) These include:

- Khafafin Mosque (Minaret), built in 1202 (Inventory No. 49)
- Zumarrad Khatun Tomb, built in 1202 (No. 410)
- Karkhi Tomb-Mosque (Minaret), built in 1215 (No. 411)
- Abbasid Palace/Sharabiya Madrasa, built in c. 1226 (No. 1)
- Qumriya Mosque, built in 1228 (No. 467)
- Mustansiriya Madrasa, built in 1234 (No. 40)
- Sahrawardi Tomb, built in 1234 (No. 372)

Baghdad was captured and sacked by the Mongols in 1258. Led by the fearful Hulago, they devastated a considerable part of its eastern side and put to death as many as eight hundred thousand or more of its population¹³. The Ilkhanid period that followed this destruction lasted for some eighty years (1258-1338) and was marked by strife and religious sectarianism. There are three known contemporary accounts describing the city during this period, the most interesting and famous of which is that of Ibn Battuta in 1327¹⁴. Among other things, he mentioned that the western side had thirteen mahallas, he also saw Mansur's Mosque, the now ruined Aadhdı Hospital, and the Tombs of Karkhi, Junaid, Sıqtı and Kadhımain. He described the eastern side and mentioned the Thalatha Suq, Nıdhamiya and Mustansiriya Madrasas, and the Mosques of the Calıphs, Rusafa and Abu Hanifa.

The overall pattern and function of Baghdad seems to have survived the serious blow by the Mongols who, after their adoption of Islam, repaired some of their damage and built new mosques, madrasas and khans¹⁵. During this period, the settlements of Aadhamiya and Kadhımiya became more or less separate townships and continued to be so until the 1930's. Two buildings survive from this period:

- Calıphs Mosque (Minaret), rebuilt in 1289 (No. 311)
- Aqulı Mosque and Madrasa, built around 1328 (No. 136)

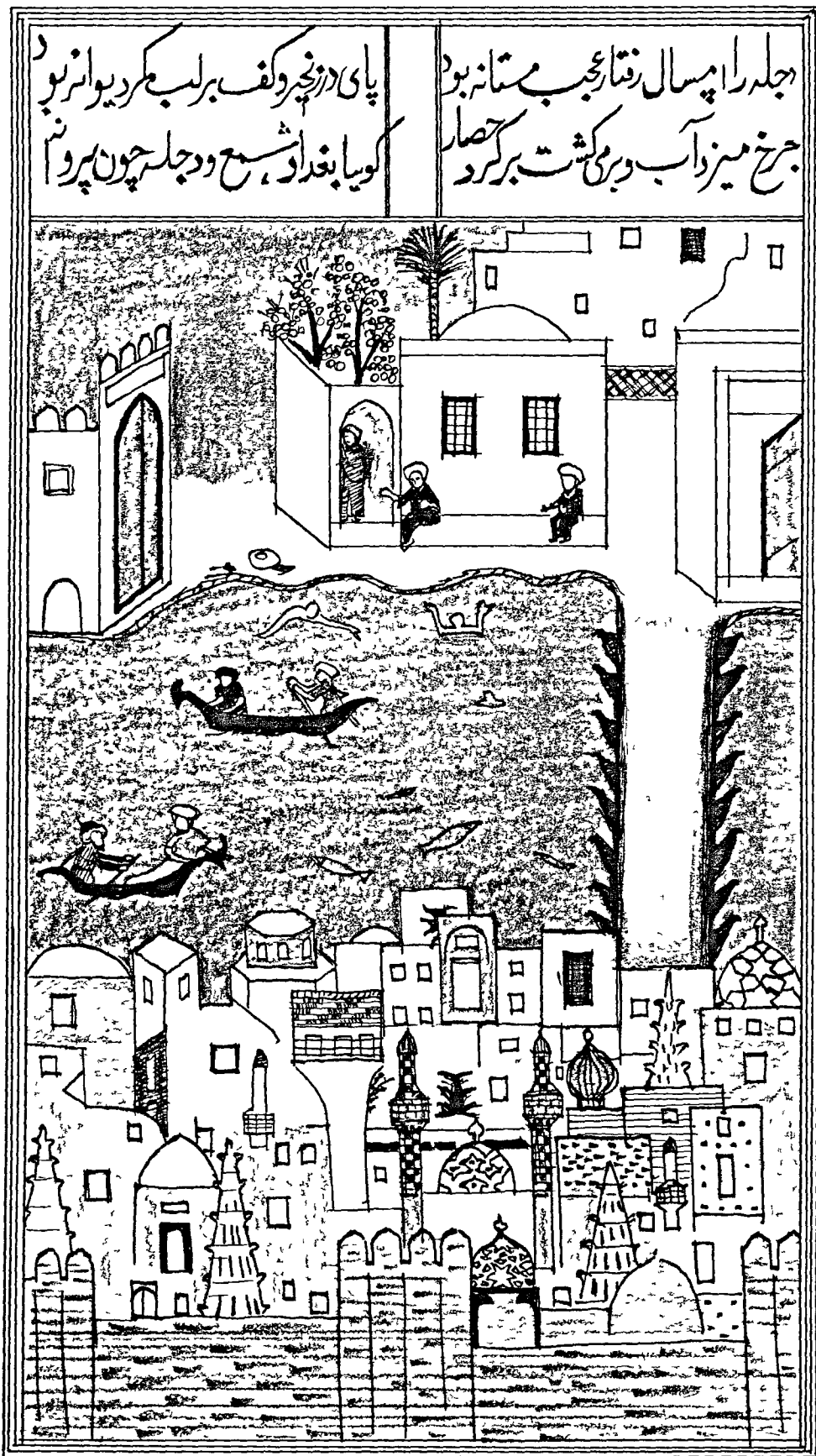


FIGURE 43 BAGHDAD DURING THE FLOOD OF 1374 BY AN UNKNOWN PERSIAN ARTIST

Source: British Museum (enlarged and redrawn by Author)

The Jalairid period, which lasted for seventy-three years (1338-1411), was also marked by a disruption and decline of the city's social and political life. It was twice sacked by the Mongol Timur the Lame in 1393 and 1401 and many of its fine public buildings were destroyed¹⁶. Although the Jalairid influence on the city's physical development was largely insignificant several buildings survive today which indicate the sophistication of the local architecture of this period. These include.

Mirjaniya Madrasa/Mosque, built in 1356 (No. 159)

Mirjan Khan, built in 1359 (No. 65)

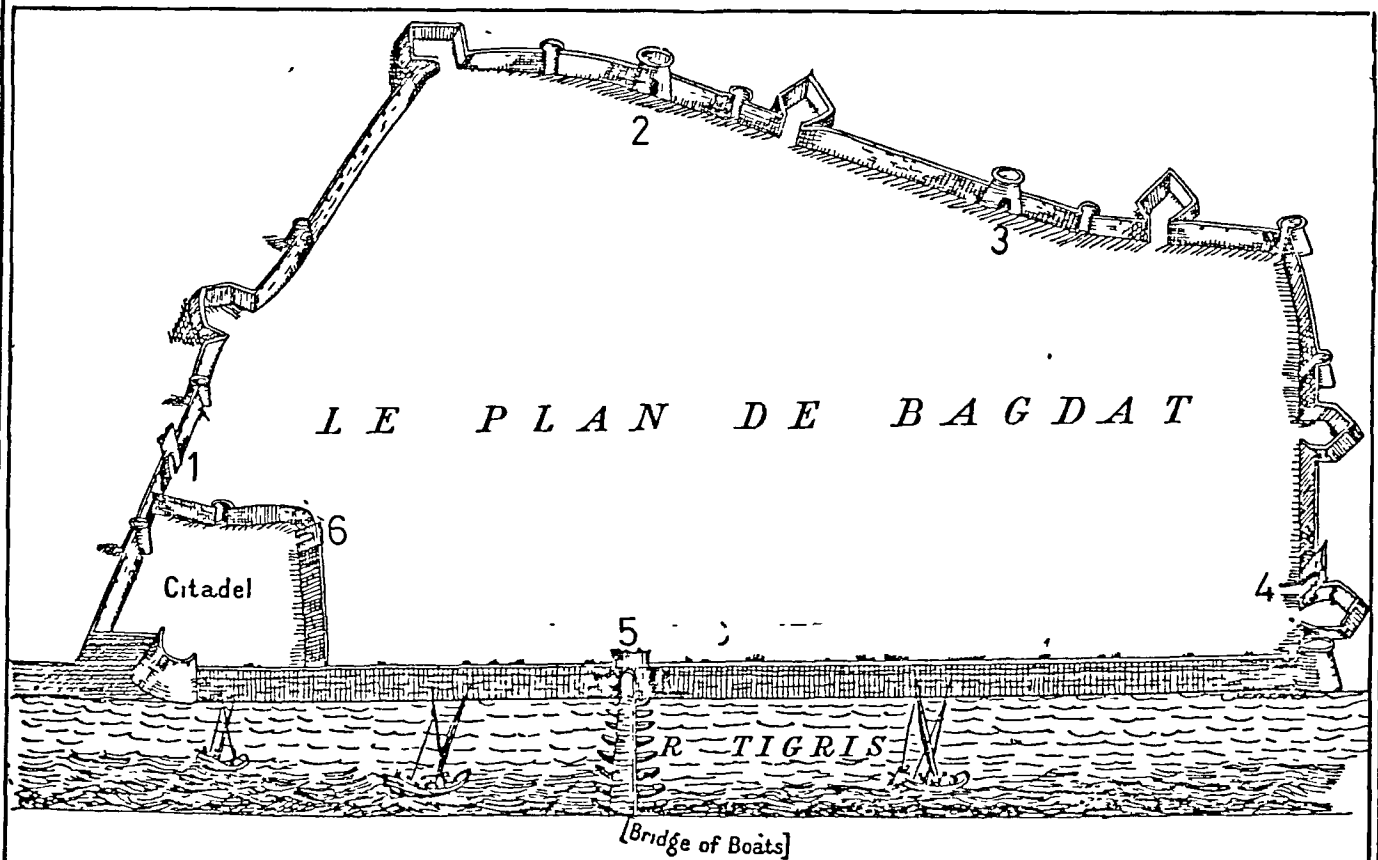
The earliest pictorial representation of the city that has been found so far is an illuminated illustration by a Persian artist depicting Baghdad during the flood of 1374 and shows the Bridge of Boats and numerous buildings and mosques most of which are unidentifiable today (Figure 43).

From 1411 to 1508 Baghdad was ruled by the Turkoman so-called Black Sheep and White Sheep dynasties consecutively. During this period, the city seems to have suffered considerable decay and stagnation. This was reported by Maqrizi¹⁷, who under the year 841/1437, wrote that

"Baghdad is ruined, there is no mosque or congregation, and no market. Its canals are mostly dry and it could hardly be called a city."

It again suffered more destruction by the Persian Safavids who occupied the city on three different occasions during their bitter struggle with the Ottomans from 1508 to 1638. Important Sunni tomb-mosques were burnt down, including those of Abu Hanifa and Gailani¹⁸. Several European travellers visited Baghdad during this period and their accounts give a glimpse of its description and social conditions (Table 27). The earliest detailed account of the city by a European was given in 1574 by Dr. Leonhart Rauwolf, a famous Dutch physician and botanist¹⁹.

Another account was written by Pietro della Valle who visited Baghdad in 1616²⁰. Tavernier visited the city in 1632 and again in 1651, and he was the first to point out to Europe the mistake of referring to Baghdad as Babylon²¹. His description, which was accompanied by a generalised map of the walls of the eastern side (Figure 44), included the following²²:



Plan of Baghdād by Tavernier

Gates of Baghdad

1. Bab Sultan (also Muadham)
2. Bab Dhafariya (also Wastani)
3. Bab Talism
4. Bab Basaliya (also Kilwatha and al-Sharqī)
5. Bab Jīsir
6. Bab Qala'a in Mīdan

FIGURE 44 TAVERNIER'S MAP OF BAGHDAD IN 1632

Source: Budge, By Nile and Tigris

"The town is 1500 paces in length, and 700 or 800 in breadth, with a circuit of three miles. The walls are of brick, and are provided with great towers, on which are sixty cannon, the ditch is five or six toises deep (1 toise is about 64 feet). The town has four gates, three on the land side and one on the river, the bridge of boats, thirty-three in number. There are five mosques and ten khans, or public guest-houses. The population is about 15,000 souls..."

Another pictorial map of Baghdad was prepared by Mitraqı who accompanied the Ottoman Sultan, Sulaiman the Magnificent, during his military campaign against the Safavids in 1534²³. This illustration is important because it shows clearly the general layout of both sides of the city, and some of the buildings shown in it are now identifiable (Figure 45). It shows the eastern walls with their four gates (Bab al-Talıs is not shown for an unknown reason), the citadel on the north-western corner of the eastern side, the bridge of boats, and many conically-domed mosques including those of Gailanı, Sahrawardı, Zumarrad Khatun, and the mosques of Sultan and Karkhı. Several important monuments and buildings survive from this period, including the following:

Kadhıman Tomb-Mosque, built in 1534 (No. 577)

Gailanı Tomb-Mosque (Dome), built in 1534 (No. 355)

Abu Yousıf Tomb-Mosque, built in 1535 (No. 479)

Zurur Khan, built in 1534 and now in a very neglected state (No. 59)

Muradıya Mosque, built in 1566 (No. 107)

Wazır Mosque, built in 1600 but rebuilt several times (No. 12)

During the long Ottoman rule, which lasted for nearly three centuries (1638-1917), Baghdad continued to lose its former status as an important capital but essentially maintained its overall morphology and social structure. Ethnic conflicts and religious sectarianism intensified and both were reflected spatially on the identity and distribution of residential mahallas. The Turks, who represented the ruling class and were of the Sunnı Muslim sect, lived mainly in the northern parts of the eastern side of the city because of their proximity to the military citadel and centre of power, e. g. , Haidarkhana, Barudıya and Maidan.

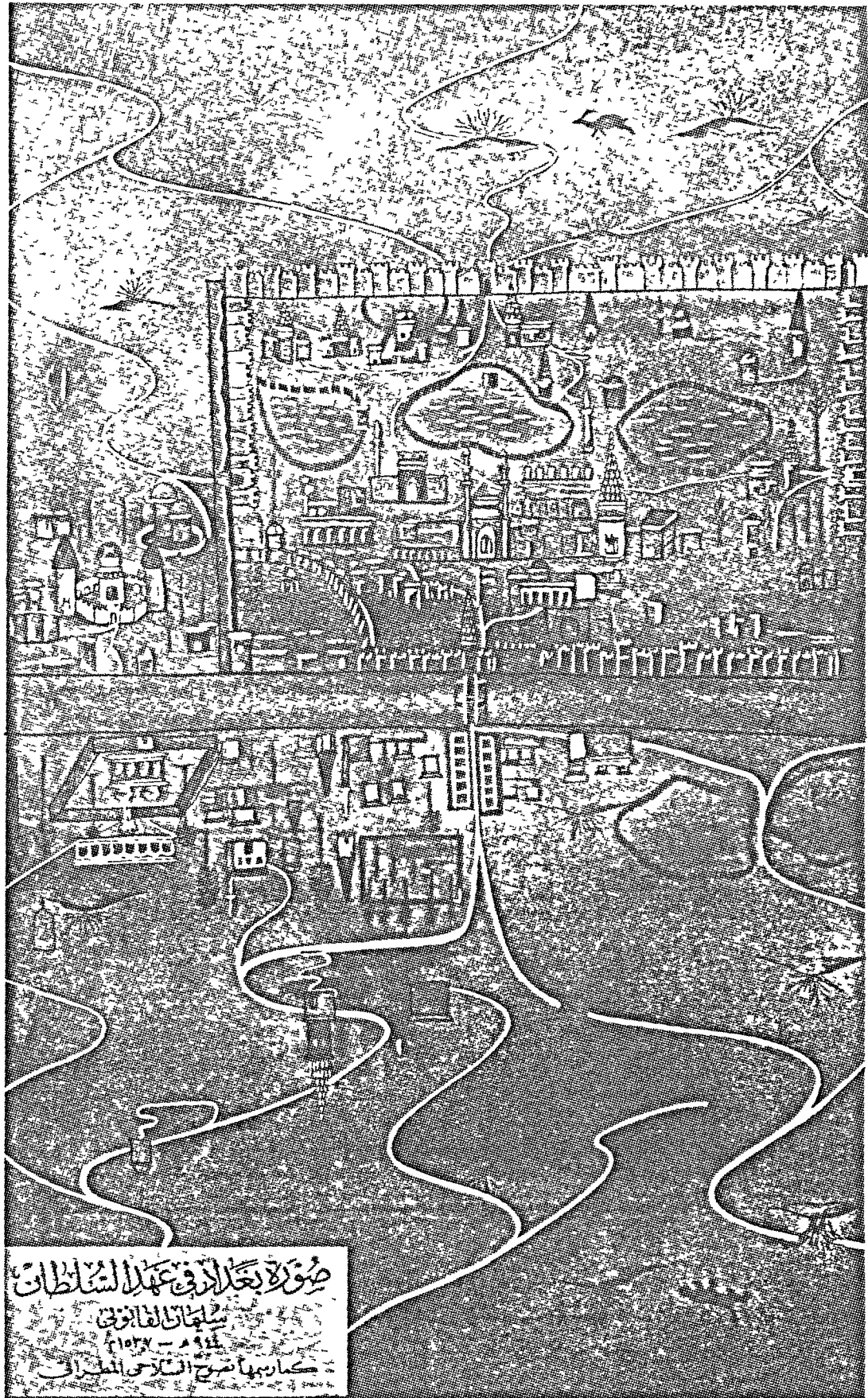


FIGURE 45 MITRAQI'S MAP OF BAGHDAD IN 1534

Source: Jawad et al, Baghdad

In contrast, the Shi'i Arabs and Persians lived mainly in Kadhimiya, while the Sunni Arabs lived elsewhere but especially in Karkh and Adhamiya. The Christians lived mainly in Ras al-Qarya and Aqd al-Nasara, a self-contained mahalla where three churches are still located. The Jews occupied the Tawrat mahalla located north of Suq al-Ghazil and adjacent to the important commercial centre of Suq al-Shorja (formerly al-Rihaniyin) (Figure 55). For security reasons, some of these mahallas had their own walls and were controlled by main gates. For example, the Tawrat Jewish mahalla was "protected by great wooden doors, which were shut at sundown, and fastened with massive bolts."²⁴

European travellers of this period are numerous (Table 26 and 27) and their accounts often include maps, illustrations and other topographical data. The most important description of the city in the eighteenth century is that of Niebuhr who visited Baghdad in 1765. He also prepared the first scaled map of the city and copied most of the Arabic inscriptions of its principal monuments²⁵ (Figure 46). The following is a summarised version of the relevant references to the city²⁶:

"Baghdad lies on the east bank of the Tigris, and is governed by a Pasha of the first rank. On the other side there is a wall, much of which is in ruins. The town proper, which is close to the river, and the part containing the Sarai or Palace, and the Bazaars, are well built. The streets are narrow, and the bazaars roofed over, and at night many of the streets are closed. The houses are built of burnt brick, are tolerably high, and have few windows looking into the streets. Each has a sirdab, or cellar, beneath it, in which the inhabitants take refuge from the heat in summer. On the north-west side is the Gate of Bab al-Muadham. On the north-east are the Gates of Wastani and Talism. The latter was built by Caliph Nasir in 1221, and when Murad IV passed through it after his capture of Baghdad (in 1638), it was blocked up, and has not been opened since. There was also the Gate of the Bridge of Boats. There are ten large towers or bastions on the city wall and several small ones. The Takyas are numerous and were founded by several different orders of dervishes. The Tigris near the city is about 600 feet wide. The Bridge consists of thirty-four small boats chained together, but the floods sometimes sweep it away. In Western Baghdad there are many gardens (Basatin), and the northern half of it represents a part of the oldest city. In Baghdad there are twenty mosques with minarets and a great many without."

The importance of Niebuhr's map lies in its contents and its scale. Previous maps have all been too generalised and drawn as an illustration

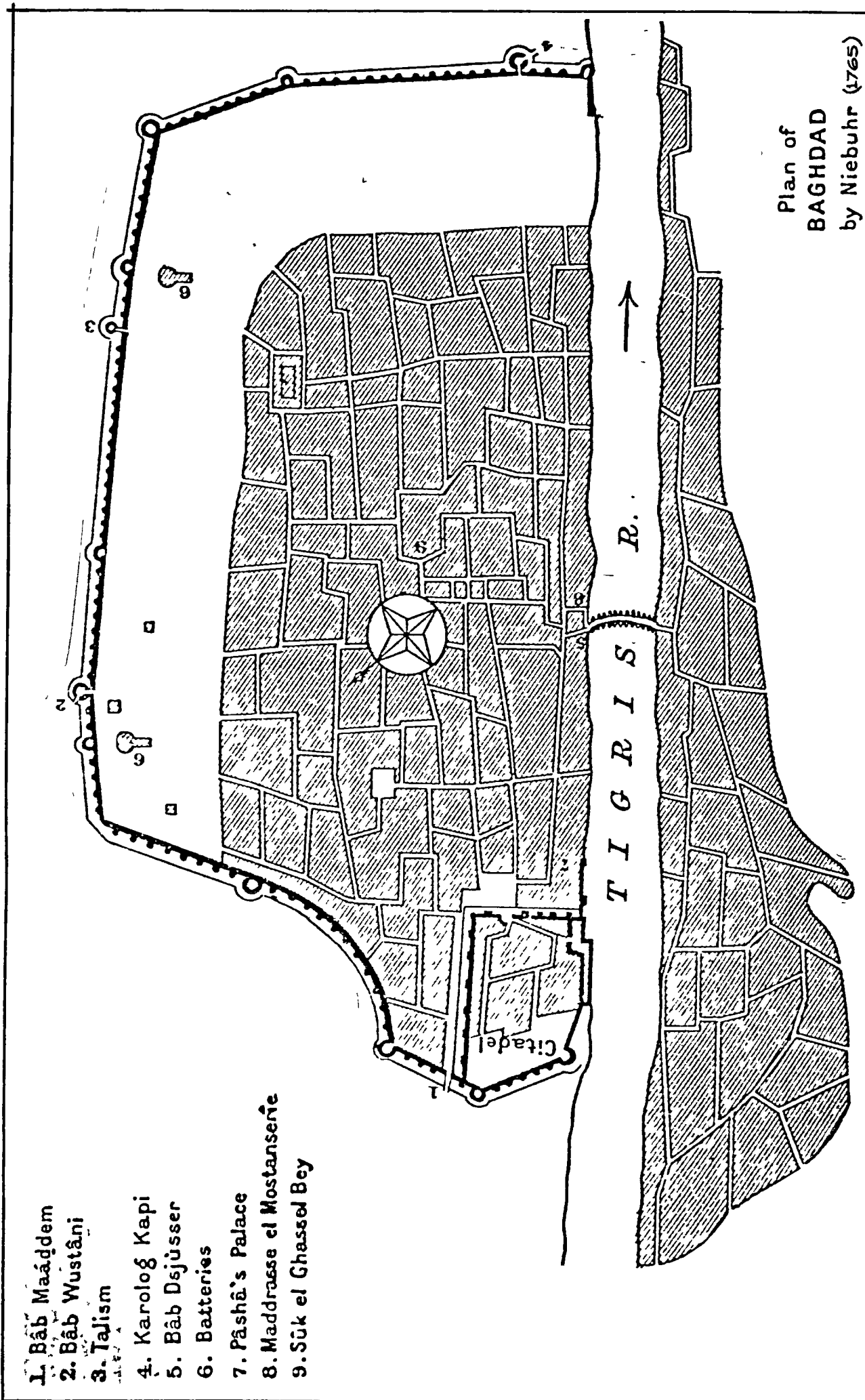


FIGURE 46 NIEBUHR'S MAP OF BAGHDAD IN 1765

Source. Budge, *By Nile and Tigris*

rather than as an accurate representation of the city. The Citadel, a prominent feature since the fifteenth century or earlier, is clearly shown with its walls and towers. It has always served as the place for army headquarters and is still being used by the Ministry of Defence. Its walls, however, have all been demolished except for a small section on its north-eastern corner (Inventory No. 15). The street pattern in the map closely resembles that of early twentieth century Baghdad. Many of the streets and features shown exist today, for example, Maidan Square, the Sarai and its Street, the Suqs Area, some elements of today's Rashid Street, Mustansir Street and Galani Street. This confirms that Baghdad's urban structure has been largely static since the twelfth century. Its overall morphology changed very slowly through six centuries and only began to change rapidly after the First World War.

The system of government of Baghdad, which roughly resembled Constantinople's, consisted of the Pasha (Wali) who held supreme local power, a Minister (Katkhuda or Kahya) as the head of administration, a Daftardar in charge of finance, a chief of the chancellory (Diwan Efendisı); and a Majlis (Council) which included the Qadhı (Judge) as the head of the judiciary²⁷. However, the 'High Porte' was the real power because it appointed the Wali in the first place. The political changes, intrigues and coups, were so frequent that the welfare of the city and its population was often neglected. From 1638 to 1704 (sixty-six years), Baghdad was ruled by not less than thirty-four different Walis, giving an average term of office of less than two years for each Wali²⁸. However, the building and repair of mosques received some attention and so did the defensive walls (Table 25).

The first decade of the eighteenth century witnessed an intensification in the conflict between the urban government and the hostile Arab tribes who controlled the countryside. The appointment of Hassan Pasha in 1704 inaugurated the Mamluk (Slaves) phase which saw the excessive power of the janissaries checked and the tribes pacified. Nadir Shah, the Persian Monarch, attempted twice to capture Baghdad in 1737 and 1743 but failed to achieve his objective largely due to the skilfulness of Ahmad Pasha. During the reign of Sulaiman Pasha (1748-1761), the Mamluk rule was consolidated and recognised by the Sultan²⁹. In 1766 the first British Residency was established marking the beginning of the British influence on the city.

TABLE 25 Architectural and Urban Contributions of Ottoman Rulers in Baghdad between 1534 and 1917

Ruler	His Main Architectural and Urban Contributions
<u>Sultan Sulaiman</u> (1534)	Built a new dome for Abu Hanifa Mosque, a khan, hammam and shops nearby, and restored the madrasa of the Mosque. Completed the restoration of Kadhiman Mosque and rebuilt Abu Yousif Mosque in Kadhimiya. Restored the Sarai Buildings and built the existing Zurur Khan
<u>Murad Pasha</u> (1569-1570)	Built Muradiya Mosque
<u>Sinan Pasha</u> (1590)	Built Gghan Khan near Mustansiriya Mdrasa, now almost totally replaced by Suq Danial. Restored Khafafin and Asifi Mosques. Restored Gailani Mosque and built its dome
<u>Hassan Pasha</u> (1597-1600)	Built Wazir Mosque in 1597. It was the largest mosque in Baghdad
<u>Sultan Murad IV</u> (1638)	Restored Abu Hanifa and Gailani Mosques, and built Qalaa Mosque in the Citadel
<u>(Kuchuk) Hassan Pasha</u> (1638-1639)	Built three more towers for the walls of the city and consolidated the walls
<u>Dali Hassan Pasha</u> (1644)	Restored Qumriya Mosque in Karkh
<u>Khasaki Muhamad Pasha</u> (1656-1658)	Built Khasaki Mosque in Ras al-Qarya
<u>Silahdar Qara Mustafa</u> (1650-52, 1664, and 1666-1670)	Restored Abu Hanifa and Sahrawardi Mosques. Restored the bund which surrounded Aadhamiya township
<u>Silahdar Hussain Pasha</u> (1671-1674)	Built Mustansiriya Suq and Hussain Pasha Mosque, and restored Karkhi Tomb-Mosque
<u>Qaplan Pasha</u> (1676-1677)	Built Qaplaniya Mosque in 1676
<u>Silahdar Omar Pasha</u> (1677-81, 1683-86, and 1687-89)	Built Omariya Madrasa adjacent to Qumriya Mosque in 1672, and a new dome for Hussain Pasha Mosque. Restored Abu Yousif and Karkhi Mosques

Continued...

TABLE 25 (Continued)

Ruler	His Main Architectural and Urban Contributions
<u>Ibrahim Pasha</u> (1681-1683)	Built Sayid Sultan Alı Mosque in 1681
<u>Katkhuda Ahmad Pasha</u> (1691-1693)	Built Fadhıl Mosque
<u>Ismail Pasha</u> (1690)	Built Ismailiya Mosque, also known as Wafaiya Mosque
<u>Hassan Pasha</u> (1704-1723)	Rebuilt Sarai Mosque, also known as Jadid Hassan Pasha Mosque
<u>Sulaiman the Great</u> (1780-1802)	Built Sulaimaniya Madrasa and Sarrajın Suq. Restored Abu Hanifa Mosque and the walls of the eastern side, and built new walls for Karkh. Built the Sarai Buildings. The Mosque of Ahmadiya was built by his Minister, Ahmad Kahya in 1796
<u>Daud Pasha</u> (1816-1831)	Built Haidarkhana Mosque and three Madrasas. Restored Azbaki Mosque and the Suqs
<u>Mıdhat Pasha</u> (1869-1872)	Built the Municipality Building, a hospital, several schools, a clothing factory at Abakhana, and a tramway between Karkh and Kadhimiya. Converted Aliya Madrasa into the Sanı School. Completed the Sarai Buildings. Demolished the walls of Baghdad but kept the Gates.
<u>Hassan Pasha</u> (1891-1896)	Set up a new bridge of boats in 1899
<u>Nadhım Pasha</u> (1910-1911)	Built new bund to protect Eastern Baghdad from floods
<u>Khalıl Pasha</u> (1916-1917)	Built new Khalıl Pasha Street, now known as Rashid Street

Sources: Jawad and Susa, Dalil, Coke, Baghdad, Azzawı, Tarikh

The reign of Sulaiman the Great (1789-1802) was noted for its stability and building. Similarly, the rule of Daud Pasha (1816-1831) was noted for its prosperity and security³⁰. He built three important mosques, several madrasas, suqs, and restored numerous other buildings (Table 25). The fall of the Mamluks was aided by the terrible flood and plague of 1831 which claimed thousands of lives and destroyed over seven thousand houses³¹.

The detailed report and survey of Baghdad by Felix Jones in 1853 is perhaps one of the most outstanding urban analyses ever taken for an Arab city in the nineteenth century³². This extraordinarily accurate and systematic work was not only prepared by a distinguished surveyor but also by a man of supreme patience and intimate knowledge of local conditions. His map (Figure 47) shows almost every important urban and architectural feature, the defensive walls on both sides, and most of the roads in the city. He also included a panoramic view of the river-front for either side and indicated the names of features on them.

According to Jones, the area enclosed by the walls of the eastern side was 591 acres (236 hectares), while the area for the western side was 146 acres (58 hectares)³³. The eastern walls, which had seventeen large towers and a hundred smaller ones, were 10,600 yards (9,688 m.) in circuit and provided with loop-holes for musketry. The eastern walls consisted of thirty-one small towers and were 5,800 yards (5,300 m.) in circuit. In all, Jones named the following³⁴:

- 63 Mahallas in the eastern side
- 25 Mahallas in the western side
- 309 Alleyways (Aqds) in the eastern side
- 55 Mosques in the eastern side
- 35 Mosques in the western side
- 47 Suqs in the eastern side
- 39 Khans in the eastern side
- 105 Coffee-Shops (Qahwas)
- 15 Hammams
- 7 Takyas

Although Jones unfortunately omitted Kadhimiya and Aadhamiya - probably because they were not regarded as part of Baghdad at the time -

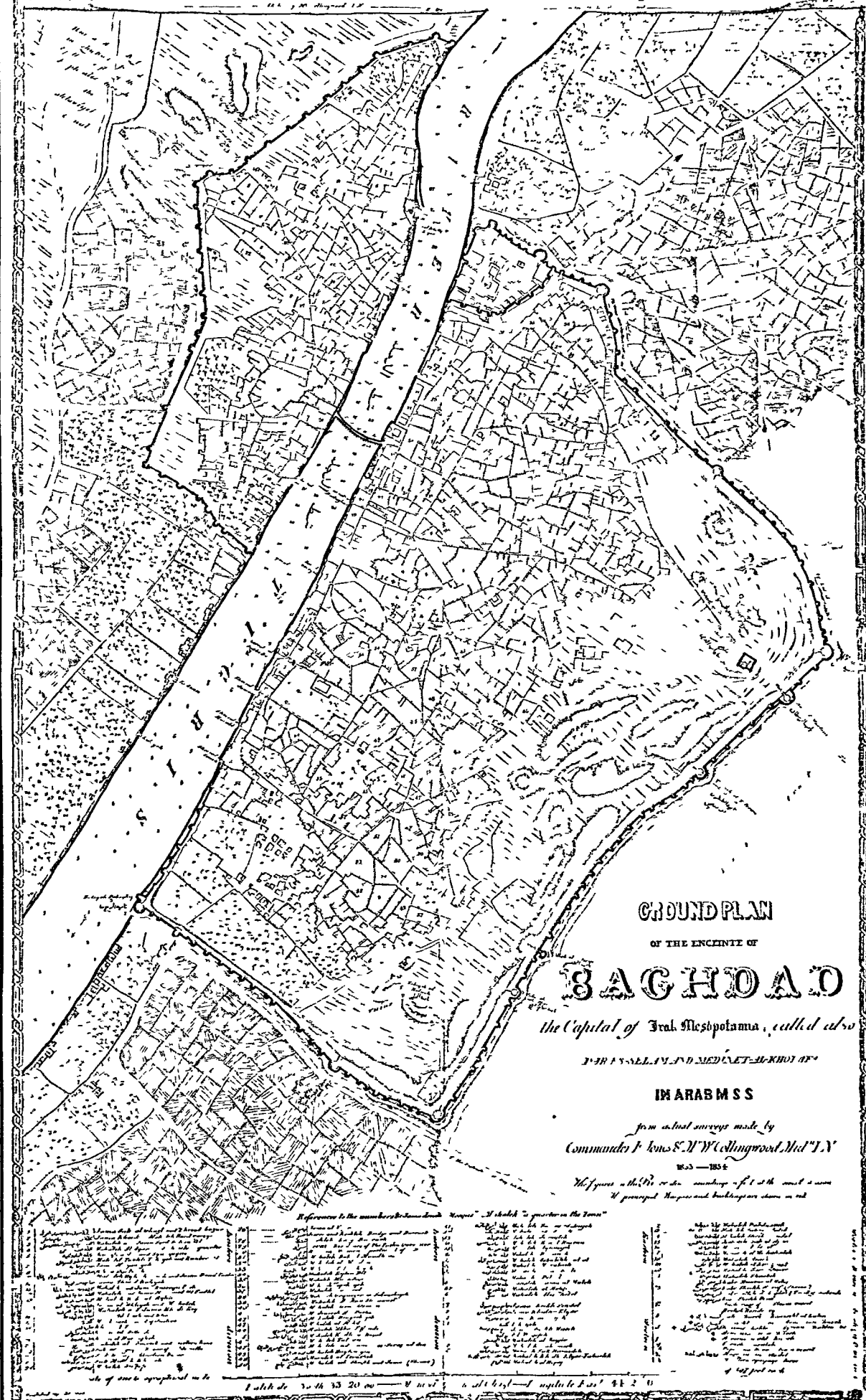


FIGURE 47 FELIX JONES' MAP OF BAGHDAD IN 1853
Source: Jones, Memoirs

his study is, nevertheless, surprisingly relevant today. Many of the names and places he mentioned in 1853 are still being used: out of the eighty-eight mahallas he mentioned, fifty-four are present, out of the ninety mosques named, sixty-two exist today, though much restored or rebuilt since then. In contrast, the hammams, khans and suqs mentioned have now mostly gone: from the fifteen hammams only three survive, from the thirty-nine khans only two remain and the rest were either taken over by shops, or simply demolished, from forty-seven suqs only fifteen survive while nearly all the coffee shops have now disappeared.

As was mentioned earlier, Baghdad's morphology from the twelfth century to around 1860 has been largely static. The few changes that have taken place occurred mainly around the peripheral intramural zones, but more significantly, in the extramural areas immediately above and below the eastern city. The reasons for this can be attributed basically to the city's flood defences. First, the foundations of the riverside buildings on both banks of central Baghdad have effectively checked the erosion and overflow of the Tigris while, in contrast, the meanders of the river near Kadimiya and Aadhamiya have been changed appreciably since the Abbasid times. Second, the defensive walls, which surrounded both sides of the city and had their ditch linked with the river, provided reasonable, though inadequate, protection against flooding. Consequently, the size of the city was physically limited by these necessary walls, and the ground level of the populated areas gradually rose as the crumbled residue of previous occupations was built over³⁵. In some localities the level rose between one and eight metres³⁶. Jones's map shows that only about half of the enclosed area of Eastern Baghdad was occupied by buildings, while the rest was cultivated, excavated for bricks or, exceptionally for a Muslim city, used for intramural cemeteries³⁷.

Between 1860 and 1914, Baghdad underwent a series of Western-inspired modernisation schemes by two energetic Pashas, Namıq (1861-63) and Midhat (1869-72). The most significant change that occurred during this phase was the demolition of the old walls of the city. Midhat, who, incidentally, left the four Gates undemolished, intended to build

French-style 'boulevards' in place of the wall but only managed to complete a few stretches of roads. This resulted in exposing the city to the dangers of flooding but also opened the way for further expansion which first began to take place north of the Citadel. Other important works during the reign of these two Pashas are shown in Table 25. (Figure 48)

Nadhim Pasha (1911-12) built a new earth bund around eastern Baghdad to protect the city from floods. This bund started from the extreme northern part of Aadhamiya (Silaikh), surrounded the city proper at about four kilometres away from the old walls, and ended at the southern area of Karrada³⁸. The large area enclosed by this bund was designed to allow expansion in all directions. With German help, Nadhim also opened a road from Bab al-Sharqi to the central Suqs Area. It was widened and extended later to Bab al-Muadham by Khalil Pasha in 1916 who called it after his name. It became known as New Street by the British and then as Rashid Street by the Iraqis, and is now the most important commercial street in the city. Another significant morphological factor was the linking of Baghdad to Europe by rail. Just before the outbreak of the First World War, German engineers completed the connection and founded the nucleus of today's extensive railway yards, station and residential development in Karkh³⁹. (Figures 49 and 50)

The failure of Nadhim's bund to withstand the floods of 1911 led the British, who occupied the city in 1917, to construct yet another bund. This second bund started also at Silaikh, utilised the existing earth embankments of the ditch which surrounded the old walls, engulfed the new military camp of Hinaidi (now Rashid), and ended at Diyala River. The security offered by this new bund extended the 'urbanisable' land and initiated the linear expansion of the city along the Tigris. Aadhamiya, which had hitherto maintained its six centuries long isolation, now began to be integrated with Rusafa. No such protective measures were necessary for Karkh because of the existence of two bunds, one of which was built by the Germans for the railway, and the other was offered by the raised level of Ramadi Road⁴⁰.

The British population, who lived mainly near their Residency in Sinak mahalla, began to occupy the areas just south of Bab al-Sharqi.

BAGHDAD

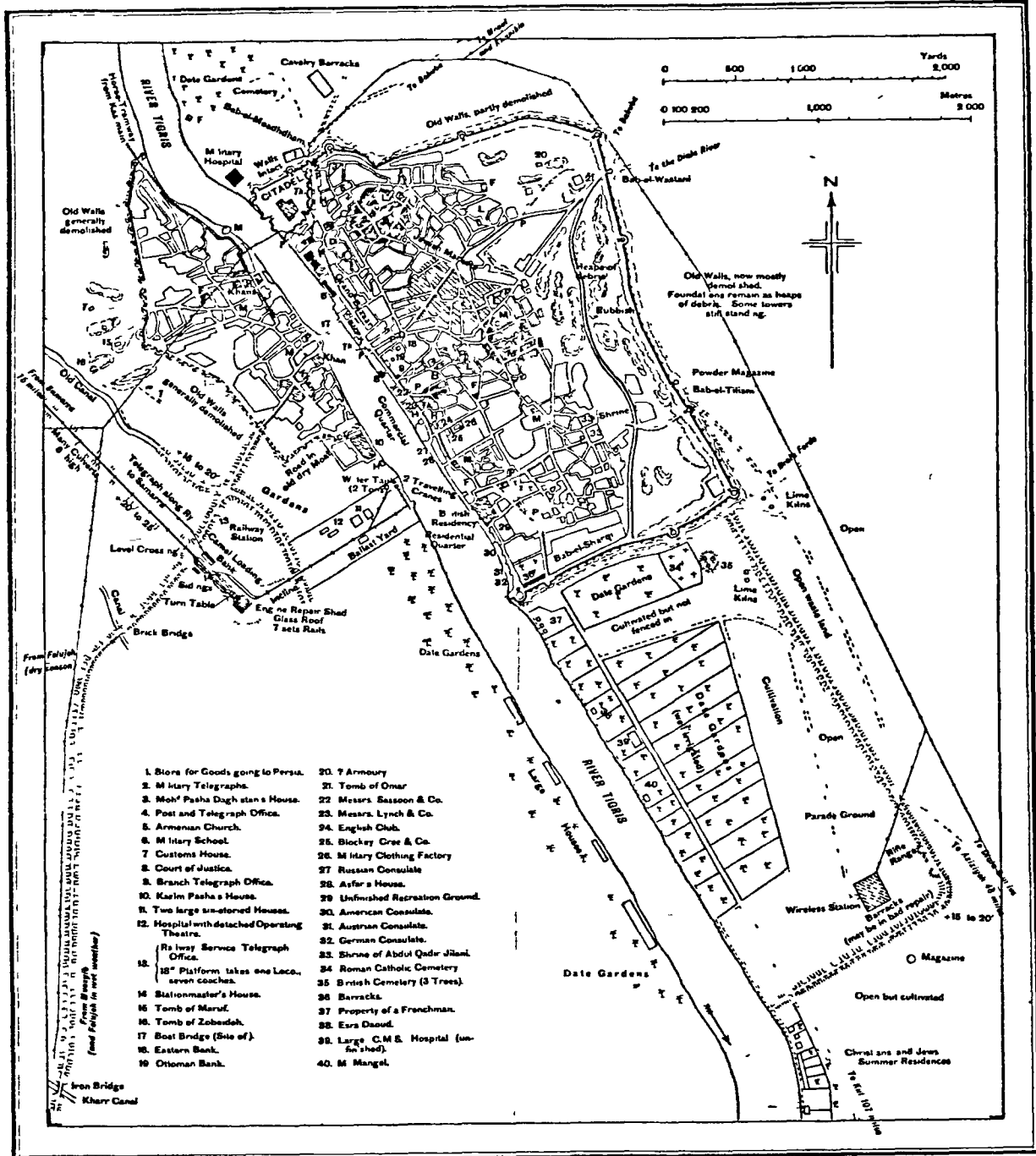


FIGURE 49 BAGHDAD IN C. 1914 BY BRITISH NAVAL INTELLIGENCE

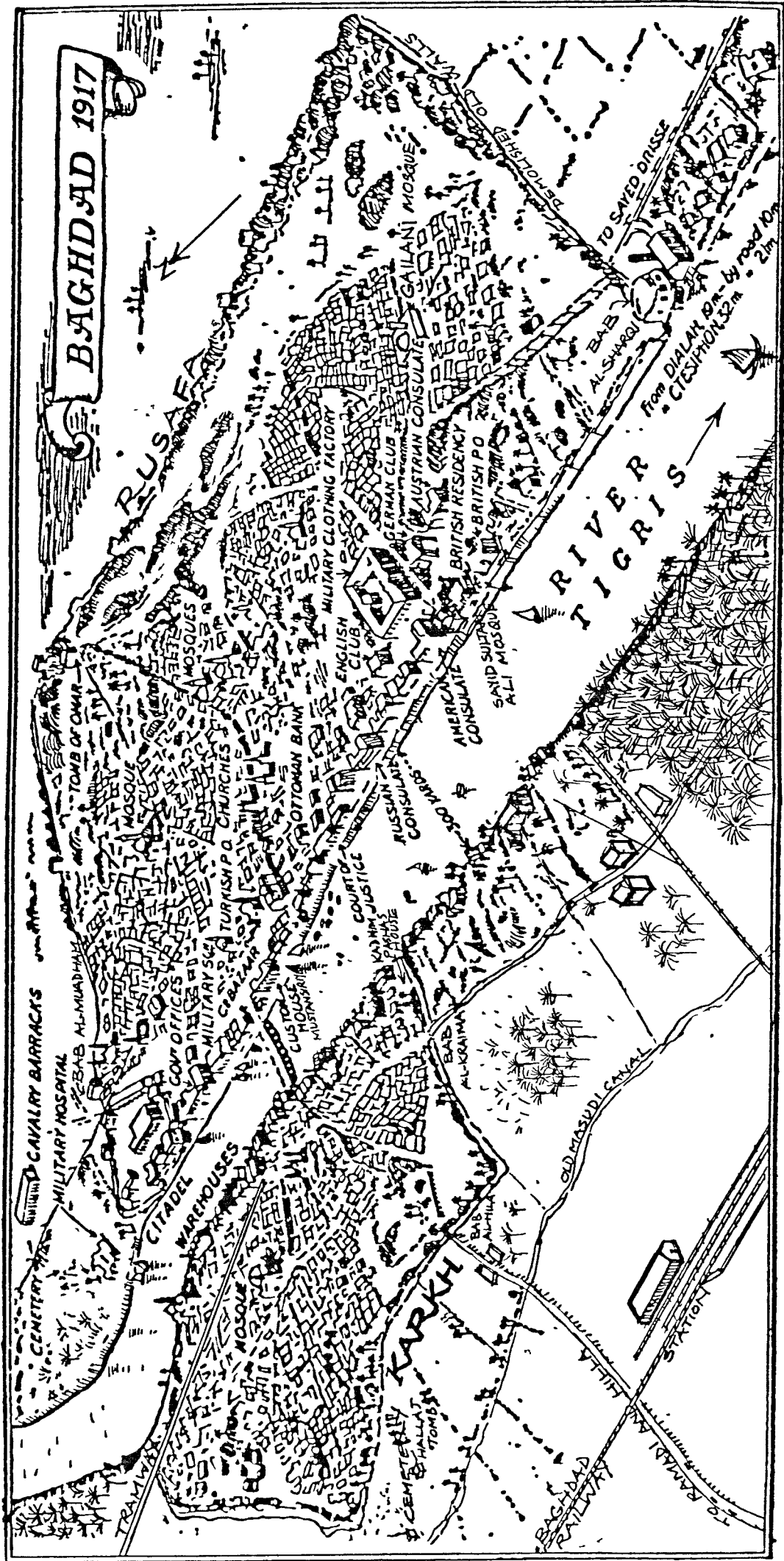


FIGURE 50 OBLIQUE VIEW OF BAGHDAD IN 1917 BY AN UNKNOWN BRITISH ARTIST (modified by Author)

They soon developed it into an exclusive British colony, set up messes for their army officers, built a large club (now the Alwiya Club), and even used the Abbasid Gate, Bab al-Sharqi, as their 'St. George's' church. The opening of the pontoon Maude Bridge in 1918 linked Salhiya on the western side to Abakhana on the eastern side, and eventually resulted in the shift of the British Embassy and colony to Salhiya.

The western influence on the local urban and architectural environment has been considerable. The new residential developments were now based on regular grid-iron layouts, such as Sinak, Batawiya and Saadun. These new mahallas reflected a definite shift, and later a departure, from traditional vernacular architecture and town planning. The inner courtyard, which had been persistently used for millenia, first began to lose its popularity as street windows on ground floor rooms became socially acceptable, and was later discarded altogether. The new streets were now wide and uniform, and were not designed for pedestrians but rather for horse-drawn carriages (Arabanas) and motor cars. New constructional techniques, some of which were imported from British India, such as the so-called 'jack-arch' which involves the use of I-section steel joists to support shallow brick vaulting, became the most widely used method for roofing until the late 1950's when it was superseded by reinforced concrete. This particular technique is a useful criterion for dating traditional houses and other buildings in Iraq from external evidence because it gives a rough date of 'not before 1917'.

In conclusion, apart from other factors which affected the city, the walls and the Tigris must be singled out as the most significant. The walls severely limited its capacity for growth and helped, therefore, to maintain its stagnation since the twelfth century. The Tigris affected not only its overall linearity, but also threatened its very existence. Consequently, protecting the city against flooding was a paramount consideration. The demolition of the walls in 1869, therefore, marks a fundamental morphological change in the city's long history, and allowed its lateral expansion which took a sudden acceleration within the last three decades.

TABLE 26 Travellers, Writers and Artists with Accounts on Baghdad from 800 to 1899

Date	Authors of Accounts (with date if known)
800-899	Ibn Taifur (d. 893), Ibn Khurdaba, Balathuri, Qudama; Ibn Batriq, <u>Yaqubi</u> (891)
900-999	Surhab (900), <u>Ibn Serabion</u> (908), Ibn Rusta (902), Ibn Faqih (903), <u>Masudi</u> (940), Istakharī (951), Hamza Isfahani, <u>Tanukhi</u> (970), Ibn Hawqal (978), Maqdisi (985), Ibn Mīshkawaih, Waqi (d. 918), Tabari (910), Naftawaihi (d. 935), Arīb, Aghani, Fihrist, Shabushti
1000-1099	<u>Khatib Baghdadi</u> (1058), Mawridi, Sabi, Nasir Khisraw, Imad al-Din, Bakri, Zumakhshani, Hamadani
1100-1199	Samaani, Iskandari, Ibn Jawzi, Attar, <u>Ibn Jubair</u> (1184), Khaqani (1136), Benjamin of Tudela (1160), Sibti Ibn Jawzi (d. 1200)
1200-1299	<u>Yaqut Hamawi</u> (1226), Dubaithi, Ibn Najjar, Dimishqi, Ibn Khaliqan (1256), Ibn Taqtaqa, Barhebraeus, Marco Polo, Chang Te (1259), <u>Ibn al-Athir</u>
1300-1399	Ibn Abd al-Haq (c 1300), Anon. Marasid (c 1300); Rashid al-Din (1310), <u>Ibn Battuta</u> (1327), Ibn Furat, Abu al-Fida, Abu al-Faraj, <u>Mustawfi</u> (1339), Dhahabi; Safadi, Ibn Badis, <u>Ibn Rafi</u> , Fakhrī (1300)
1400-1499	<u>Sharaf al-Din</u> , Ibn Taghribidi, Mirkhawand, Siyuti
1500-1599	Tadifi, Mitraqi (1537 map)l Caesar Fedirigo (1563), <u>Leonhart Rawolf</u> (1574), Ralf Fitch (1583), John Eldred (1583), Sir Antony Shirly (1599), John Newbery (1580), Balbi (1580)
1600-1699	<u>Haji Khalifa</u> (1657), P. Teixeira (1604), Bandanigi, John Cartwright (1613), <u>Pietro della Valle</u> (1615), <u>Tavernier</u> (1632 and 1651), <u>Ewlia Celebi</u> (Chelebi) (1656), Thevonet (1664), Dapper (1680), Vincenzo da Siena (1656), Maundrell (1697-99)
1700-1799	Murtadha Nadhmi (1700), A. Hamilton (1721), Amin Umari, Richard Pococke (1743-45), J. Otter (c 1748), E. Ives (1754), Captain Elliot (1757), <u>Niebuhr</u> (1765), Samuel Evers (1779), Joseph Beauchamp (1782); James Capper (1779), Donald Campbell (1796), Dimishqi (1726), Burckhart (1776), Parsons (1775), G. A. Olivier (1796-97), J. Otters (c 1745)

Continued....

TABLE 26 (Continued)

Date	Authors of Accounts (with date if known)
1800-1899	Thabit Afandi, Mulla Rasul, Midani, Basri, Bustani, Mirza Abu Talib Khan (1803), Jaubert (1806), Rousseau (1808), Dupre (1808), <u>Claudius Rich</u> (1808), <u>Buckingham</u> (1816), Heude (1817), Gaspara Balbi (1817), <u>Ker Porter</u> (1818), Munshi Baghdad (1822), G. Keppel (1827), <u>Texier</u> (1830), J. Wellsted (1830), J. B. Fraser (1834), W. Ainsworth (1836), A. N. Groves (1830), H. Southgate (1840); Lynch (1841), <u>E. Flandin</u> (1841), de Costa (1841), B. Poujoulat (1841), J. Fletcher (1850), F. Hoefler (1852), <u>Felix Jones</u> (1853), A. Lychlama (1867), F. Webb (1870), Anne Blunt (1878), G. Geary (1878), Tristram Ellis (1869), Mignan (1821), Kinneir (c 1810), <u>Dieulafoy</u> (1881), <u>Henry Binder</u> (1887), H. Cowper (1894), C. Sachau (1897), Pasons, Aucher, Eloy, Ritter, Oppert et al, Thielmann, Ernouf, J. Heer, Jeannier, Mez, Chilet, Mignot, Yasin Umari, Petermann (1856), J. Peters (1897), H. Geere (1890), Layard (1887), William Fogg (1874), Loftus (1857), W. Andrew (1857), M. Wagner (1856), Chesney (1850), Ritter (1844), Fowler (1841), Bensch (1838), <u>Sir Henry Budge</u> (1888), Rawlinson

NOTES: Underlined names indicate works of particular interest to the urban history or topography of Baghdad

Names of travellers and authors were compiled from numerous sources such as books and bibliographies

The dates shown are of travel or writing and not of publication.

TABLE 27 Data on Baghdad obtained from Travellers and Writers

Sources and Date	Main Data on Baghdad
Istakharī (940)	<u>City</u> : Area of both sides (east and west) 25 sq. miles (64.75 sq. km.)
Khatīb (1058)	<u>City</u> : Area of E. B. 27,000 Jarībs (33 sq. km.) Area of W. B. 16,750 Jarībs (20 sq. km.) <u>Buildings</u> : Six Friday mosques, and the rather exaggerated figure of 60,000 hammams
Ibn Jubair (1184)	<u>City</u> : E. B. dominant, W. B. largely ruined but surrounded with its own wall with four gates, and had 14 mahallas. <u>Buildings</u> . 11 Friday mosques in all, three of which were in E. B. Thirty madrasas in E. B. He was told of 2,000 hammams in the city
Yaqut (1226)	<u>City</u> : Main street in E. B. was Aadham, the continuation of the Tuesday Suq. Dar al-Khilafa occupied nearly one third of E. B. Old Rusafa (near today's Silāikh) was walled and had its own mosque. W. B. had its own walled quarters. <u>Buildings</u> . He mentioned the Mosques of Abu Hanifa, Mansur, Kadhīman; and Dar al-Khilafa and Shonīziya Cemetery.
Ibn Battuta (1327)	<u>City</u> : His account of Baghdad is largely based on that of Jubair. Both sides were walled. Reported two bridges. <u>Buildings</u> : Did not give number of mosques but mentioned the Mosques of Mansur, Rusafa and Sultan (all non-existent now). He saw Mustansiriya Madrasa and gave interesting details about hammams.
Mustawfī (1339)	<u>City</u> : His account again resembles that of Jubair. Both sides were walled, the circuit of E. B. wall was 18,000 paces and had four gates, the circuit of W. B. was 12,000 paces and had two gates, and of Kadhīmiya 6,000 paces. <u>Buildings</u> . He reported seeing the Mosques of Kadhīman, Abu Hanifa, Gailanī, Karkhī, the Tombs of the Calīphs and that of Ibn Hanbal
Texeira (1604)	<u>City</u> : Between 20,000 and 30,000 houses in all Baghdad

Continued...

TABLE 27 (Continued)

Sources and Date	Main Data on Baghdad
Tavernier (1651)	<p><u>City.</u> Wall of E. B. was about 5 km. in circum. and built-up area was about 30 hectares. The ditch 6 toises deep (about 38 ft.), and had four gates. He prepared a sketch map of city, population 15,000.</p> <p><u>Buildings:</u> There were five main mosques and ten main khans in Baghdad.</p>
Celebi (1655)	<p><u>City.</u> Wall circuit for both sides was about 11 kms. Ditch was 60 Dhra in width and was connected to Tigris.</p> <p><u>Buildings:</u> Nine main mosques and numerous small ones, two madrasas, 700 takyas, two good khans, 500 hammams, eight churches and three synagogues.</p>
Niebuhr (1765)	<p><u>City:</u> Wall circuit for E. B. 3.2 km. with ten large towers and many small ones. He included a scaled map of the city.</p> <p><u>Buildings:</u> Twenty main mosques and numerous small ones, 22 khans and 20 hammams. He described many important buildings including Gates, Citadel, Sarai, Mustansiriya, and the Mosques of Gailani, Abu Hanifa, Kadhiman, Karkhi, Zubaida, Bahlul Dana and Yousha.</p>
Umarī (1779)	<p><u>City.</u> Population 300,000</p> <p><u>Buildings:</u> 80,000 houses and 13,000 shops</p>
Buckingham (1816)	<p><u>City.</u> He estimated the population between 80,000 and 100,000. Included illustrations.</p> <p><u>Buildings:</u> 30 khans and 50 hammams</p>
Baghdadī (1822)	<p><u>City:</u> Both sides walled. Population was estimated at 100,000, including 1,500 Jewish and 800 Christian families</p> <p><u>Buildings.</u> 200 mosques including 20 main ones, 20 hammams</p>
Fraser (1830)	<p><u>City:</u> Estimated population at 150,000</p> <p><u>Buildings:</u> 200 mosques, 6 madrasas, 20 khans</p>
Felix Jones (1853)	Refer to text in this chapter
'Salnama' (1882)	<p><u>Buildings:</u> 46 main mosques, 36 small mosques, 600 (?) khans, 21 hammams, 16,303 houses, 21 madrasas, 34 primary schools, 184 coffee-shops and 3,244 shops</p>

Continued...

TABLE 27 (Continued)

Sources and Date	Main Data on Baghdad
'Salnama' (1903)	<u>City</u> : Population 90,000 <u>Buildings</u> : 145 mosques, 20 takyas, 8 churches, 4,000 shops, 285 coffee-shops, 135 orchards (Bistans), 6 primary schools, 8 schools for non-Muslims, and 12 bookshops

NOTES: E. B. and W. B. denote East and West Baghdad respectively.
Dates shown are of travel or writing and not of publication.
Data was compiled by author from numerous sources

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CHAPTER VII

BAGHDAD TODAY ITS HISTORIC CORES AND PLANNING

7.1 Introduction

Since its foundation in AD 762, Baghdad has nearly always maintained its supremacy as the most important urban centre in Iraq. Its rapid growth since the end of the Second World War has increased its overall dominance. From a built-up area of about 6 sq. km. around the first decade of this century it mushroomed to 238 sq. km. in 1970, and is expected to reach about 467 sq. km. by 2000¹. This would represent a physical increase by a dramatic factor of over seventy-seven times which vividly illustrates the scale of the problems which face Baghdad today (Figure 51)

The growth of its population has been equally dramatic. From around 140,000 in 1904², the population of the city increased to an estimate 2,270,000 in 1971³. This last figure represents eighty-five per cent of the total population of Baghdad in Governorate and about twenty-five per cent of the total population of Iraq for the same date. The population of Baghdad was estimated at around three million in 1975⁴ but is expected to reach some five and a half million by 1990⁵. This alarming population growth is generally attributed to two main causes. the high rate of natural increase, and the influx of rural migrants into the city. The rate of natural increase for the period 1947 to 1970 amounted to 3.05%⁶, a very high rate indeed. Rural migration into Baghdad during the same period was nearly seventy per cent of the total for Iraq, or about 700,000 migrants. These migrants, who tend to come mostly from the poor southern regions of the country, settle either in the old areas of Baghdad or in suburban low-cost housing

The concentration of economic and industrial activities in Baghdad is clearly revealed by the following statistics in 1969⁷ which are related to the city as a percentage for the whole country. private residential constructions and repairs accounted for 54.2%, and their costs 63.8%, the number of constructed commercial buildings was 43.39%, while the number of constructed industrial buildings was 52.5%, and the number

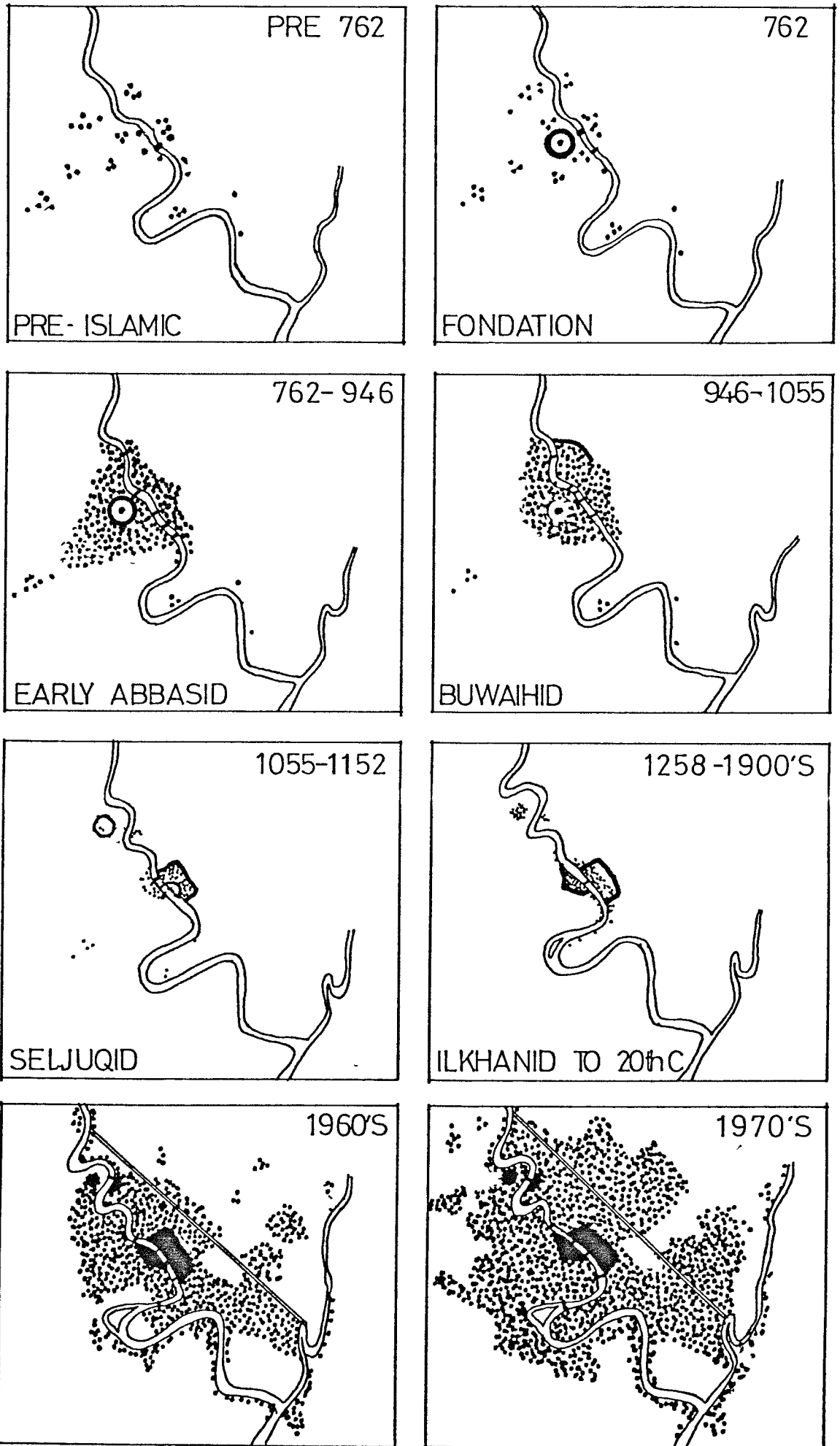


FIGURE 51 GROWTH OF BAGHDAD OVER TWELVE CENTURIES

of employees in the building industry was about fifty per cent. Baghdad Governorate claimed sixty-three per cent of all the larger industrial establishments (those of over ten employees) and employed over sixty-five per cent of all employees of this class in Iraq

Similar concentrations are also found in educational, health, cultural and other social facilities. In 1970 Baghdad claimed about forty per cent of all secondary school pupils and seventy-three per cent of university students in Iraq. More than half of all Iraqi doctors practiced in Baghdad which contained 43.8% of all the hospitals⁸.

The effects of these concentrations on the morphology and the historic fabric of the city have been overwhelming, especially during the last three decades. Massive urbanisation, resulting from largely unplanned economic growth and due to the reasons mentioned earlier, has inevitably caused a sharp demand and competition for physical space. Because modernisation and redevelopment first started within the confines of old Baghdad, especially Rusafa, the four historic cores took the brunt of their pressure. This is in contrast to some North African Arab madinas where most modern development took place outside the old walls and not inside them. Thus, the historic nucleus of Baghdad continued to function as the centre for a much enlarged metropolitan city. Of course, modern growth spilled outside the old city and new local centres have siphoned off some of these pressures but only after much damage had been done to its historic fabric.

Modernisation, which was - and still is - envisaged as closely following the Western model, was realised through two major processes: first by improving accessibility for motorised traffic, opening and widening streets, and providing parking, and second, by the clearance of old areas and their replacement by high-rise modern development to provide the maximum space for business and commercial uses. The competition for central urban space has increased the price of land in old areas to such a degree (as much as three hundred Dinars per square metre in Rashid Street) that it made it profitable for owners and land speculators to let their old properties decay and then to replace them by modern structures of more intensive use. Consequently, the majority of old buildings which are

within the historic cores are now so badly neglected that they await demolition.

Naturally, old areas become a haven for the poor because of the low rents of the traditional houses that are only to be found there. The resultant overcrowding worsens their already bad physical, as well as hygienic, conditions. It increases the population density, lowers the standard of living and accelerates the rate of decay and destruction of historic buildings within these areas. The juxtaposition of the old and the new, moreover, accentuates the radical differences between life styles and social strata. This leads not only to unrest, but perhaps more important as a social phenomenon, to the resentment to and rejection of the traditional⁹:

"The 'old madina-new city' phenomenon is caught up in a situation of cross-cultural borrowing with all its attendant psychological strains. In such cases, man's view of the problem is even more likely to transcend aesthetic and utilitarian considerations. Old and new are then likely to become symbols of ultimate values - the old madina as a refuge and locus of traditional religious piety, the old time in the old time city. Or the old city becomes a stifling museum of antiquities and the very symbol of 'our backwardness'."

This dialectic process of the indigenous versus the intrusive new continues apace in Iraq and remains as a fundamental obstacle against popularising the concept of conserving the traditional heritage. The misleading subconscious tendency to associate modernity with Westernisation has led some Iraqi planners and politicians to resist conservation as a reactionary romanticism. The latter are more significant because they are the decision-makers.

7.2 The Existing Historic Cores

The modern city of Baghdad contains four cores of historic or architectural interest: Rusafa, Karkh, Aadhamiya and Kadhimiya. In all they cover some six square kilometres and consist of seventy-five traditional mahallas (Table 28). They represent the vestiges of the past four townships, interspaced and surrounded by modern urban growth, and physically well-defined by their characteristic urban fabric and by the roads which have replaced their old walls (Figure 52).

These historic cores are essentially the urban expression of a past traditional age. As such, they exhibit the urban constitution and layout of typical Islamic cities of the Near East. A considerable amount of scholarly debate and research has already gone into the question of the nature of the Islamic city, and in spite of the divergent range of opinions, there seems to be an overall consensus amongst them that the Islamic city shows a remarkable unity throughout the Near-Eastern region. According to some scholars¹⁰, ancient Mesopotamian and Hellenistic influences provided the bases and background for the evolution of many Islamic urban and architectural elements: the suq developed from the colonnaded avenue, the khan from the basilica, the hammam from the thermae and the mahalla from the Babylonian quarter, and so on. However, it must also be emphasised that Islam, being an urban religion and a way of life, must have been a strong factor in the shaping of such cities¹¹. This is manifested in such elements as mosques, madrasas and shrines, and in such formulations as waqf, different religious schools, professional guilds and the 'ulama' (those learned in theology) and their close connection with the commercial class.

Another important generalisation about the Islamic city is its 'inside-outside' dialectic. The obsession of Muslim society with privacy has had a direct effect on its built environment. As Balbas¹² correctly observed:

"private life turned inwards, towards the courtyard and not the street... a life where the basic units, the families, touched externally without mingling to form a civitas."

TABLE 28 The Four Historic Cores of Baghdad, their Area, and the Number and Incidence of their Listed Items

Historic Core	Area (ha.)	Items Listed by author*	Incidence of Item per ha.
Rusafa	360.00	288	0.80
Karkh	85.00	63	0.74
Aadhamiya	20.00	12	0.60
Kadhimiya	58.59	236	4.05
Totals	523.59	603	

Source. The Author's Conservation Survey, Baghdad, 1975-77

NOTES: These figures exclude Archaeological Sites, Views and Conservation Areas
The items were listed by the author and not by the government

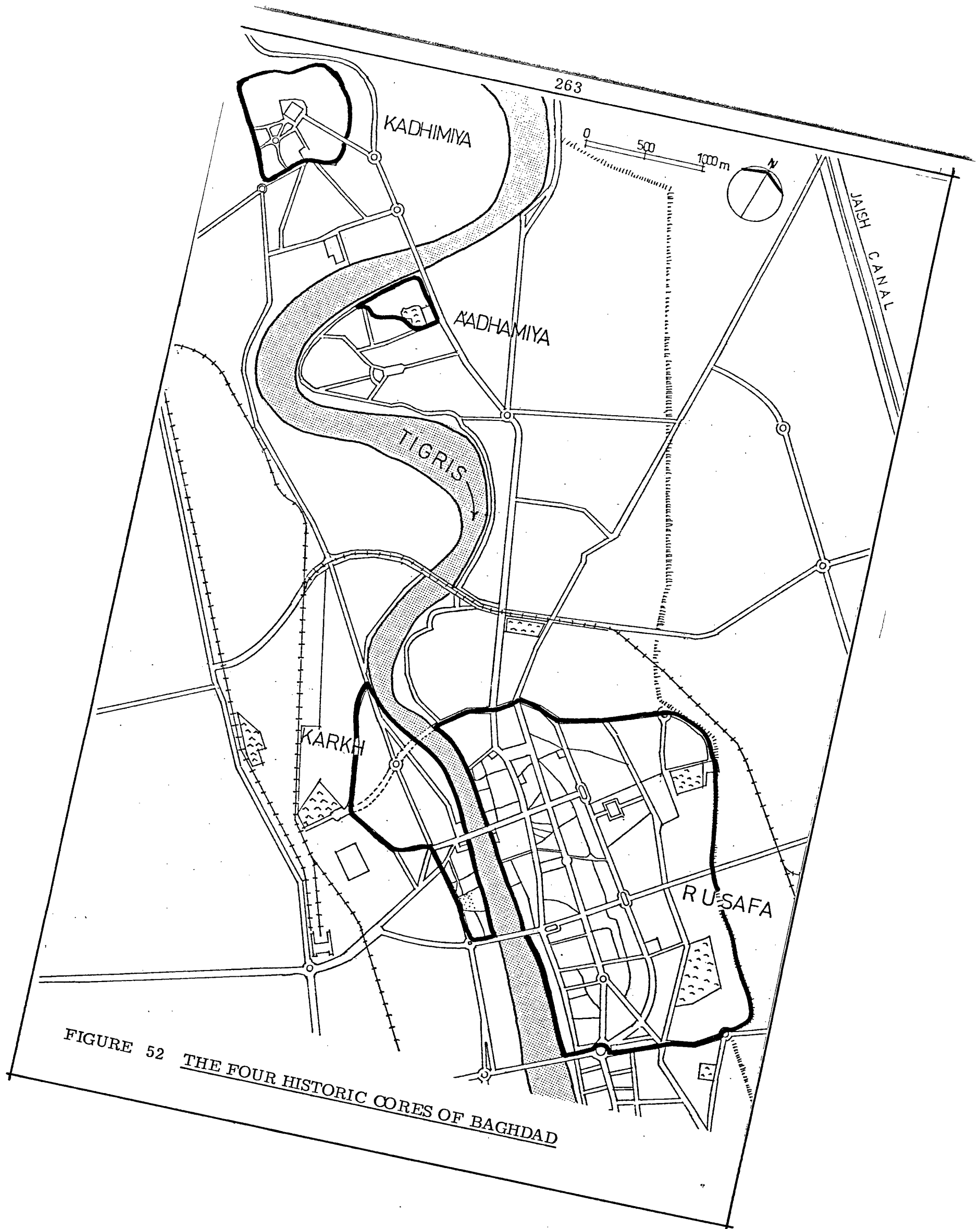


FIGURE 52 THE FOUR HISTORIC CORES OF BAGHDAD

Max Weber¹³ attributed this absence of municipal institutions in Islam to the tribal traditions of the Arabs. This is a valid observation which partly explains the lack of civic-consciousness in today's Arab cities, and one that was realised by the famous Arab historian, Ibn Khaldun (1332-1406)¹⁴.

The medieval Islamic madina was usually defensive in its external outlook. The wall, which surrounded more than its built-up area, was the first line of defence. Several strongly guarded gates pierced it at locations facing the main routes into the countryside. The madina itself consisted generally of numerous self-contained residential quarters (mahallas) which radiated from the centre towards the outer wall. Usually, they contained homogeneous ethnic or religious groups and possessed their own wall. Within their pedestrian labyrinth of alleyways (zuqaqs, aqds) were located the inward-looking courtyard houses, and often the whole length of an alleyway was inhabited by one clan or one extended family providing a strong sense of solidarity that still lingers today. (Figure 53)

By contrast, the centre was the setting for public life. It contained most of the major public buildings such as Friday-mosques (jami's), suqs, khans and hammams. Friday-mosques were located at prominent places like crossroads or open squares. The suqs, often hundreds of metres in length, were a very important urban feature and had a distinct hierarchy of functional organisation based on the different needs of commercial groups, traders, artisans and craftsmen. Khans, always located off suqs, provided storage and lodging for traders and visitors. Hammams (public baths) were usually located near mosques because of their religious significance to Islam in providing bodily hygiene. A citadel, normally located peripherally in a commanding position, housed the ruler and his military garrison. With the exception of a few madinas, such as Baghdad, the main cemeteries were always located outside the city walls.

Today, Islamic madinas exhibit an atmosphere of spontaneity, looseness, informality and an apparent lack of deliberate design. This gives them their visual excitement and character. However, their different parts, often contrasting and competing with each other, were held together, like a living organism, by the unifying force of Islam and its strong sense of tradition.



FIGURE 53 AERIAL PHOTOGRAPH OF KARKH'S HISTORIC CORE (C. 1954)

Source: D. G. of Surveys, Baghdad

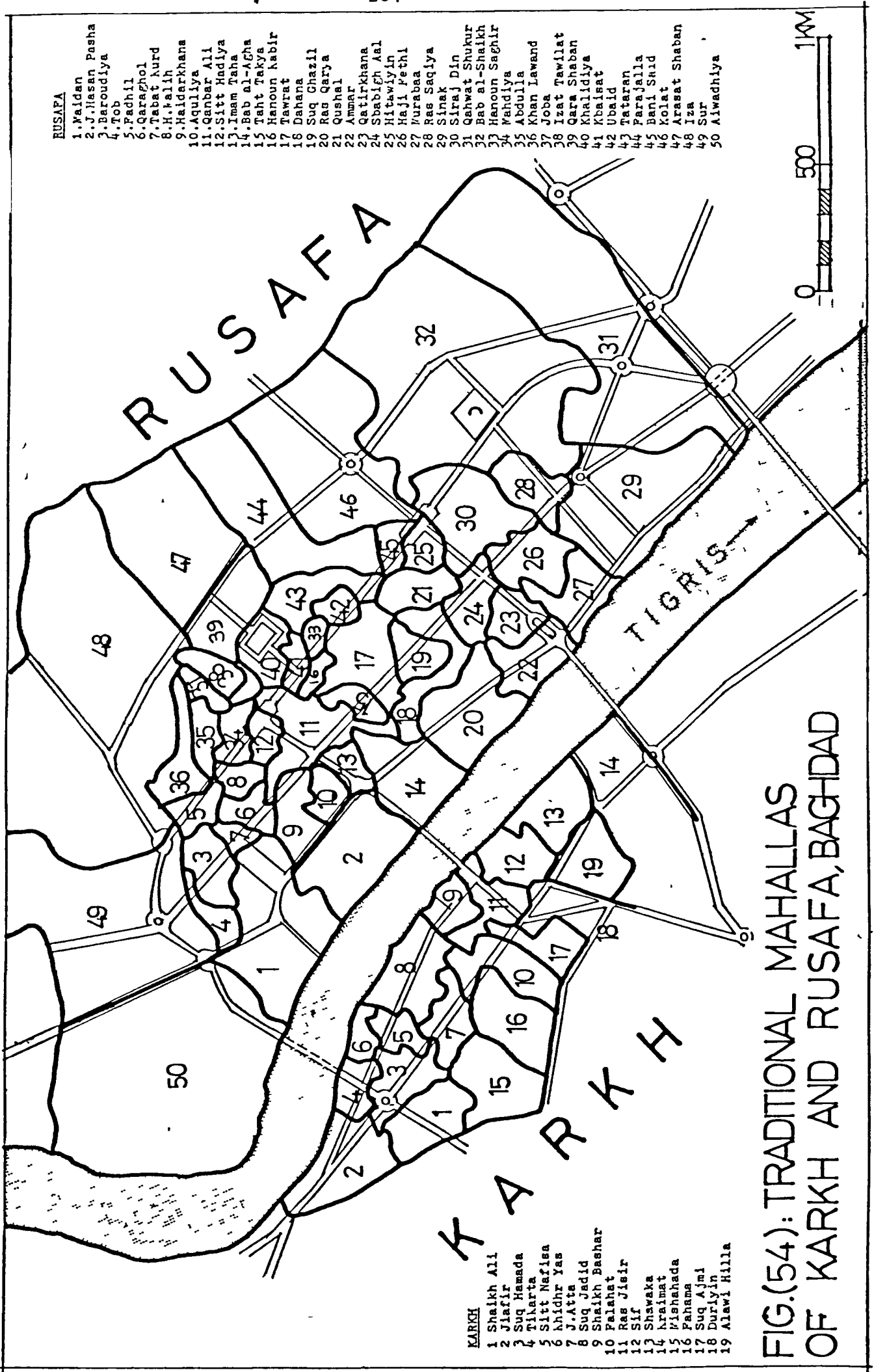
7.2.1 Rusafa

Rusafa, the largest of the four historic cores of Baghdad at about 360 hectares in area¹⁵, is what remains of the old eastern side. It is roughly rectangular in form with its three kilometres-long south-western side bordering the Tigris. It consists of fifty-three mahallas of an average population density of around three hundred inhabitants per hectare¹⁶ (Figures 54 and 55).

Bab al-Shaikh, which was probably in existence before the building of the late twelfth century Gailani Mosque, the most important urban feature in Rusafa, is today the largest mahalla at 73.75 hectares. A typical mahalla, however, ranges between three and twelve hectares. The average percentage of building coverage - mainly by courtyard houses - reaches some eighty-eight per cent, but twenty-four per cent of this is in fact 'open space' represented by the open private courtyards, the remaining twelve per cent is taken up by pedestiran alleyways¹⁷.

The borders of mahallas are no longer physically clear, nor are they easily recognised by any identifiable periphery or pattern as their old walls have long been demolished. Consequently, for the purpose of this research, their administrative boundaries were used. However, Sinak and Murabaa mahallas were easily identifiable because of their relatively recent fabric and architectural characteristics. Mahallas' names, in contrast, yield more information about their origin and general function than their boundaries. The names are often derived from their past ethnic and religious structure, tribal affiliations, a mosque or a tomb of a Shaikh within, or the type of work associated with a particular mahalla. Individual alleyways are often named in the same way (Table 29).

Because Rusafa still functions as the centre for the whole of Baghdad, its historic fabric has been under tremendous pressures for modern development and consequently it has suffered the worst losses compared with the other three cores. Although it is more than six times larger than Kadhimiya's historic core, its incidence of listed items is only a fifty of Kadhimiya's (Table 28). Since World War I, it has lost more



RUSAF A

1. Waidan Pasha
2. J. Hasan Pasha
3. Baroudiya
4. Tob
5. Fadhil
6. Qaraghul
7. Tabat Aurd
8. H. Falih
9. Haidarkhana
10. Aqullya
11. Qanbar Ali
12. Sitt Hadiya
13. Imam Taha
14. Bab al-Agha
15. Taht Takya
16. Hanoun Kabir
17. Tawrat
18. Dahana
19. Suq Ghazil
20. Ras Qarya
21. Qushal
22. Ammar
23. Qatirkhana
24. Spabigh Aal
25. Hitwiyin
26. Haji Fethi
27. Murabaa
28. Ras Saqiya
29. Sinak
30. Siraj Din
31. Qahwat Shukur
32. Bab al-Shaikh
33. Hanoun Saqhir
34. Fahdiya
35. Abdulla
36. Khan Lawand
37. Joba
38. Izat Tawilat
39. Gara Shaban
40. Khalidiya
41. Kbaizat
42. Ubaid
43. Tataran
44. Parajalla
45. Bani Skid
46. Kolat
47. Arasat Shaban
48. Iza
49. Sur
50. Alwadhya

KARKH

1. Shaikh Ali
2. Jiafir
3. Suq Hamada
4. Tikarta
5. Sitt Nafisa
6. Khidhr Yas
7. J. Atta
8. Suq Jadid
9. Shaikh Bashar
10. Falahat
11. Ras Jisir
12. Sif
13. Shawaka
14. Kralmat
15. Mishahada
16. Pahama
17. Suq Ajmi
18. Duriyin
19. Alawi Hilla

FIG.(54): TRADITIONAL MAHALLAS OF KARKH AND RUSAF A, BAGHDAD

TABLE 29 Nomenclature of Traditional Mahallas in Rusafa and Karkh and their Etymological Origins

Tomb/Mosque	Important Urban Feature/Place	Tribal/Kinship Origins	Ethnic Origins	Type of Work
<u>Rusafa</u> Jadid Hassan Pasha Qamr al-Din Fadhil Haidarkhana Aquliya Qanbar Ali Sitt Hadiya Imam Taha Taht al-Takya Ammar Haji Fethi Siraj al-Din Bab a-Sheikh Mahdiya Sayid Abdulla	Maidan Hamam al-Malih Bab al-Agha Hanun al-Kabir (suq) Hanun al-Saghir Suq al-Ghazil Ras al-Qarya Qushal Qatirkhana Muraba'a Ras al-Saqiya Sinak Qahwat Shukur	Qaraghol Hita wiyin al-Kolat Bani Said Faraaj alla Arasat Qara Shaban Qara Shaban Ubaid Khalidiya Kubaisat Albu Mufraj Azat Twailat al-Jubba al-Aza	Tabat al-Kurd Tawrat Camp al-Arman Hai al-Akrad	Barudiya Dahana Sbabigh al-Al Tataran
<u>Karkh</u> Karadat Maryam Sheikh Ali Sitta Nafisa Khidhr al-Yas Jami Atta Sheikh Bashar Sheikh Sandal	Suq al-Ajaimi Suq al-Jadid Suq Hamada Ras al-Jisir Bab al-Sif	Duriyin Falihat Jaifir Mishahda Tikarta Kraimat/ Salhiya		Allawi Hilla Fahama Sha waka

NOTE: Data compiled by author

than twenty-three per cent of its total area through demolition for new streets and clearance schemes alone (Table 30). If one takes other causes into account, such as redevelopment, individual rebuilding and demolition, the real figure would probably be nearer to fifty per cent. These alarming figures show clearly the wide scale of destruction: between them, the Streets of Rashid, Amin, Kifah, Wathba and Jumhuriya, destroyed more than sixty-eight hectares of historic area, or the equivalent of about nineteen per cent of the total area of Rusafa.

Inevitably, these streets, which had been ruthlessly driven through old Rusafa in a straight line, have profoundly altered the social, functional and visual character of the major part of the core. It has been the empirical lesson in most Arab cities that almost immediately after a new street is cut through a historic core it is turned into a linear commercial strip. The same is also experienced along the approaches to new bridges. This is partly due to the almost total lack of zoning, and partly due to the very intentions of local authorities to 'modernise' their dilapidated areas. Indeed, it could be argued that, in Baghdad, these new streets were primarily constructed to induce modern commercial and business enterprises and not - as one might expect - to improve vehicular traffic and accessibility to the existing areas and buildings. (Figure 56)

Unlike the other three cores of Baghdad, the number of Rusafa's inhabitants has been largely static between 1952 and 1965 in contrast to its residential density which has been steadily on the increase. This could be explained in two ways: first, more demolition took place in Rusafa than in other cores and, second, housing opportunities decreased as traditional houses were demolished and replaced mainly by non-residential buildings (Table 31). However, although accurate estimates of population since 1965 are not available these could show an increase because of the acute housing shortage which has developed during the last five years. Population densities in Rusafa in 1965 ranged from as high as 1337 inhabitants per hectare in Hanun al-Saghir to as little as forty inhabitants per hectare in Bab al-Agha mahalla (Table 31). Apart from the major disruption caused by new streets, its functional structure, rather remarkably, still retains some of its historical roots.

TABLE 30 The Destruction Caused by New Streets and Clearance in Rusafa and Percentage of Total Area

Project	Historic Area Destroyed in ha. Dimensions in m*	Percentage of Total Area of Historic Core
1. Rashid Street	40 x 3000 = 12.00 ha.	3.33%
2. Amin Street	50 x 900 = 4.25	1.25
3. Wathba Street	50 x 1250 = 6.25	1.73
4. Kifah Street	50 x 3200 = 16.00	4.44
5. Jumhuriya Street	80 x 3700 = 29.60	8.22
6. Maidan Parking	130 x 250 = 3.25	0.90
7. Shorja Parking	100 x 250 = 2.50	0.69
8. Awaina Clearance	300 x 300 = 9.00	2.50
Totals	<u>83.10</u> ha.	<u>23.06%</u> of Rusafa's Historic Core**

Source: Author's Conservation Survey, Baghdad, 1975-77

NOTES: * Widths of streets include modern development on both sides

** This figure excludes the destruction caused by the numerous other smaller streets



The clearance being carried out in 1954 for the construction of Jumhuriya Street and the approach to the new Jumhuriya Bridge, also under construction, can be seen clearly in this photograph

FIGURE 56 DEMOLITION IN RUSAFA

Source: Aerofilms Limited

TABLE 31 Rusafa. Traditional Mahallas, their Area, Population, Density and Main Causes of Destruction

Traditional Mahalla	Area (ha.)	Population			Population Density 1965 inh/ha.	CAUSES OF DESTRUCTION										
		1952	1957	1965		Decay and Neglect	Projects Clearance	Rashid Street 1915-1930's	Kifah Street 1936-1950's	Jumhouriya Street 1954-1960's	Shuhada Bridge 1940 and Links	Ahrar Bridge 1941 and Links	Modern Development	Parking	Projected Street	
1. Maidaan	23.50	4882	3707	2946	125.36	x										x
2. Jadid Hassan Pasha	15.00	3082	3877	2287	152.46	x										x
3. Baroudiya	6.00	3955	4052	2748	458.00	x			x							x
4. Tob	3.25	2227	2246	744	228.92	x				x						x
5. Fadhl	3.50	1872	2327	2930	837.14	x				x						x
6. Qaraghol	3.75	2529	2414	2336	622.93	x										x
7. Tabat al-Kurd	1.75	961	817	1172	669.71	x										x
8. Hammam al-Malih	2.50	1941	2090	2240	896.00	x										x
9. Haidarkhana	6.00	2621	2254	1709	284.83	x			x							x
10. Aqulya	3.75	1406	1373	890	237.33	x										x
11. Qanbar Ali	11.25	6718	5807	6754	600.35	x				x						x
12. Sitt Hadiya	2.50	1814	1599	1367	546.80	x				x						x
13. Imam Taha & Dashti	2.50	1062	699	678	271.20	x										x
14. Bab al-Agha	11.75	1632	1542	464	39.48	x										x
15. Taht al-Takya	2.75	1502	2791	1583	575.63	x										x
16. Hanoun al-Kabir	1.50	1179	1541	1376	917.33	x				x						x
17. Tawrat	10.25	4011	6481	4136	403.51	x				x						x
18. Dahana	7.25	2809	2748	2436	336.00	x										x
19. Suq al-Ghazil	4.25	2408	1798	839	197.41	x										x
20. Ras al-Qarya	13.75	3147	2492	2420	176.00	x										x

Continued. .

TABLE 31 (Continued)

Traditional Mahalla	Area (ha.)	Population			Population Density 1965 inh/ha.	CAUSES OF DESTRUCTION												
		1952	1957	1965		Decay and Neglect	Clearance Projects	Rashid Street 1915-1930's	Kitfah Street 1936-1950's	Jumhouriya Street 1954-1960's	Shuhada Bridge 1940 and Links	Ahrar Bridge 1941 and Links	Modern Development	Parking	Projected Street			
																1952	1957	1965
21. Qushal	5.50	3673	5379	5438	988.72	x												
22. Ammar	7.75	2174	2442	1679	216.64	x												
23. Qatirkhana	4.25	2233	2065	2174	511.52	x	x											
24. Sbabigh al-AI	6.00	3847	2926	2260	376.66	x												
25. Hitawiyin	3.25	1246	1700	1917	589.84	x												
26. Haj Fethi	7.75	7253	6694	4240	547.80	x												
27. Muraba'a	7.25	2815	3731	3808	525.24	x												
28. Ras al-Saqya	5.75	3078	3144	3499	600.52	x												
29. Sinak	28.50	5758	5788	5001	175.47	x												
30. Siraj al-Din	14.75	8846	13895	8554	579.93	x												
31. Qahwat Shukur*	50.00	7813	7801	6371	127.42	x												
32. Bab al-Shikh*	73.75	21149	23766	15142	205.31	x												
33. Hanun al-Saghir	1.50	1981	1998	2006	1337.33	x												
34. Mahdiya	3.50	3585	3424	3463	989.42	x												
35. Abdulla	3.50	2256	2393	2514	718.28	x												
Totals	359.75	129441	139801	110123														

Sources: Susa, Atlas, p21, D.G. of Civil Affairs, Detailed results of 1957 Census, Baghdad, 1963,
Central Statistical Organisation, Preliminary Report on 1965 Census, Baghdad, 1971,
Author's Conservation Survey, Baghdad, 1975-77

NOTE: *Mahallas whose administrative boundaries include modern neighbourhoods

For example, Bab al-Agha, Taht al-Takya and Suq al-Ghazal mahallas continue to house the major suqs as they did for centuries, the Sarai maintains its former function as an administrative complex, the Citadel is still used by the military, and the Cemeteries of Ghazali and Wardiya maintain their old function.

7.2.2 Karkh

The historic core of Karkh is situated opposite Rusafa on the western side of the Tigris, and is what remains of the oldest parts of Baghdad. It is roughly triangular in form, covering an area of about eighty-five hectares, and consists of fourteen mahallas of cultural interest (Figure 54). Its river-front is about two kilometres long and is still largely occupied by traditional houses which occasionally project over the river giving it a picturesque character (Figures 29, 53, 57 and 58).

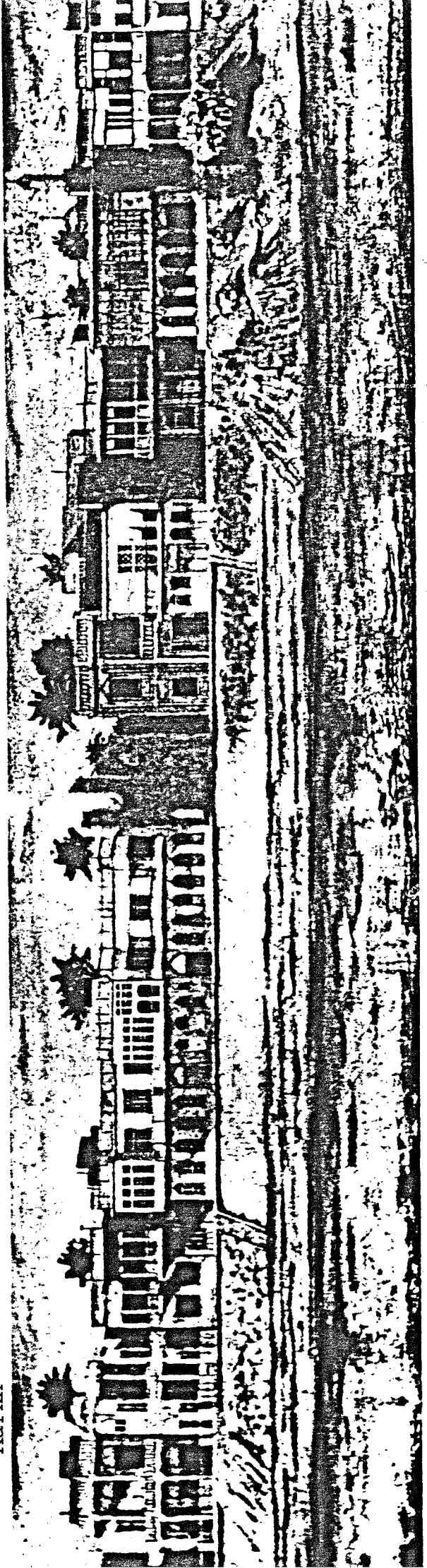
Its average population density is high at 437 inhabitants per hectare. It ranges from as high as 1,260 in Shaikh Ali mahalla to 230 in Ras al-Jisr mahalla (Table 32). It is also significant that, despite the large-scale destruction by Amanat al-Assima, Karkh has managed to increase its population between 1952 and 1965. The conservation survey of this research resulted in listing sixty-three items of cultural interest, giving it an incidence ratio of 0.74 items per hectare which ranks it third of the four cores.

Modernisation first came to Karkh when a tramway linked it to Kadhimiya in 1869. The horse-drawn service was started in Shaikh Bashar mahalla (just west of Nawab House) and ended at the southern side of Astarabadi Suq in Kadhimiya. A straight street, fifteen metres wide and 1,200 metres long, was driven through the mahallas of Shaikh Bashar, Suq Jadid, Sitta Nafisa and Tikarta. When the service was stopped in 1964 this street (now called Musa al-Kadhim Street) was widened and soon developed into a typical linear commercial street.

Similarly, the construction of the first permanent bridge between Karkh and Rusafa in 1941 brought major changes and re-adjustments on both sides. For Karkh, this bridge (now known as Shuhada Bridge) and its approaches have almost completely wiped out Ras al-Jisr mahalla,



Rusafa



Karkh

FIGURE 57 RUSAFSA AND KARKH RIVERFRONTS

Source: Photographed from Paintings by Lorna Salim

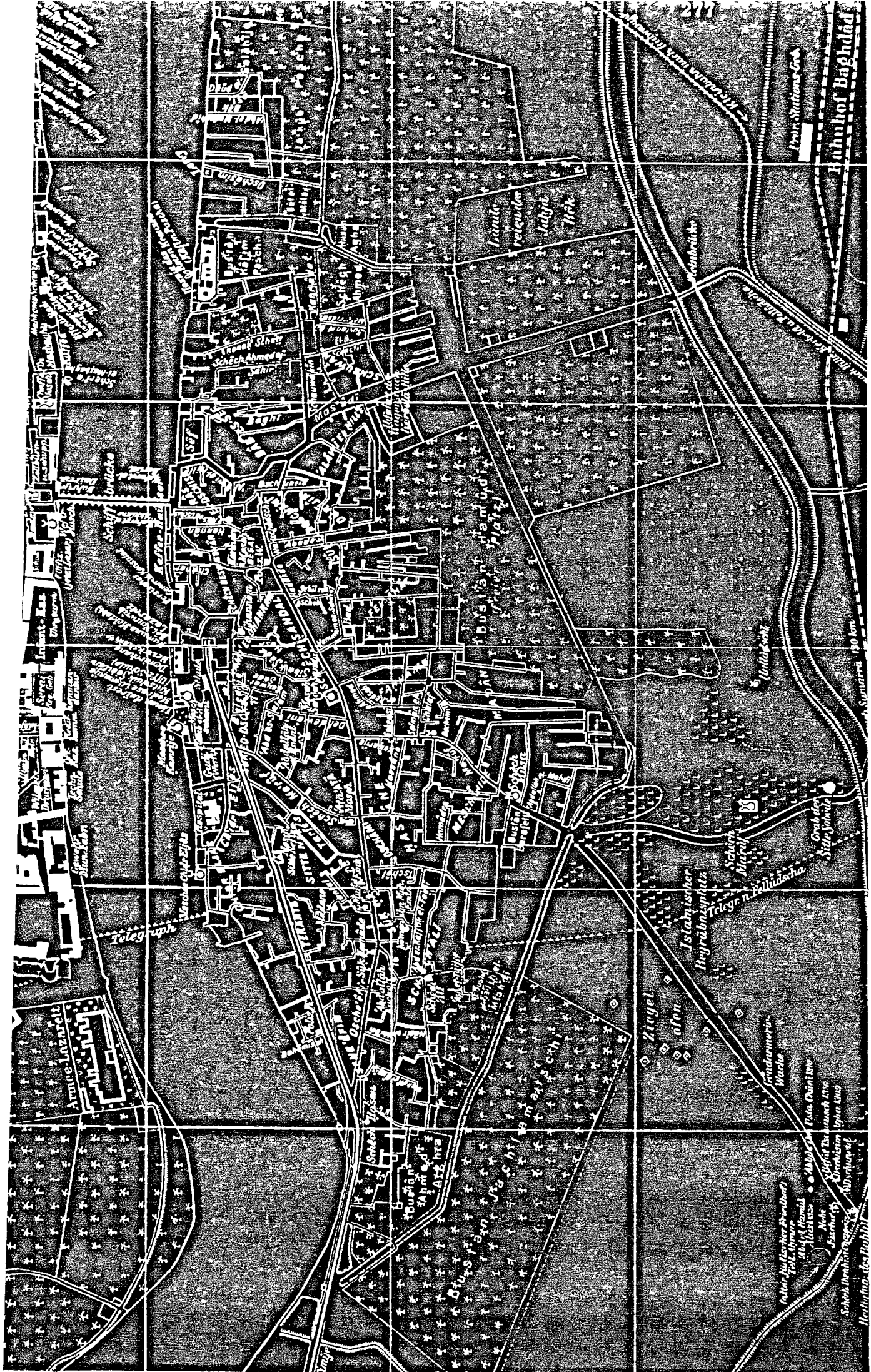


FIGURE 58 KARKH IN 1914 BY THE GERMAN ARMY

TABLE 32 Karkh. Traditional Mahallas, their Area, Population, Density, and Main Causes of Destruction

Mahallas	Area (ha.)	Population			Density inh./ha.	MAIN CAUSES OF DESTRUCTION												
		1952	1957	1965		Neglect and Decay	Clearance Projects	Musa al-Kadhim Street	Harfa Street	Shuhada Bridge/Square	B. Muadharn Bridge/Square	Modern Development	Parking	Projected Corniche Street				
1. Shaikh Ali	8.00	7030	13984	10105	1263.12	x	x	x	x	x								
2. Old Jiafir	10.75	3545	-	4328	402.60	x	x								x			
3. Suq Hmada	7.00	4370	4777	4223	603.28	x	x							x				
4. Tikarta	3.75	1787	1761	1467	391.20	x	x							x				x
5. Stta Nafisa	3.25	2106	1677	1492	459.07	x	x							x				x
6. Khidhr Yas	2.00	1043	1235	870	435.00	x	x											
7. Jami Atta	5.50	2922	3764	2593	471.45	x	x											
8. Suq Jadid	10.00	3445	3638	2424	242.40	x	x											
9. Shaikh Bshar	3.75	1789	1621	2218	591.46	x	x											
10. Shaikh Sandal	1.75	756	902	784	448.00													
11. Ras Jisir	6.50	1892	2088	1490	229.23													
12. Bab al-Sif	6.25	2431	3196	2854	456.64													
13. Shawaka*	7.75	4046	4180	4001	516.25	x	x											
14. Kraimat/Salhuya*	31.25	6627	7548	7969	255.00	x												
Totals	107.50	43789	-	46818														

Sources: Susa, Atlas, p. 21; D. G. Civil Affairs, Detailed Results of 1957 Census, Baghdad, 1963, Central Statistical Organisation, Preliminary Report on 1965 Census, Baghdad, 1971, Author's Conservation Survey, Baghdad, 1975-77

NOTE: *Mahallas whose administrative boundaries include modern neighbourhoods

destroyed many important mosques and buildings¹⁸, and attracted considerable modern commercial and administrative buildings, especially along and off Nasr Street.

Another major destruction in Karkh was caused in the late 1960's by the construction of Haifa Street. This new street was arbitrarily and perhaps unnecessarily cut straight through six traditional mahallas. Falahat, Fahama, Shaikh Sandal, Jamī Atta, Suq Hamada and Jiaifir. It destroyed a strip 60 m wide and 1,500 m. long (more than ten per cent of the total area of historic Karkh), including the outstanding Shamī Hammam and numerous other buildings of cultural interest¹⁹ (Table 33).

The new Bab al-Muadham Bridge, now under construction, will span the Tigris between the northern tip of Rusafa and the northern mahallas of Karkh. It has already caused the loss of most of the areas of Khidhr al-Yas and Tikarta mahallas, while its approaches ruthlessly cut across the mahallas of Suq Hamada and Shaikh Alī. It is almost certain that, within the next decade or so, most of the northern mahallas of Karkh will be replaced by modern commercial development. Already, the price of land near and around the bridge has shot up remarkably quickly in anticipation of this future development.

The interesting views of the long river-front of Karkh, especially at Tikarta and further down at Bab al-Sif and Shawaka, will soon be destroyed by a projected 'Corniche' Street along the banks of the Tigris. Karkh has already been drastically disrupted and its character considerably changed and any remaining areas and buildings of interest, therefore, must be strongly defended against further encroachment. This corniche street which has been constructed in some places will almost certainly affect the structure of the early thirteenth century Qumriya Mosque whose unique and fragile minaret lies only a few metres from the Tigris. It will also result in the destruction of Khidhr al-Yas Mosque and scores of superb houses on the river-front.

Within the last three decades, historic Karkh has lost about twenty hectares of its fabric through two new streets and two bridges which alone represents a loss of more than twenty-two per cent of its total area (Table 33). This figure, however, does not reflect the true scale of destruction of Karkh as the numerous new small streets, redevelopment, and individual rebuilding are not recorded and therefore excluded.

TABLE 33 The Destruction Caused by New Streets and Bridges in Karkh and Percentage of Total Area

Project and Dimensions (m.)	Historic Area Destroyed (ha.)	Percentage of Total Core
1. Shuhada Bridge, Square and Parking (100 x 300)	3.00	3.50
2. Bab al-Muadham Bridge and its Approaches (60 x 900)	5.40	6.35
3. Nasr Street (60 x 300)	1.80	2.11
4. Haifa Street (60 x 1500)	9.00	10.58
Totals	19.20 ha.	22.50%

Source: Author's Conservation Survey, Baghdad, 1975-77

7.2.3 Aadhamiya

Aadhamiya is what now remains of the Abbasid Shamasiya and Rusafa. This historic core was first developed as a cemetery by the Sassanids and the Abbasids continued to use it as a burial place. However, when the celebrated Sufi, Imam al-Aadham Abu Hanifa died in 768, he was buried here and his shrine soon induced pilgrims and urban settlements. The cemetery was then known as al-Khazaran after the mother of Caliph al-Rashid who was also buried here. During the early Abbasid and Buwaihid phases Shamasiya continued to be physically integrated with the larger complex of Eastern Baghdad. Since the fall of the city in 1258, it has shrunk considerably but maintained its core because of the importance of its mosque. This mosque and its cemetery, therefore, are very important historic landmarks. It still remains the most important urban feature in the whole of the northern zone of Eastern Baghdad.

The existing historic core of al-Aadhamiya consists of four traditional mahallas, all clustered around the mosque. They are: Shiyoukh, the largest of the four, Safina, Hara, and Nassa (Figure 59). According to the 1957 Census, the population of the four mahallas was 27,421 which gives a density of 144 inhabitants per hectare. However, this relatively low figure is misleading because the administrative boundaries on which the census was based were not confined to the historic fabric but included considerable areas of modern development, orchards, and vacant land. If one takes Hara, which was exclusively traditional, as a more representative example, then the density rises to 373 inhabitants per hectare (Table 34).

Although the total area within the administrative boundaries of the four mahallas is 190 hectares, the historic fabric that remains of interest today is only about twenty hectares. This is because of the large-scale destruction caused by modern development that has taken place within and around it since the early 1940's. The main destructive cause was, as usual, a new street. The al-Aadham Street effectively ended the centuries-long relative isolation of the core from Eastern Baghdad, but destroyed a long area of al-Nasa mahalla and its

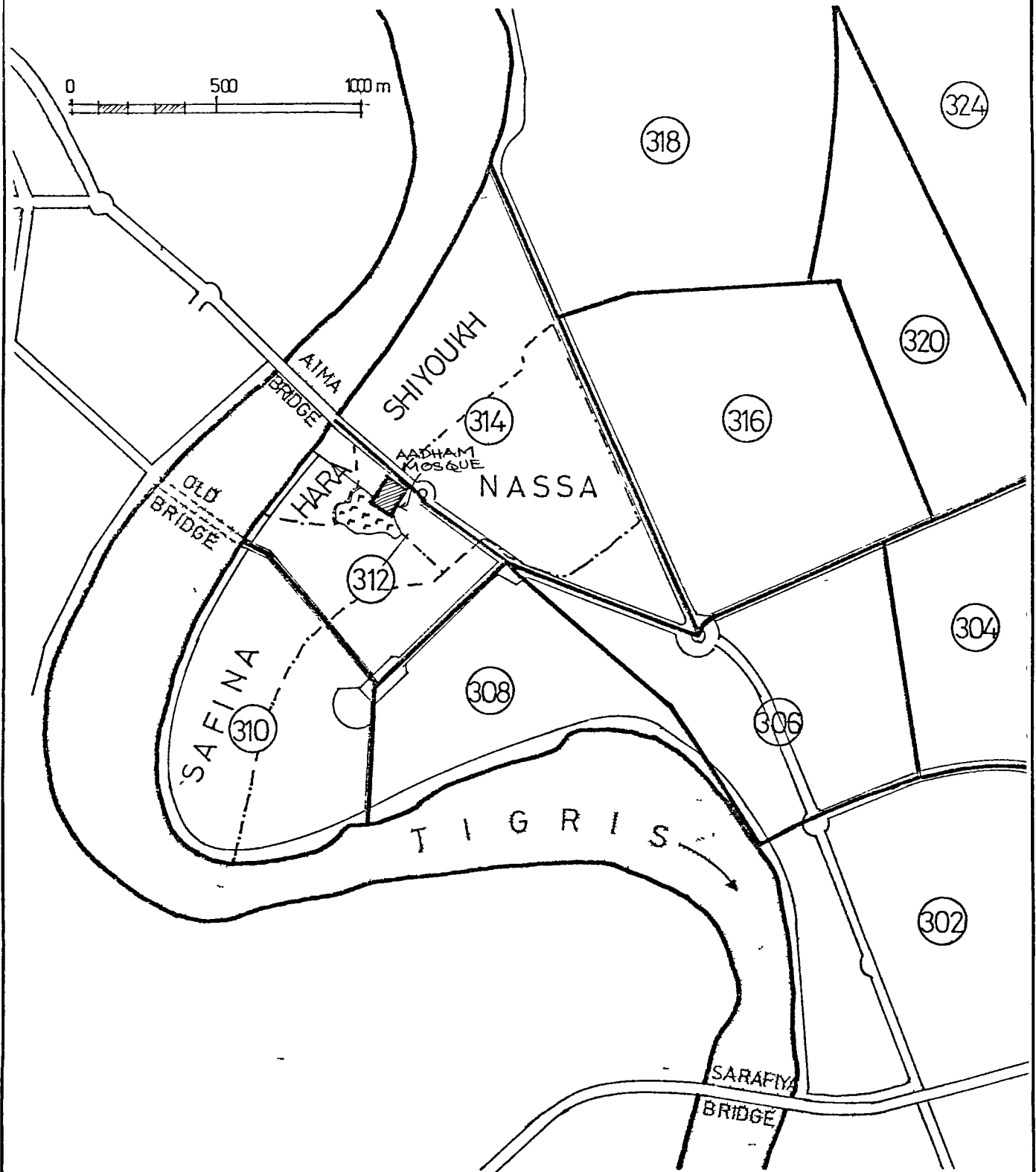


FIGURE 59 AADHAMIYA - TRADITIONAL MAHALLAS AND SURVEY BLOCKS

TABLE 34 Aadhamiya: Traditional Mahallas, their Area, Population, Density and Main Causes of Destruction

Mahalla	Area (ha.)	Population			Density 1957 inh/ha.	Main Causes of Destruction									
		1952	1957	1965		Neglect and Decay	Clearance Projects	Imam al-Aadham Street	Almma Bridge (1957)	Modern Development	Parking	Corniche Street			
1. al-Nassa	47.50 (2.0)*	6802	8615		181.36	x		x	x	x					
2. al-Hara	5.25 (2.0)	1214	1958	1452	372.95	x	x		x						x
3. al-Safina	49.25 (6.0)	6487	8927		181.25							x			x
4. al-Shiyoukh	88.50 (10.0)	6098	7921		89.50					x					x
Totals	190.50 (20)*	20601	27421												

Sources: SUSA, Atlas, p. 23, D.G. Civil Affairs, Detailed Results of 1957 Census, Baghdad, 1963, Author's Conservation Survey, Baghdad, 1975-77

NOTE: * Figures in brackets are areas of cultural interest only

former cemetery. It soon became a commercial street, thus attracting even more modern development in and around the historic core. The surrounding green areas of palm orchards were subdivided and cleared for new residential suburbs.

The erection of al-Aima Bridge in 1957, which replaced the earlier bridge of boats located in Safina mahalla, effectively shifted the development emphasis nearer to the mosque. Again, as was the case with Shuhada and Ahrar Bridges, this bridge triggered the destruction of the greater part of Hara and some parts of Shiyoukh.

The construction of a corniche street along its river-front resulted in more losses and intrusions. Some of the traditional houses destroyed by this street were of outstanding architectural value, a number of which were originally built by rich and notable Ottoman families who preferred to live nearer to the sacred Sunni shrine than in East Baghdad. Formerly, the whole of the river-front of historic Aadhamiya was physically defined and stabilised by a high brick embankment. The embankment protected the town from floods but it was also used by the houses to cantilever their living rooms over the Tigris. Aesthetically, the effect was very pleasing indeed and gave a dramatic visual interplay and physical affinity with the waters of the Tigris. Indeed, before the advent of the French-inspired corniche streets, Karkh, Rusafa, and Aadhamiya, were all characterised by this strong urban element. Then, the Tigris was much more effectively used as a means of transport than today, and the embankment (Msanaya) was provided with many stepped landings and bays (sharias), which played a vital role in the social and commercial life of the city.

The most recent wave of official destruction came about when the Awqaf and Amanat al-Assima cleared an area of about fifteen hectares west of the mosque to facilitate its expansion. Some fine buildings were unnecessarily pulled down, including several mosques and a sixteenth century hammam built by Sultan Sulaiman²⁰. The author's conservation survey resulted in listing only twelve items of cultural interest which means an incidence of 0.60 items per hectare, making it the last rank amongst the four historic cores of Baghdad (Table 28).

7.2.4 Kadhimiya

Kadhimiya, the fourth historic core of Baghdad, is relatively more preserved than the others. This is also indicated by the number of items of cultural interest listed by the author in his conservation survey: 236 items within its sixty hectares giving the highest incidence ratio in Baghdad at 4.05 items per hectare (Table 28). For this reason, it is treated in more detail here than the other cores. Its existing core is typical of all shrine-cities in Iraq such as Samarra, Karbala and Najaf. It is roughly circular in form, about one kilometre in diameter, and with the mosque occupying its centre and dominating its functional and social life as well as being one of the finest in Islam. The core consists of four traditional mahallas: Shiyukh, the largest, Tell, Dabagh Khana, and Qatana (Figure 60). The southern and north eastern mahallas seem to be its oldest parts.

Kadhimiya derives its name from the shrine of Imam Musa al-Kadhim, the revered Shi'i descendant of the Prophet who died and was buried here in AD 800. During the early Abbasid period, the same area was used as burial grounds for those who belonged to the Quraish tribe of Mecca and became known as 'Quraish Cemetery'. It is said that when Jaafar, the son of Caliph Mansur, died in 767, Mansur and other mourners walked from the Round City to Quraish Cemetery where he was buried²¹. This suggests that Kadhimiya may have been nearer to the Round City than some scholars believed. Among other notables who were buried here are: Ibn Hanbal (d. 903), Abu Yousif (d. 799), whose Tomb still exists near the Kadhimain Mosque, and Zubaïda (d. 831), the wife of Caliph Harun al-Rashid, whose grave has long been destroyed but is still mistaken for that of Zumarrad Khatun in Karkh.

By the late Abbasid period, Kadhimiya seems to have developed into a small township which probably included the cemetery within its walls²². Kadhimiya has suffered, like old Baghdad, from destruction by fires, recurrent floods, sectarian conflicts such as the one in 1051, and by Hulagu in 1258. However, the town began to thrive again and, when the Muslim Safavids occupied Baghdad in 1509, it was boosted by several important works, one of which was the complete rebuilding of the Kadhimain Mosque.

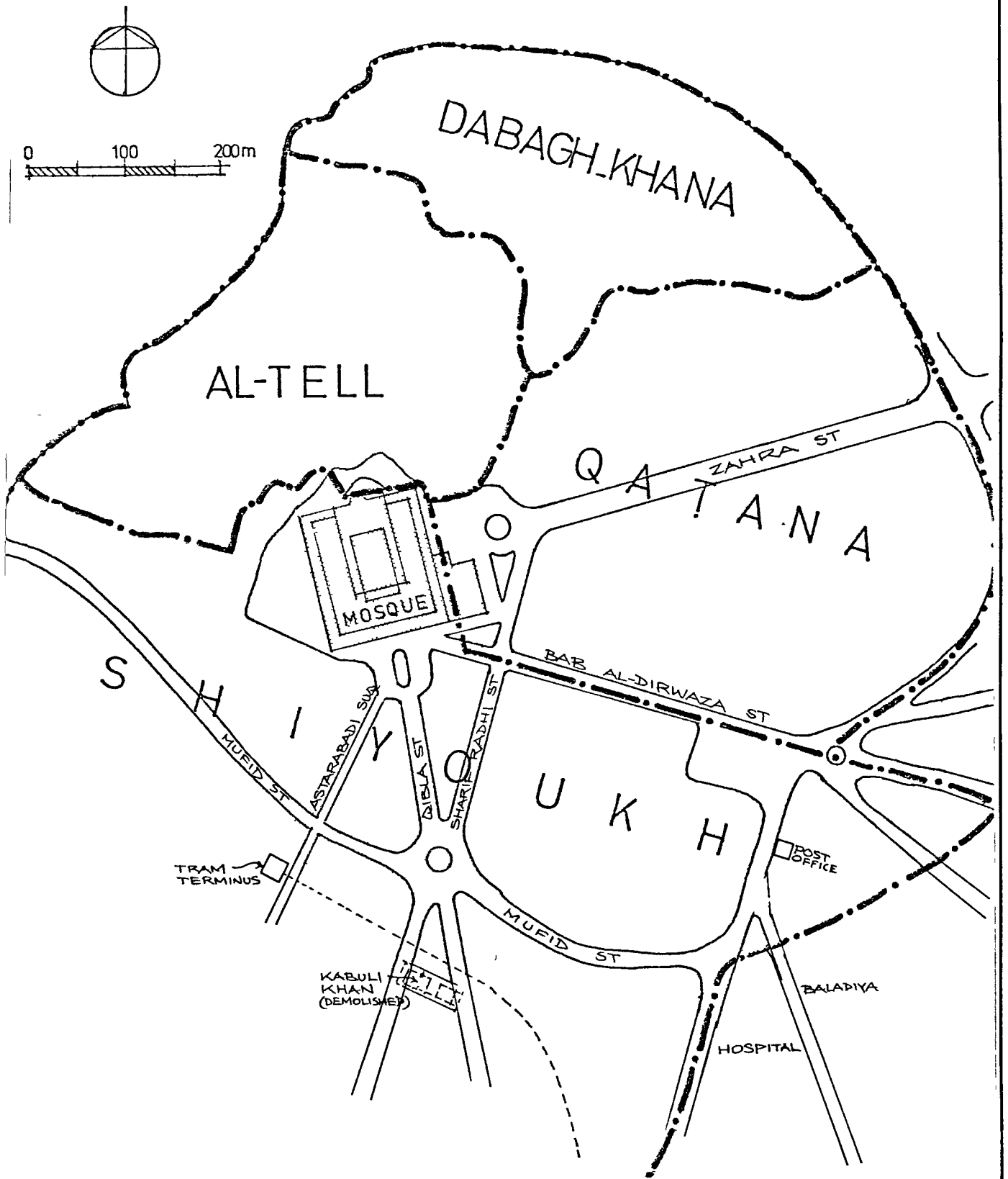


FIGURE 60 KADHIMIYA - TRADITIONAL MAHALLAS

TABLE 35 Kadhimiya: Traditional Mahallas, their Area, Population, Density, and Main Causes of Destruction

Mahallas	Area (ha.)	Population			Density 1967 inh/ha	Main Causes of Destruction						
		1947	1957	1965		Neglect and Decay	Clearance Projects	Qibla Street and Square	Sharif Radhi Street	Zahra Street	Modern Development	Parking
1. Shiyoukh	54.39*	17259	19729	17718	325.75	x	x	x	x	x	x	x
2 Tell	11.12	5499	7585	8893	799.73	x	x					
3. Dabaghkhana	7.38	7396	9353	8960	1214.09	x						
4. Qatana	16.72	8137	9675	9332	558.13	x	x		x	x		x
Totals	89.61**	38291	46342	44903								

Sources: Susa, Atlas, p. 25, D. G. Civil Affairs, Detailed Results of Census 1947, Baghdad, Central Statistical Organisation, Preliminary Report of Results of 1965 Census, Baghdad, 1971, Author's Conservation Survey, Baghdad, 1975-77

NOTES: *This mahalla includes modern neighbourhoods and the area of its traditional part is probably nearer to 25 hectares.

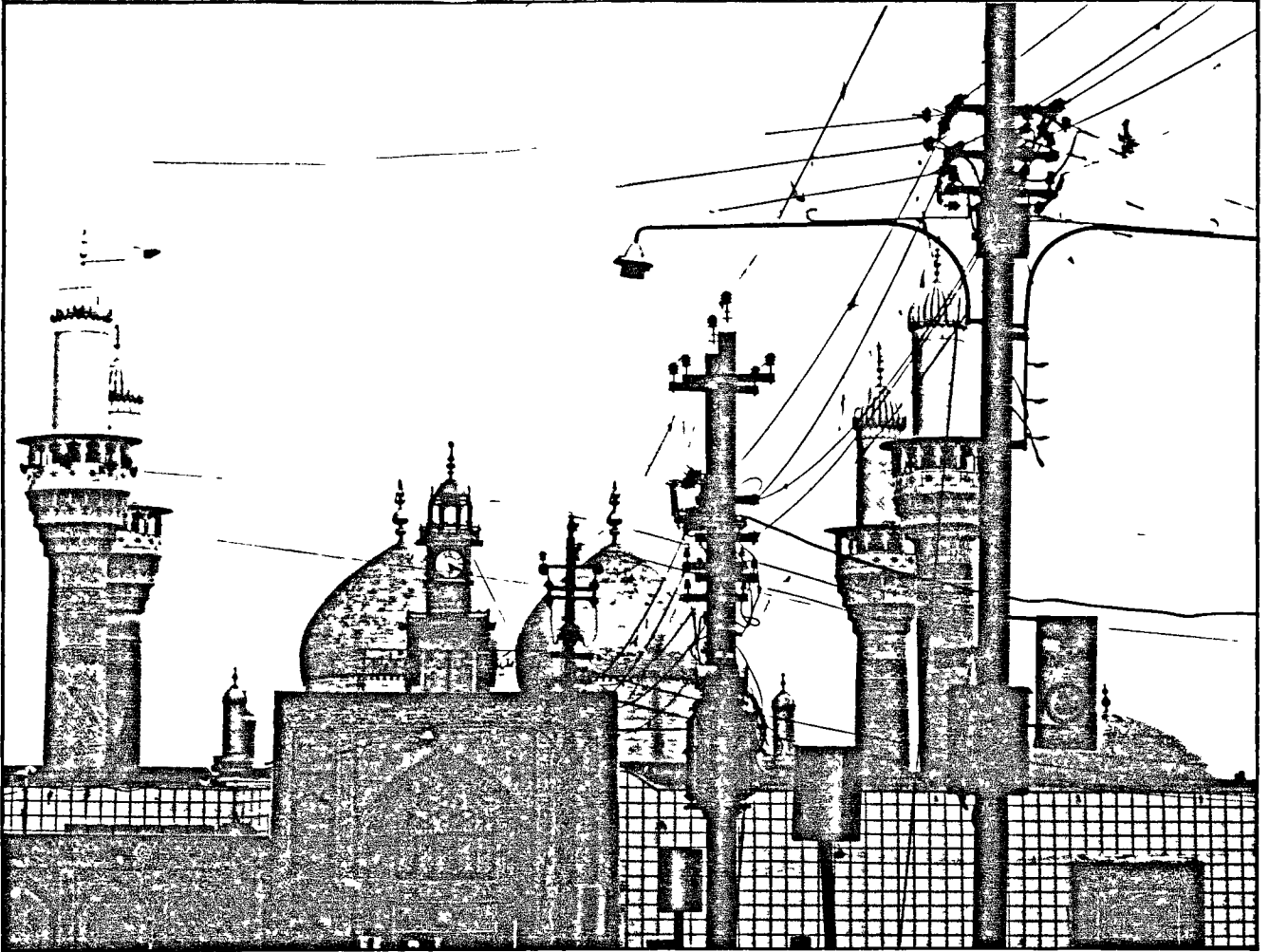
**The total used for the historic core in this research is 58.59 hectares.

Kadhimiya's long sustained autonomy and physical isolation from the rest of Baghdad was largely due to its position as one of the most important Shi'i pilgrimage centres in Islam. Every year, it attracts thousands of pilgrims from all parts of Iraq and other parts of the Near East, especially Persia. Consequently, it still exhibits a marked Persian influence in its social, urban and architectural character.

Because the Censuses of 1947 and 1965 used administrative boundaries which are different to those of the traditional mahallas of Kadhimiya, especially Shiyukh, the population of its historic core cannot be determined. The population of the 'Census' Kadhimiya increased from just over 38,000 in 1947 to about 45,000 in 1965²³. However, Polservice carried out a survey in Kadhimiya in 1973 and estimated the population of the historic core at 28,000 inhabitants based on a ten per cent sample²⁴. This gives an average population density of about 482 inhabitants per hectare. As in other cores of Baghdad, the density fluctuates and is not uniform throughout its mahallas. Dabagh Khana, whose area was given by Susa as 12.75 hectares²⁵, had a density of about 542 in 1952 but reached a staggering 1214 inhabitants per hectare in 1965 (Table 35). These figures demonstrate the overcrowded conditions in Kadhimiya. According to Polservice,²⁶ the occupancy ratio was as high as 2.26 persons per room.

Polservice's survey of the core revealed that it contained a total number of 3329 buildings, out of which 2323 (about seventy per cent) are of traditional design²⁷. The sizes of residential plots, which numbered 3008 in 1973, varied mainly between 50 and 150 sq. m. It was also revealed that the overwhelming majority of these plots are privately owned, of which 58.8% are owner occupied, and 40.5% are rented²⁸. This survey, as well as the author's conservation survey, showed that the majority of buildings within the historic core are in a poor structural condition²⁹.

According to Polservice's socio-economic survey, which involved 466 households, as many as 97% of the households were only earning up to fifty Dinars per month³⁰. This means that the core is almost solidly occupied by the poorest income groups and, therefore, should have a



This fine view of Kadhimain Mosque from Zahra Street is severely marred by unsightly poles and overhead wires which intrude upon the beauty of its traditional architecture

FIGURE 61 EYESORES IN KADHIMIYA

Source of Photograph: Author, 1976

direct effect on any future conservation plan. It would be unrealistic, for example, to expect owners to pay for conservation programmes themselves and consequently other alternatives would have to be found.

Kadhimiya's introduction to modernisation started in 1869 when its long isolation was effectively ended by the tram service. The tramway was started at a purposely-built terminal building (listed as No. 794) and located two hundred metres southwest of the mosque. Its morphological influence, as in Karkh, was immediate and revolutionary. It soon induced and attracted many modern commercial and business developments along the southern fringes of the old core. Among these were the important Astarabadi Suq, and many large khans such as Kabuli³¹.

In 1884, Kadhimiya was linked physically to Aadhamiya by a bridge of boats which was later moored several hundred metres down river and located near the new textile factory of Fatah Pasha (built in 1926). Numerous other governmental buildings began to be built, mainly in the southeastern fringe of the core. These included the Sarai Building, built in 1900, the Post Office, built in 1935, and the Royal Hospital, built in the late 1930's (Figure 60). But most of these modern developments did not directly affect the historic fabric of the core itself, their effect had been mainly functional and spatially peripheral.

Politically, Kadhimiya, being an important seat of the Shi'i sect, has nearly always been at odds with Sunni-dominated past governments. This observation could explain, perhaps, the relatively well-preserved state of its core, governments were either not too concerned with its modernisation, or too sensitive to take radical planning decisions that might lead to local unrest and opposition. This was illustrated by the tragic so-called 'Post Office Incident'. In 1935 the government started erecting a new post office building at about four hundred metres southeast of the mosque and at a site of an old but still revered cemetery. A large crowd of local inhabitants rioted against the loss of this cemetery and burnt down the new building. The clash with the police led to thirteen deaths and more than eighty casualties³². For nearly twenty years after this incident Kadhimiya seems to have been largely excluded from major governmental development programmes.

TABLE 36 Kadhimiya. Main Causes of Destruction and Percentage of Total Area

Project and Dimensions (m.)	Historic Area Destroyed (ha.)	Percentage of Total Area
1. Sharif Radhi Street (12 x 200)	0.24 0.40	0.4%
2. Qibla Street/Square (22 x 200) (20 x 200)*	0.44 0.50 0.40	2.28
3. Zahra Street (60 x 300)	1.80	3.07
4. Modern Building near Astarabadi House	0.35	0.59
5. Bab al-Murad Square	1.00	1.70
6. Clearance west of mosque	0.60	1.02
7. Clearance north of mosque	0.50	0.85
Totals	6.23 ha.	10.63%

Source: Author's Conservation Survey, Baghdad 1975-77

NOTES: *The dimensions of streets include modern development on both sides, and are calculated by author.

Bab al-Dirwaza Street is excluded

Total area of historic core is taken at 58.59 hectares.

The increased sense of security and stability during the early and middle 1950's began to affect Kadhimiya as much as it did other areas in Baghdad. New streets were constructed, a new permanent bridge (Aima Bridge) replaced the old one in 1957, and considerable modern residential and commercial development quickly surrounded and penetrated the old core. The new streets of Sharif al-Radhī (12 m. wide) Qibla (22 m. wide), and more recently, Zahra (30 m. wide), were forcibly driven through the dense historic fabric of Shiyoukh and Qatana mahallas (Table 36). Zahra Street, completed in the late 1960's, is a direct consequence of the Aima Bridge. It not only caused the destruction of three hectares of some of the most interesting parts of the core but also brought with it a concomitant array of modern multi-storey blocks which are mostly unsightly and unsympathetic to their surroundings

Table 36 shows that, since the 1950's, more than ten per cent of the total area of the historic core has been demolished, nearly three-quarters of it within the last decade. The clearance of the historic fabric that surrounded the mosque accounted for 2.6 hectares or 4.5% of the core. The clearance of the fabric round mosques and other important monuments in Iraq is a recent unfortunate practice whose philosophy seem to be based on an ill-conceived imitation of Western architecture.(Figures 62 and 63)

Indeed, it is ironic that the clearance west of the mosque was first proposed by the Polish firm of Polservice whose planners were charged by Amanat al-Assima to prepare a conservation plan for the historic core of Kadhimiya. Today, the mosque stands alone in a pool of vacant land surrounded by half-amputated traditional houses on the north and by insipid multi-storey modern buildings on the south.

In conclusion, because of various past religious and political factors, Kadhimiya has managed to evolve and retain a very rich and interesting historic core. Despite the recent tragic losses which it has suffered under the onslaught of insensitive modern development and 'planning', there is still a rare but brief opportunity to stop further destruction and conserve its unique core.

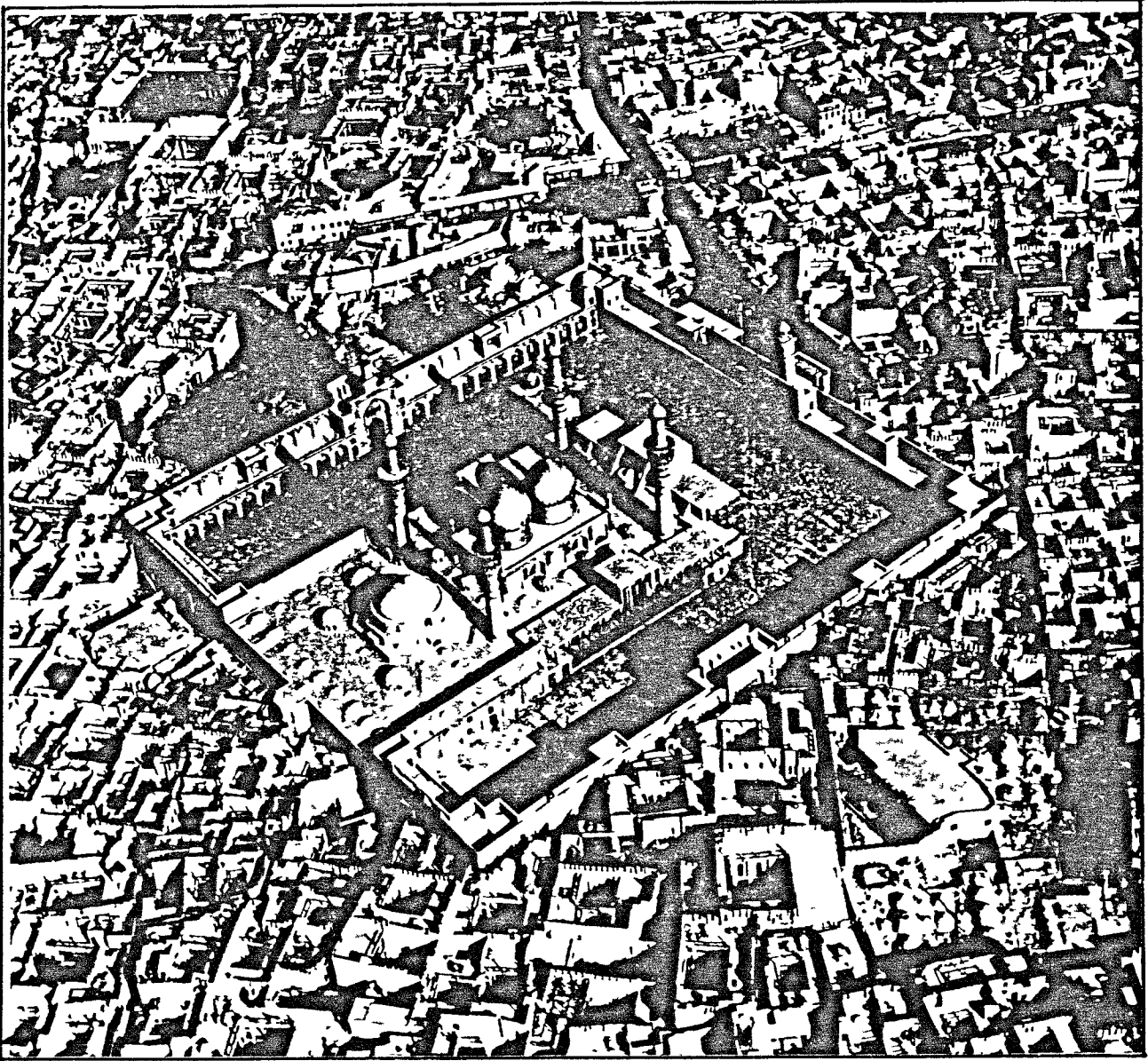
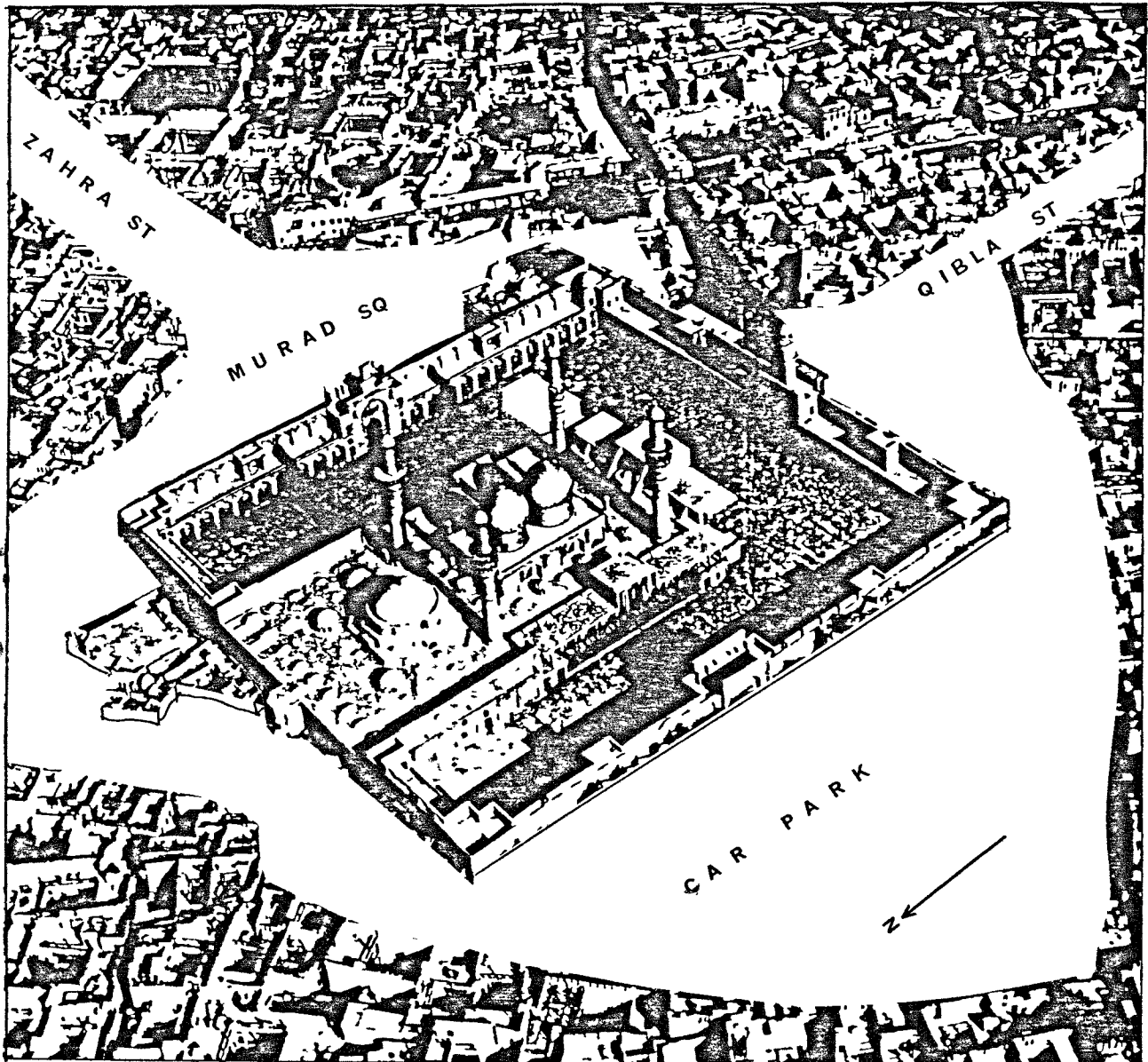


FIGURE 62 KADHIMAIN MOSQUE AND ITS TRADITIONAL SURROUNDINGS
IN THE 1940'S (see Figure 63 for comparison after the
demolition of surroundings)

Source: Aerofilms Limited



The separation of the Mosque from its normal close-knit surroundings in 1976 has made an isolated spectacle of the Mosque instead of treating it as part of the living environment. It thus becomes more a 'museum piece' than remaining the focus of the everyday worship of the ordinary people.

FIGURE 63 KADHIMAIN MOSQUE IN 1976

7.3 Urban Planning

Efforts to plan for Baghdad's modern development go back to the late Ottoman era. During the British occupation the city witnessed several important developmental projects, services and general municipal improvements. Major J. M. Wilson (d. 1965), an architect in the British Army, was appointed as Director of Public Works in the 1920's³³, and was instrumental in the preparation of a sketch master plan for Baghdad and designs for numerous public buildings³⁴. Another master plan was prepared in 1936 by Brecks and Bronowener of Berlin³⁵. Because of the lack of records of this plan in Baghdad it is not possible to assess its effect, if any, on the city. It is known, however, that it was designed for an 'ultimate' population of half a million, and that it was obsolete by the time it was submitted as the population had reached this figure by the early 1940's.

During the 1950's, major developmental programmes were initiated and for which extensive foreign technical help was sought. The lack of experienced personnel, coupled with the incessant drive of municipal authorities to emulate Western cities, resulted in a wholesale importation of Western planning know-how. Within less than ten years (1956-65), three firms from three different Western countries were called to prepare a master plan for Baghdad: Minoprio, Spencely and Macfarlane (U.K.), 1956, Doxiadis Associates (Greece), 1958, and Polservice (Poland), 1965. This rapid succession of plans could be interpreted not only to reflect the instability of the Amanat, but also the laissez-faire way in which it treated planning. Evidently, the problem lay not in the lack of a plan but rather within itself as a feeble administration seeking an unattainable panacea.

Indeed, even important decisions such as inviting a foreign firm seem to have been impromptu and taken by a few or one influential official with little or no experience in planning. This was implied in a letter to the author from Mr. Macfarlane of the British firm³⁶:

"Mr. Minoprio was invited by the British Council to give a talk in Baghdad on town planning. The Lord Mayor was in the chair. Soon after this we were invited to prepare the Baghdad master plan. But agreement was with the municipality and followed the lines suggested by us."

7.3.1 Amanat al-Assima

Amanat al-Assima, called Amanat hereafter, is the municipality of Baghdad. It is the largest municipal body in Iraq, employing thousands of people of various skills: 1082 civil servants and 10,661 ancillary staff³⁷. Administratively, it enjoys a special municipal status and is linked directly with the central government, its Mayor (Amin al-Assima) acting as a Cabinet Minister. This direct administrative linkage was devised so that the Amanat can now obtain special governmental funds to finance its large projects and secure a speedier sanction of its policies.

The Mayor, who is appointed by the government, chairs the Municipal Council which is composed of seventeen members charged with the formulation of general policy. The Council is assisted by an executive committee in charge of studying and carrying out the Council's resolutions and recommendations. The organisational structure of the Amanat consists basically of nine departments each of which deals with a particular municipal activity (Figure 64). The majority of its personnel (85.5%) are in fact ancillary workers mostly employed in daily municipal services and local branches. The technical department, which is the one relevant to this study, employed a total of 165 civil servants (officials) and 242 workers in 1972.

The technical department is responsible for development control, issuing planning permits, the implementation of the master plan and its follow up. However, according to Shafi³⁸, a United Nations planning consultant in Baghdad from 1966 to 1972, the planning section of this department had "three qualified planners, four architects and a few engineers, and assistants and draughtsmen". This gives a ratio of one planner for nearly every million inhabitants in Baghdad. This is a very serious shortage indeed, and in his report to the Iraqi planning authorities in 1970, Professor James suggested a crude rule of thumb ratio of one planner for every 50,000³⁹. If one is to follow this method to estimate the number of planners needed by the Amanat then it would be at least sixty. It is of interest to note that he quoted the rate of one planner to every 10,000 to have been a short-term target in Britain⁴⁰. To ensure a competent planning team this department would have to be augmented

AMANAT AL-ASSIMA

A. <u>Mayor</u> (Cabinet Minister Status)		
B. <u>Municipal Council</u> (17 members)		
C. <u>Executive Committee</u>		
D. <u>Departments :</u>	<u>Officials</u>	<u>Workers</u>
1. Administration	583	269
2. Finance	143	55
3. Legal	80	36
4. Services	91	3518
5. Transport	181	240
6. Abattoirs	85	346
7. Zawra Park	7	2
8. <u>Local Branches:</u>		
<u>Administration</u>	2	-
Central	92	877
Karkh	99	1108
Aadhamiya	78	767
Kadhimiya	70	769
Karrada	63	785
Thawra	45	381
New Baghdad	38	342
Maintenance	9	924
9. <u>Technical</u>		
<u>Head Office</u>	18	39
Planning	14	65
Design & Lab.	35	22
Implementation	45	167
Master Plan	2	-
<u>Totals</u>	1802	10661
<u>Grand Total</u>	<u>12,463</u>	

FIGURE 64 THE ADMINISTRATIVE STRUCTURE OF AMANAT AL-ASSIMA

Source: Amanat al-Assima, Amanat al-Assima in Four Years, Baghdad, 1972 (Modified by Author)

on a substantial scale by more planners and skilled personnel from other related disciplines.

Financially, the Amanat is largely dependent on central government funds and regular allocations. Although its small budget increased from 4.3 million Dinars in 1969 to 7.8 in 1972, Baghdad city received more than 40 million Dinars between 1970 and 1974 from the central government⁴¹. The annual per capita income of the Amanat was less than 2.6 Dinars in 1971 (about £3.6 for the same period), and its tax and permits revenues constituted only 20% of its budget for the same period⁴². It should also be noted that most of its budget must go into salaries and maintenance work and into the implementation of specific projects. Consequently, under such conditions its capacity and efficacy for urban improvement are minimal.

As an official body in charge of planning Baghdad, the Amanat has shown little interest in conservation. Indeed, it has already been shown here that it was itself responsible for the demolition of considerable areas of cultural interest. Its present technical, administrative and financial conditions add to its apathy towards its heritage. The Master Plan Law (No. 156 of 1971) refers casually to the importance of conservation, but this issue has not yet been elaborated in regulations.

However, within the last few years, there have been some positive steps for conservation which were probably caused by this Law. Several ad hoc committees had been set up from the various protective organisations in Baghdad and were charged specifically to study the question of protecting Baghdad's heritage. One such committee was made up of representatives from the Amanat, Awqaf, Tourism and the Unesco Conservation Centre⁴³. Another one, set up in 1971, included representatives from the Directorates of Antiquities and Planning. Several meetings were held but, unfortunately, their minutes and recommendations were classified as confidential and, therefore, not made available to the author. The reason given was that the records included recommendations to purchase certain privately-owned properties which, if prematurely revealed, could cause speculation⁴⁴.

Another committee was set up in 1973 and fortunately this time some

details have come indirectly to the author. It seems that after reviewing the reports of previous committees, it submitted its own to the Ministry of Information. In turn, the Ministry secured the approval of the Ministry of Planning to allocate the sum of half a million Dinars to finance the committee's intended appropriations and other work. In March 1974, the Planning Board responded favourably:⁴⁵

"To create a new article in Chapter 25 to be number 5 in the annual tables of 1973/74 and under the heading: Conservation of Cultural Property in Baghdad, in the amount of ID. 500,000 and to allocate another ID. 50,000 in the five-year plan, in addition, an amount of ID. 20,000 annually, and authorising the Ministry of Information to carry out the order."

According to Shaman⁴⁶, the following six buildings of outstanding architectural interest were designated by the committee for appropriation and preservation. The first two buildings have been purchased and are being converted into museums:

1. Astarabadi House in Kadhimiya (Inventory No. 729)
2. Naqib House in Sınak (No. 225)
3. Sasson House in Mustansir Street (No. 85)
4. Haidar Hammam in Mustansir Street (No. 78)
5. Shahrabali House (Masbagha Ahliya) in Suq al-Ghazil (No. 192)
6. Iqbal al-Dawla House in Kadhimiya (No. 731)

These recent developments, which involved the Amanat in conservation for the first time in the hundred or so years of its existence, give reason for guarded optimism. The same applies to the other protective agencies, especially the Antiquities whose authorities are now seemingly willing to relax their interpretation of the arbitrary legal terminal date of 1700. However, while not intending to minimise the value of their efforts, there are several critical observations that ought to be made. First, the various committees were basically transitory in nature and, therefore, did not constitute a formal conservation authority. Second, their attempts only dealt with individual buildings and not with areas; and only with Baghdad and not other historic cities as well. Their work was unconcerned with the problems of decaying inner-city historic cores and their proposal to preserve six buildings is a paltry proportion of the real potential already shown by the inventory of this study, probably because of financial constraints. Third, it is difficult

to envisage how the Ministry of Information, a body neither qualified nor experienced in conservation, is going to administer effectively its appointed overall responsibility and financial management.

7.3.2 Planning and Historic Cores of Baghdad

Baghdad has been 'planned' four times within the last four decades by four different foreign firms. Yet, in every case, the important question of conserving the city's heritage has been either totally ignored or, at best, superficially considered. Indeed, it has already been shown that such planning and other measures disguised under the pretext of modernisation were, directly or indirectly, responsible for the destruction of more than a third of the total historic area of the city. Lamenting this tragedy, the late Arab planner, Dr. Shiber, condemned this planned destruction in his characteristic style⁴⁷:

"(Baghdad's) master planning should have been sensitive and grand. Instead, the insensitive, absurd 'chop-up' approaches have been followed by 'dotting-up' the city with insipid, featureless 'modern' buildings. This is tragic for this great Arab city, a tragedy it dubiously shares with sister Arab cities that have fallen prey to the workings of a motley group who have almost literally raped those cities and, with them, the great Arab heritage and history in urbanism and architecture. The 'planning' of Baghdad during the past eight to nine years is, perhaps, the most tragic example of that type of abject planning that is the epitome of vacuity and insensitivity."

Both master plans, the one prepared by Minoprio and Partners and the other by Doxiadis Associates, have not only ignored conservation but they positively advocated the total demolition of the historic cores of Baghdad. The following statement is quoted from the report of Minoprio's plan⁴⁸:

"The old, central areas of Rusafa and Karkh, together with the smaller areas of Adhamiya and Kadhumain, largely comprise a dense mass of congested buildings, intersected by narrow, winding alleys. They are without any open space or other amenities... These areas should be demolished and comprehensive layouts prepared for their development."

Both plans were largely concerned with physical planning and 'surgery' typical of the prevailing attitudes of the 1950's and, devoid of a social

and economic context, they failed to diagnose the real problems of the city. The planners introduced alien planning concepts based on a glaring misunderstanding of the indigenous urban fabric, those 'congested' areas were consciously so built in response to climatic and social conditions. The fact that historic areas lacked infrastructural services should not have been used by the planners to justify their total demolition. Naturally, some of the blame must fall on the Iraqi municipal authorities for their lack of experience, vague briefs, and for their general blind belief in the superiority of Western planning.

Doxiadis's plan was even more alien in concept than its predecessor. In this case the admirable philosophy of 'Ekistics' seems to have been reduced into a mere exercise in simple geometry. It is of interest to realise that in his article 'Confessions of a Criminal', the late Doxiadis admitted his own 'crimes' and complicity in failing to satisfy the basic human needs when planning for the Third World⁴⁹:

"This... is important if we think of the many forces which infiltrate the developing countries from the so-called developed ones, meaning they are economically and technologically more advanced though they may be less well balanced with nature."

He called his own creation, and that of other architects and planners, the 'anti-human city' and advocated a return to a human world which is ecologically balanced with nature. The lack of concern for historic areas in those two plans is often attributed to the unfashionability of urban conservation in the West itself during the 1950's. However, the credibility of this argument is tenuous because, as far back as 1910, the French planners Lyautey and Prost were actively engaged in conserving old madinas in Tunisia and Morocco⁵⁰, and Patrick Geddes in India⁵¹.

By 1965, six years after the submission of the Doxiadis plan, the Amanat authorities, rather habitually by now, diagnosed the reason for the increasing problems in Baghdad as the need for a 'good' master plan. Thus, their seemingly quenchless thirst for master plans led them to offer the city to the international planning market and the

competition was subsequently won by Polservice. The first agreement, which was signed in September 1965 at a cost of ID. 124,000, did not contain any provision for the conservation of the four historic cores; nor did it provide for a comprehensive land use survey of the city. These defects in the original brief were to cost the Amanat another sum of ID. 156,900 as a second agreement was necessary. The second agreement provided for the preparation of a survey, a detailed development scheme based on the master plan, detailed plans for the central area, and "To prepare detailed plans for some areas selected for urban renewal and historic preservation"⁵².

The overall approach of the Polish planners to the historic cores has been that of redevelopment and renewal rather than conservation. Apart from Kadhimiya, which was chosen as the study area referred to in the second agreement, the planners seem to have more or less written off the prospect of conserving the other cores as a whole. They believed that

"in general, old quarters are destined for destruction and replacement by modern structures, only groups or individual buildings particularly worthy of preservation should be selected."⁵³

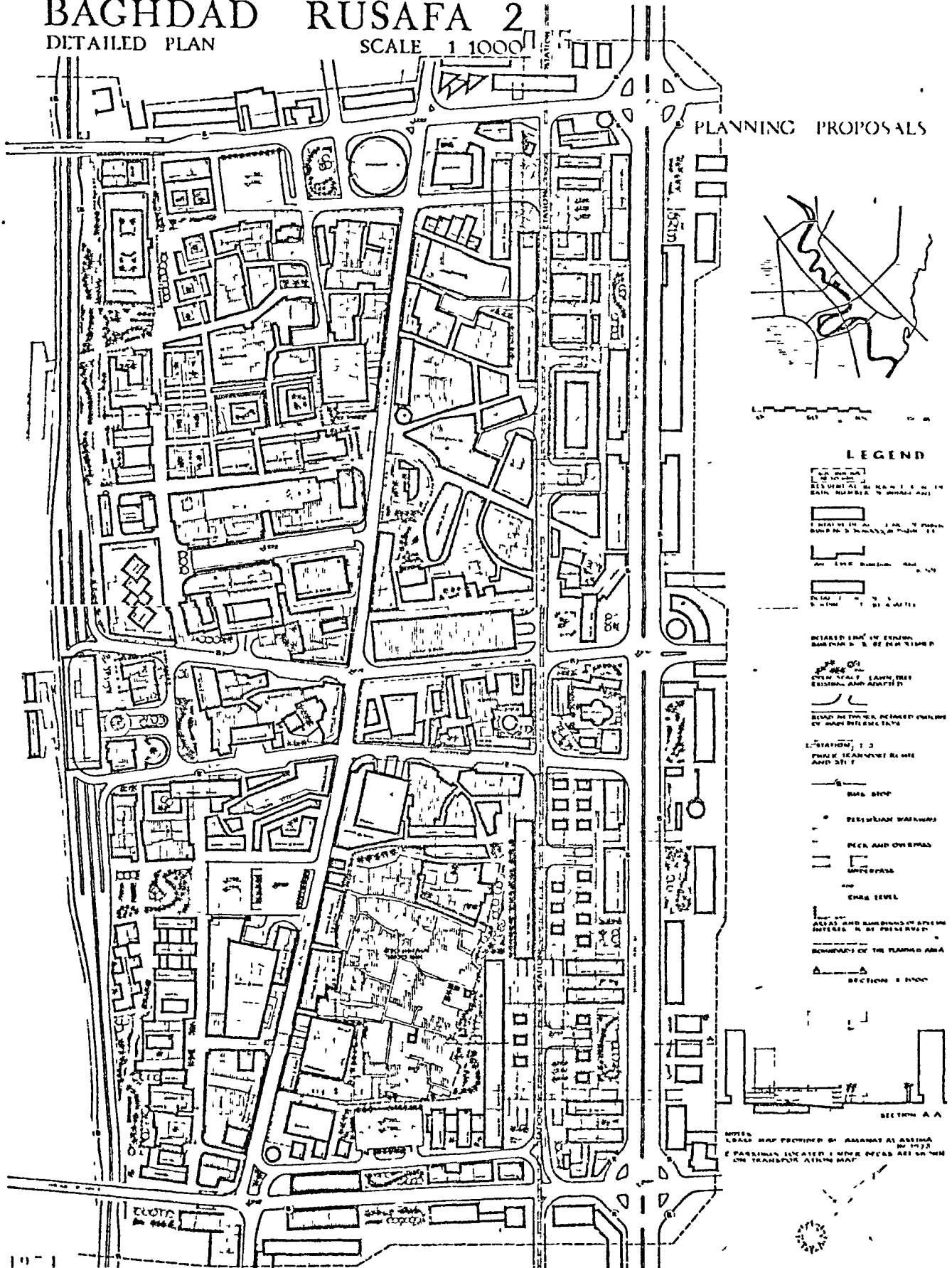
In relative terms, the Polish planners were more aware of Baghdad's heritage than their predecessors. Their Master Plan of Baghdad for the year 2000, however, does not propose the creation of conservation areas in Rusafa, Karkh and Aadhamiya. In fact, their detailed plans for the redevelopment of several blocks in central Rusafa show a 'planned' attempt to change substantially the historic character of these areas (Figure 65). If carried out, which is likely, this redevelopment will involve the wholesale demolition of one of the most interesting historic parts of the city. Even if the buildings of outstanding cultural interest in the area were to be left undemolished the removal of their urban context would be a serious loss of their authentic setting.

The comprehensive redevelopment of the cores, if one were to accept the planner's fatalistic submission that only important buildings should be preserved, must be preceded by a carefully conducted conservation survey. However, this was not done by them as they were paid to

BAGHDAD RUSAFA 2

DETAILED PLAN

SCALE 1:1000



1971 POLSERVICE & MIASTOPIEKT KRAKOW-TOWN PLANNING OFFICE FOR THE CITY OF BAGHDAD

FIGURE 65 PROPOSED REDEVELOPMENT OF BLOCKS 108 AND 110 BY POLSERVICE

prepare a conservation survey for Kadhimiya alone and not for other cores. Their map of 'Historical Heritage' shows only twenty-eight items in Rusafa (most of which are already preserved), seven in Karkh, and one in Aadhamiya⁵⁴.

As conscientious planners who called their task of planning Baghdad "greatly responsible but magnificent"⁵⁵ they should have at least warned the Amanat that before such massive redevelopment takes place identifying what is to be preserved should be a first priority. How otherwise can the Amanat or the planners hope to avoid destroying the valuable items? Again, the Iraqis must share some of this criticism for their apathy and approval of the planners' proposals.

7.3.3 Old Kadhimiya Study

Because of its relatively well-preserved fabric, Kadhimiya was chosen for 'redevelopment and preservation'. According to Polservice, the main objective of the study was to "formulate guidelines for redevelopment of the area and to establish the policy of conservation of buildings of historical and traditional artistic value"⁵⁶.

Between October and November 1973, the Polservice team carried out a basic survey of old Kadhimiya which investigated the technical condition of its buildings, their use, height, and their cultural interest, and the socio-economic conditions were examined. Their forty-eight page report, which was submitted to the Amanat in August 1974, did not, however, contain any specific data on individual buildings. Instead, their survey findings and proposals were presented in generalised form on eight maps (Figure 66). It should be stated at the outset that, relatively, this survey is perhaps the best of its kind yet attempted by a foreign planning firm in Iraq, within its terms of reference it has been more comprehensive than any previous official so-called conservation study. However, as shall be explained, it was not without its own defects and misjudgements.

The planners identified three main elements which determine the character of Kadhimiya. the mosque, the residential areas, and the commercial and business uses (Table 37). Their investigations

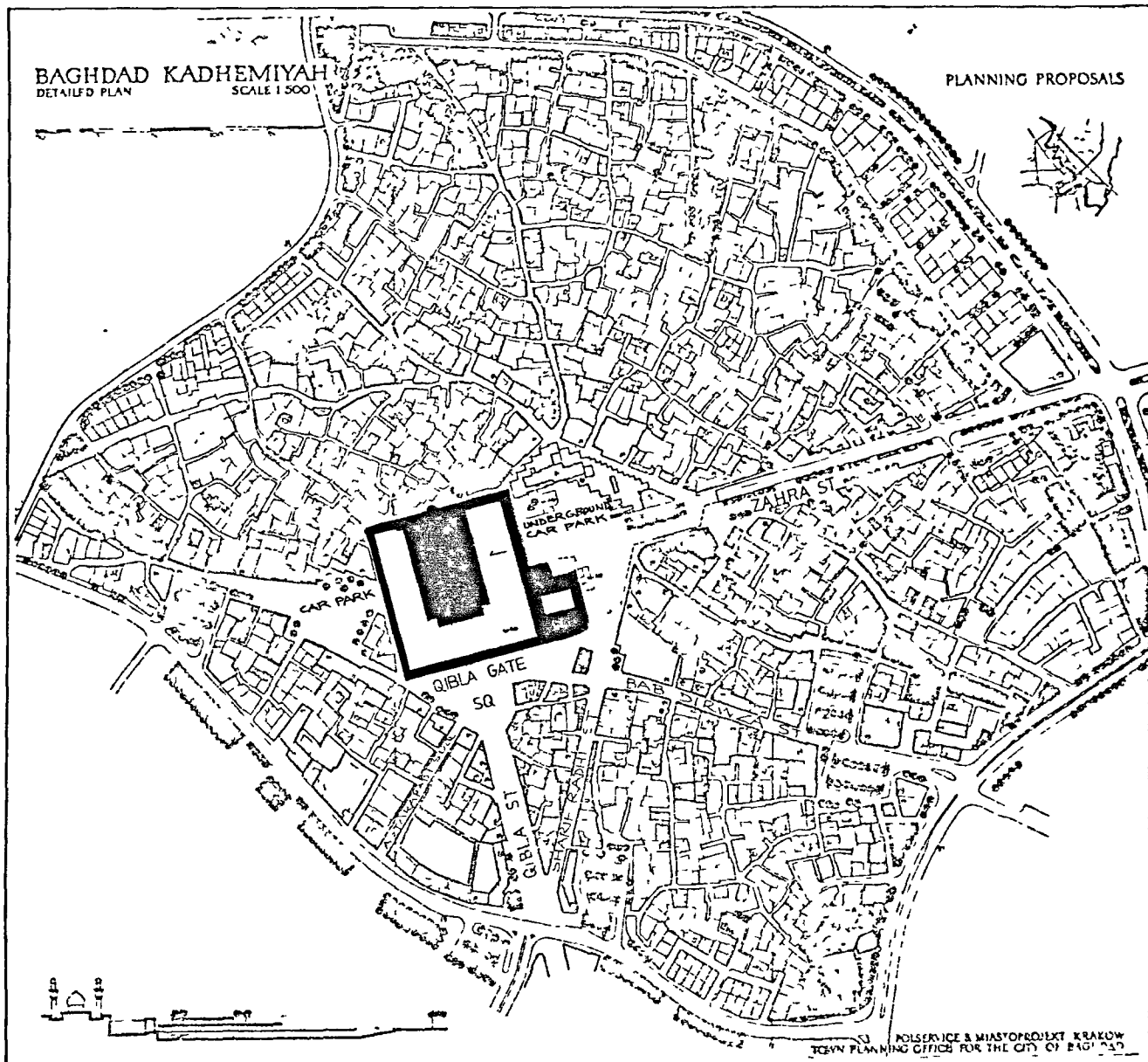


FIGURE 66 PLANNING PROPOSALS FOR OLD KADHIMIYA BY POLSERVICE

TABLE 37 Existing and Proposed Land Use in Old Kadhimiya by Polservice

	Existing Use (1973)		Proposed Use (2000)	
	Area (ha.)	%	Area (ha.)	%
The Mosque	1.99	3.40	1.99	3.40
Residential	40.53	69.30	34.30	58.30
Schools	0.65	1.10	1.60	2.70
Commercial	3.48	6.50	5.90	10.10
Public Facilities	-	-	0.40	0.70
Open Space	0.44	0.70	2.75	4.70
Streets	)		7.36	12.60
Alleyways	) 9.85	16.8	3.30	5.60
Parking	)		0.99	1.70
Vacant	1.29	2.20	-	-
Totals	58.59	100%	58.59	100%

Source. Polservice Consulting Engineers, Kadhimiya, p. 28

revealed that sixty-six per cent of all buildings within the study area (3,329 in all) were in bad physical condition, twenty-eight per cent fair, and six per cent were good⁵⁷. Their estimation of the age of buildings was, however, not so precise. Probably because of their unfamiliarity with local architectural and constructional historical development, they were content with grouping the buildings under three general categories. less than ten years old, ten to thirty years, and more than thirty years old. The last category, which constituted fifty-seven per cent of the total⁵⁸, is obviously too generalised to be of any practical value, especially in the context of a conservation study where the date of buildings is often a prerequisite. Moreover, as the author's own conservation survey shows, a significant number of buildings belong to the mid to late nineteenth century. Their maps do not show this data on individual plots.

The report and the way in which the findings of the survey were presented indicates that the planners did not thoroughly examine every traditional building within the study area. The report itself does not explain the methodology of their survey. This is a serious defect because it is a well-known fact that the overwhelming majority of vernacular buildings here are inward-looking and consequently do not usually exhibit any significant external signs which might lead to a quick recognition of their architectural richness. To the experienced or trained eye, however, even seemingly insignificant details can sometimes give a hint of the quality of the interior. But there is no reason to believe that the foreign planners were particularly familiar with the intricacies and niceties of local architecture. Even if the planners and their Iraqi assistants did manage to enter the courtyards of some buildings it seems unlikely that they were allowed to examine the interiors of individual rooms.

Another serious but related defect was the fact that the planners did not document the buildings of cultural interest within the study area. In other words, they did not prepare a comprehensive inventory of this heritage. Perhaps this was not part of their brief. But, again, it is emphasised here that without the precise and detailed knowledge of the qualities and merits of buildings designated for preservation,

the dangers of their being demolished are not avoided. Indeed, since their report was submitted, several very important buildings (including three of grade one)⁵⁹ that were identified for preservation have been pulled down. What is suggested here is that perhaps these demolitions could have been avoided had the full details of their value been documented and distributed to the relevant authorities. Consequently, it was decided to extend the conservation survey of this study to Kadhimiya largely to ameliorate these defects.

Three grades were used by Polservice to classify the cultural interest of traditional buildings within the study area⁶⁰:

- Grade 1: Highest aesthetic and/or historical value. rich original layout, structural details and decorations. Must be preserved.
- Grade 2: High aesthetic and/or historical value, structural details and decorations within slightly rebuilt unit. Should be preserved.
- Grade 3: Some elements of tradition, still easily noticeable either in layout or structural or decorative details. Groups should be preserved.

Table 38 shows that, according to Polservice, the number of buildings of cultural interest is only 18.4% of the total building stock, that out of a total of 626 graded buildings only 116 are in a fair physical condition, while the remaining 510, i. e. 81.46% of the total, are in bad condition. The highest concentration of graded buildings is around the mosque but especially in western and north-western mahallas.

Because the planners did not explain their methodology it is difficult to assess the validity of their grading criteria to individual buildings. In fact, their report included only two pages on historical analysis⁶¹, and in any case, the grades themselves are not shown on individual plots but only in blocks of plots in a map indicating the limits to redevelopment. However, general comparative analysis with the author's own conservation survey show that Polservice's grading is largely over-rated. In other words, Polservice's grade one is roughly equivalent to the author's grade two, and so on.

TABLE 38 Kadhimiya: Number of Graded Buildings, their Physical Condition and Percentage of Total by Polservice

Grade	Number of Samples		Percentage of Total Number of Buildings (3,329)
	Physical Condition	Number	
1	Fair 24	79	2.4%
	Bad 55		
2	Fair 40	196	6.0%
	Bad 156		
3	Fair 52	351	10.0%
	Bad 299		
Totals	Fair 116	626	18.4%
	Bad 510		

Source: Polservice, Kadhimiya, p. 14

The important question of the proposed new uses for some of these graded buildings was dealt with by the planners rather casually and even inconsistently. They suggested the following four yardsticks⁶²:

1. "The best buildings are to be converted to museums. Two smaller ones furnished in a traditional way will represent the old type of houses. Others may become a frame for any exposition."
2. "Very valuable buildings are to be adapted for various cultural uses: clubs, libraries, artists' studios."
3. "Old buildings spacious enough and easily accessible, ought to be adapted for hostels, while smaller buildings located at the main walkways may be adapted for other commercial or business purposes."
4. "Buildings of any historical category located deep inside the residential areas should remain residential. This also regards the buildings which are located conveniently from the commercial point of view and are very well maintained by their owners. Their further use as residential will be more successful than any commercial usage may guarantee."

The planners did not identify which building is to be used for what purpose. All they indicated was a table showing the proposed uses in numbers only (Table 39). Curiously, this table shows only two grades - 'necessary' and 'desirable' - which were respectively defined as 'absolutely must be preserved' and 'may be demolished if further preservation is impossible'⁶³. This is contrary to their earlier three-grade system and does not even correlate with their own previous definitions. Moreover, the same table shows only 420 graded buildings out of their original number of 626 buildings (Table 38), the planners did not show what was to happen to the remaining 206, nor did they explain why the remaining buildings were graded in the first place.

The survey revealed that over sixty-three per cent of all plots within the core are less than one hundred square metres in area (Table 40). In order to decrease the high residential densities, which are largely due to small plots, the planners proposed plot mergers. Eventually, they hoped to decrease the percentage of these plots to only 3.4%. Increasing the area of plots without destroying the fabric of historic buildings is certainly an attractive idea. However, it is difficult to

TABLE 39 Kadhimiya: Number and Floorspace of Buildings Selected for Protection by Polservice

Proposed Use	"Conservation Necessary"		"Conservation Desirable"	
	Number of Buildings	Floorspace (sq. m.)	Number of Buildings	Floorspace (sq. m.)
Museums	5	2,900	-	-
Cultural	8	3,200	-	-
Hostels	43	22,800	1	450
Commerce and Business	5	2,800	-	-
Hammams	1*	650	-	-
Schools	1	2,500	-	-
Residential	227	61,200	129	26,800
Total	290	96,050	130	27,250

Grand Total: 420 Buildings of 123,250 square metres

Source: Polservice, Kadhimiya, p. 29

NOTE: * Hammam al-Murtadha or Dirwaza

TABLE 40 Kadhimiya: Existing and Proposed Sizes of Plots by Polservice

	A R E A					
	Up to 50 sq. m.	51-100 sq. m.	101-150 sq. m.	151-200 sq. m.	201-250 sq. m.	over 250 sq. m.
<u>Year 1973</u> Existing Number of Plots and % of Total of 3,008 plots	658 (21.8%)	1244 (41.5%)	747 (24.8%)	207 (6.9%)	89 (2.9%)	63 (2.1%)
<u>Year 2000</u> Proposed Number of Plots and % of Total of 1,232 plots	None	42 (3.41%)	333 (27.03%)	393 (31.1%)	301 (24.43%)	163 (13.23%)
Number of Plots Lost or Gained	658	-1202	-414	+186	+212	+100

Net Total of Plots. 1776Source: Polservice, Kadhimiya, p. 30

see how merging several small traditional houses can be achieved without destroying some of their historic fabric. The planners did not elaborate on how the actual practical work is to be achieved. A merger in itself does not necessarily lead to a significant improvement in functionality as they claimed⁶⁴, while on the other hand, it requires a colossal amount of legal and administrative work. Difficult problems of complicated forms of Islamic ownership of plots would have to be surmounted. The planners did not even refer to the very important question of the financial implications of implementing plot mergers, who is to pay for the mergers; and what is to guarantee the owners' acceptance? Without the answer to these basic questions the scheme is likely to remain within the realm of theory.

Another related misconception is the planners' belief that plot merger would eventually lead to a sharp decrease in the number of inhabitants living in the core from 28,000 in 1973 to 10,000 in the year 2000. This target is extremely unlikely because larger plots still mean the same number of rooms which, in turn, mean the same occupancy ratio. The question of overcrowding is directly related to socio-economic reasons and not the size of the plot. The likelihood is that the urban poor and rural migrants will always be attracted to these areas as long as they continue to offer cheap accommodation. Because of their desperation and the seemingly endless housing shortage, whole families will be prepared to live even in a single room of a much enlarged house.

In dealing with the question of pedestrian and vehicular movement within the core, the planners proposed to detach the whole core by a ring road off which some seventeen cul-de-sacs would penetrate the core and be linked with small car parks of a total capacity of four hundred cars (Figure 67). The plan also suggests the construction of three large car parks to "ensure access to the mosque from the east, south, and west"⁶⁵. The northern carriageway of Zahra Street is to be used by vehicular traffic which will be led to a large underground car park (four hundred car capacity) located just next to the mosque.

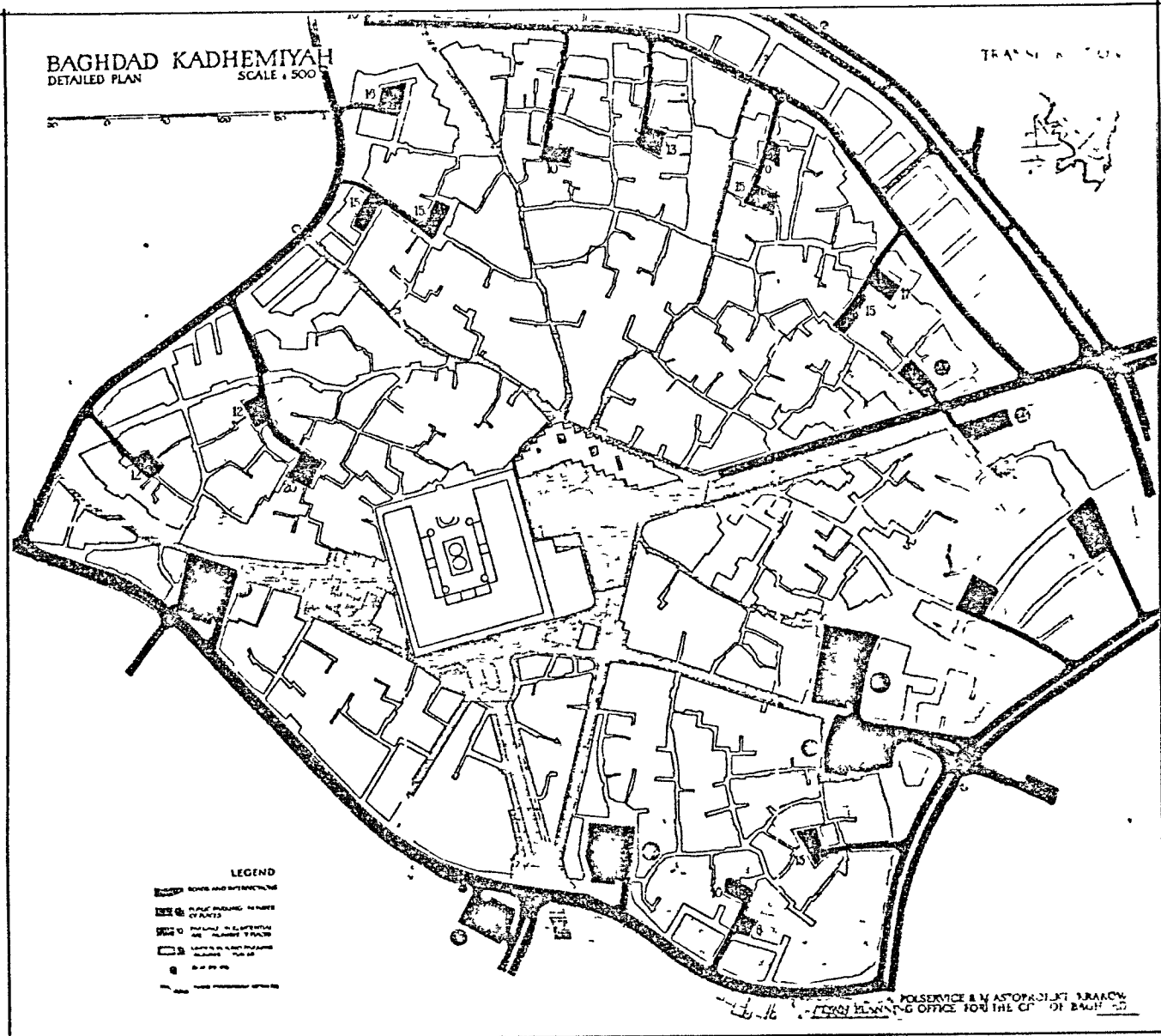


FIGURE 67 TRANSPORTATION PROPOSALS FOR OLD KADHIMIYA
BY POLSERVICE

Besides parking the planners stated:

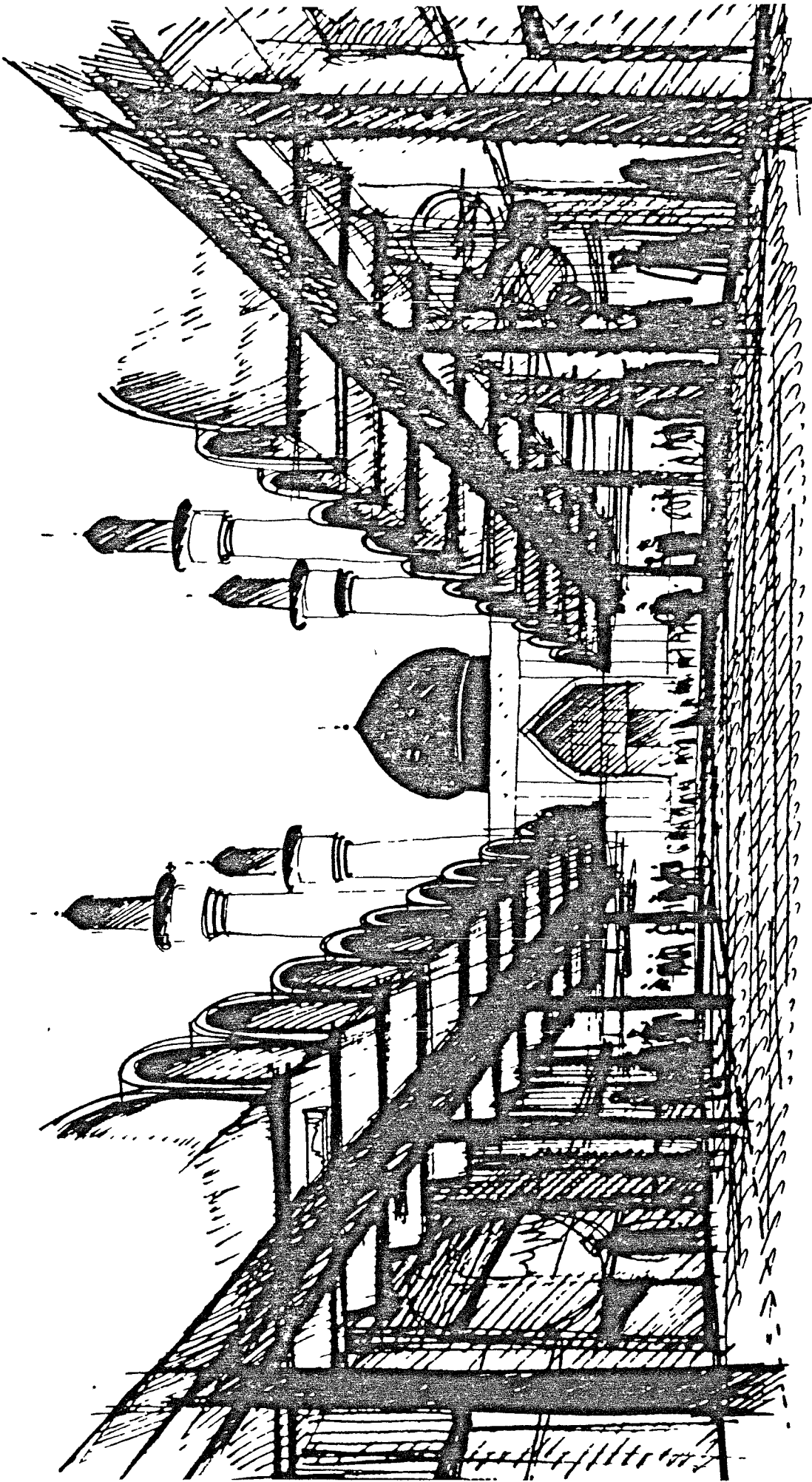
"this arrangement will ensure direct access to the mosque for taxis, buses or other vehicles which will come there just to pick up or drop their passengers without parking." ⁶⁶

Moreover, it was proposed to pedestrianise the southern carriageway of Zahra Street; and the streets of Qibla, Sharif al-Radhī, and Bab al-Dīrwaza.

Planning experience in Iraq has shown that the introduction of new roads into central residential areas, even when they are minor roads, are very likely to attract commercial and other forms of modern development. The planners' road proposals should, therefore, not be implemented without making sure of strict zoning regulations. The planners' major blunder, however, resulted from the implementation of their proposal to demolish the area west of the mosque to allow for one of their new car parks. It is curious to learn that very soon after this proposal the bulldozers of the Amanat were hard at work. The demolished area, which amounted to about 6,000 sq. ms., included several fine public buildings such as the Turk Mosque, and the Jawadain hammams, and a number of fine houses such as Ali Tarraza and Baqir al-Sihail. In fact, the demolition has already exceeded the planners' own proposals and is still going on. Realising their disastrous mistake, they attempted to justify their guilt by adding a small note at the very end of their report ⁶⁷:

"The survey of the area was completed in October 1973. In March 1974 extensive demolition works took place in the western vicinity of the mosque. Among others some buildings of historical and artistic value have been demolished too. (Incidentally, these were classified as grade one by the planners.) Thus some consequences of these works had to be taken into consideration in the further elaboration of the Plan."

To rectify the massive problem of visual intrusion, the plan suggests several remedial measures. The pedestrianised section of Zahra Street is to be partially covered with a "roof structure which would hide modern alien buildings, help to transform the street into a suq and form a vista on the mosque" ⁶⁸ (Figure 68). The facades



An impression of the proposed pedestrianisation of Qibla Street showing the cosmetic treatment of existing buildings.

FIGURE 68 VISUAL IMPROVEMENTS IN KADIMIYA BY POLSERVICE

of intrusive modern buildings in Bab al-Dirwaza Street are to be replaced by new facades "which would introduce a visual correlation between the existing old and modern elements"⁶⁹. New buildings are to harmonise with the visual character of the area, while new car parks are to be screened by trees. Generally, these visual measures are perhaps necessarily superficial. The planners did not elaborate them with detailed examples and unless they are thrashed out in specific working drawings they will remain purely conjectural. Furthermore, the planners again failed to indicate in their report how the costs of these operations are to be met.

The implementation of the plan was proposed in three stages excluding initial measures which involve pulling down some ninety-five buildings of dangerous physical condition by 1975. According to the planners, some of these buildings have historical or artistic value and "if quick actions are taken, these values may still be saved"⁷⁰. Stage one (1980-85) is to involve the preservation of valuable buildings and construction of two car parks, stage two (1985-90) is to deal with preserving buildings but also with pedestrianisation and with the provision of underground car parking while, during the third stage, (1990-2000) all car parks are to be completed. The estimated cost of implementing the first stage was put at ID. 2,416,000 at 1974 prices (Table 41). The approximate costs of each particular project included the cost of construction, land, and a compound interest of seven per cent which is, according to Polservice, "the rate usually applied by money lending banks"⁷¹.

They estimated the cost of 'reconstruction' of each house between ID. 3,500 and 4,000, and maintained that the 'economic' rent of a house in Kadhimiya would amount to about ID. 240-280 annually; this rent includes amortisation of the initial capital, interest, cost of repairs and cost of management. Accordingly, only economic groups C and D (those earning between 101 and 200 and 201 plus Dinars monthly, respectively) will be able to afford such 'economic' rents, groups A and B, which amount to almost 99.9% of the total population of the core, "will have to be helped financially, either by loans or by grants"⁷². Assuming that a family can afford to buy a

TABLE 41 Kadhimiya. Estimated Costs of Implementation of First Stage

Project	Estimated Cost in I. D.
Commerce and Business	425,000
Hotels	405,000
Facilities	145,000
Transportation	246,000
Public Utilities	200,000
Green Areas	230,000
Reconstruction of Houses	765,000
Total	<u>2,416,000 Iraqi Dinars</u> (at 1974 current prices)

Source. Polservice, Kadhimiya, p. 44

house for a price not exceeding two to two and a half times its annual income, the planners concluded that group A could afford ID. 800, and group B could afford ID. 2200. By assuming again that their plot merger scheme will succeed, which is unlikely because of the reasons outlined earlier, they calculated that the two groups could be granted ID. 300,000, while the remaining ID. 465,000 (60%) is to be met by the inhabitants to make up the total of ID. 765,000 required for the 'reconstruction' of all the houses in the three groups.

The report ends with a very brief list of recommendations which included the need for creating a special 'Architectural Service', new legislation, research, and pilot projects. In conclusion, this study is a relatively good effort by a team of foreign planners who, because of their lack of intimate knowledge of local conditions, were unsuspectingly driven to put forward several unrealistic policies that were based on erroneous or over-optimistic assumptions. Moreover, it seems that because of contractual and brief defects they were not obliged to prepare a documentative inventory of cultural heritage for the area. Such an inventory would have probably helped to avoid the loss of several important buildings which were demolished partly because of the consultants' proposals and partly because of the enthusiasm of some Amanat officials to 'clear' the area.

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CHAPTER VIII

THE CONSERVATION SURVEY AND INVENTORY OF CULTURAL HERITAGE

8.1 Aims

The aims of the conservation survey of Baghdad, which was carried out by the author between 1975 and 1977 and was of crucial importance to this study, were three fold:

1. To investigate the four historic cores of the city and to analyse their general characteristics and individual urban and architectural elements
2. To identify their problems and the scale and different causes of destruction with the aim of preparing a documentary inventory of cultural heritage lost between 1917 and 1975 (Chapter IV)
3. To select, grade, and photograph individual items of interest, and to document other relevant data with the aim of preparing a comprehensive inventory of the existing cultural heritage in the city.

8.2 Scope and Limitations

The conservation survey was limited to the area enclosed by the present municipal boundaries of Baghdad City. It, therefore, excluded even those items of interest which are located just outside the boundaries such as Aqarquf. The date of 1932 was used as the upper limit for the selection of items. However, it must be pointed out that selection was applied much more cautiously to items of a more recent origin, i. e. , 1918-1932, of which only those of outstanding qualities were included in the inventory. With only a few exceptions, the overwhelming majority of selected items are found within the four historic cores.

The coverage of the survey and the inventory was intended to be comprehensive. The author investigated nearly every single alleyway in all four cores and managed to enter the majority of selected items including private houses. The higher the grade of the item, the more rigorous and intensive was the examination and documentation.

Consequently, it may reasonably be claimed that, as far as items of outstanding cultural interest are concerned, i. e. grades A and B, none was likely to have been missed.

8.3 Methodology

In order to carry out the survey, there were four basic and essential requirements. These were the following.

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

The official permits enabled the author to carry out photographic work, to interview public officials, and to obtain maps, aerial photographs, and governmental reports. Furthermore, they were of enormous help as far as entering private houses was concerned. The occupants of such houses felt somewhat more assured when they saw the official letter and they allowed the author to investigate the interior quite freely. It can be categorically stated that, without such kind help, selection and grading would have been drastically incomplete.

The maps, obtained from Amanat al-Assima and the Directorate General of Surveys, were somewhat incomplete, and of different scales and vintages. They also included several detailed planning proposals. A set of aerial photographs, taken by the Iraqi Air Force in 1972, was very helpful in filling the gaps and updating base maps. They were also very useful in tracing the shapes and structures of inaccessible roofs of mosques, churches, and other large public buildings.

The survey followed the same blocks and numbers of the Amanat. For Kadimiya, however, the blocks used by Polservice were followed but with a different numbering system. This was because the maps of Kadimiya were of 1:500 scale showing much more detail than the maps of other areas and, consequently, a more refined block division was needed (Figures 59, 69 and 70).

Again, with the exception of Kadhimiya, the survey was generally conducted from northern blocks down to southern blocks. Thus, for Rusafa, the survey started with the northern blocks of 114 (Maidan and Jadid Hasan Pasha) to block 110 (Bab al-Agha to Ras al-Qarya), then from the northern block of 112 (Barudiya and Haidar-Khana) to block 108 (Shorja and Ammar) to block 104 (Sinak). Similarly, from the northern block of 113 (Fadhil) to 107 and 117 (Bab al-Sheikh). (Figure

In Karkh the survey was also conducted likewise. From the northern block of 210 (Sheikh Ali to Jiaifir) down to block 212 (Suq al-Jadid to Ras al-Jisr), then to block 216 (Sif to Shawaka to Kraimat). In Kadhimiya which is, unlike other historic cores, circular in form, the survey was carried out in a clockwise direction. It started from the north-eastern blocks of 401 and 415 down to the south-eastern blocks of 416 to 425, and ended with the north-western blocks of 426 to 434.

A prototype survey card of size A4 was designed for the purpose of writing quick field notes and remarks that are relevant to the particular building under investigation. A thousand copies of such cards were printed in Baghdad and were used for the preparation of both inventories. The card was laid out to include, inter alia, the following data:

- Serial number of item
- Address details
- Block and mahalla
- 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 data for each item was later transferred to a final card which was used for the inventory (Vols. II to III). Because most streets, especially alleyways, are not named, or have lost their historic names; and because the numbers of buildings themselves have been

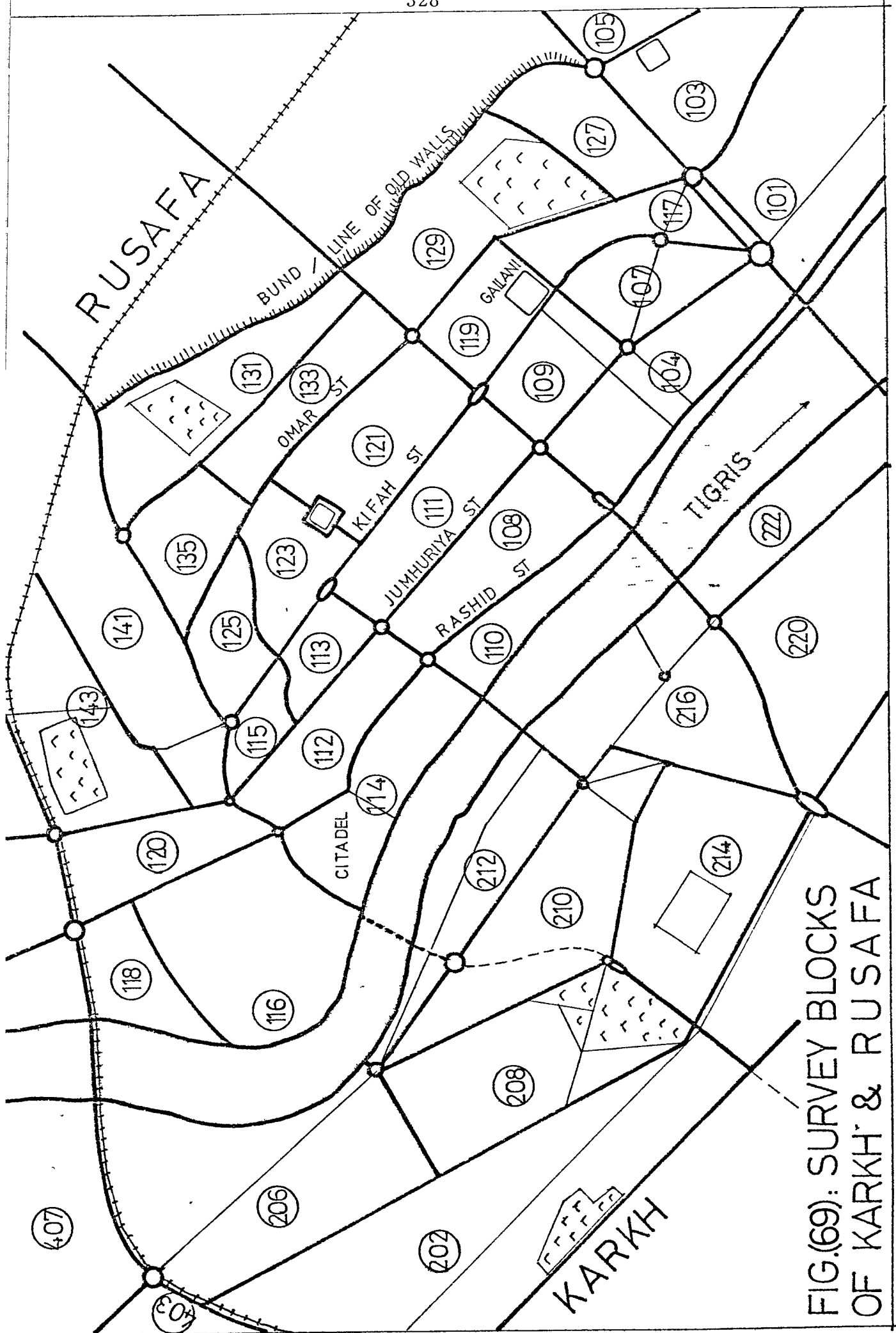


FIG.(69): SURVEY BLOCKS OF KARKH & RUSAF A

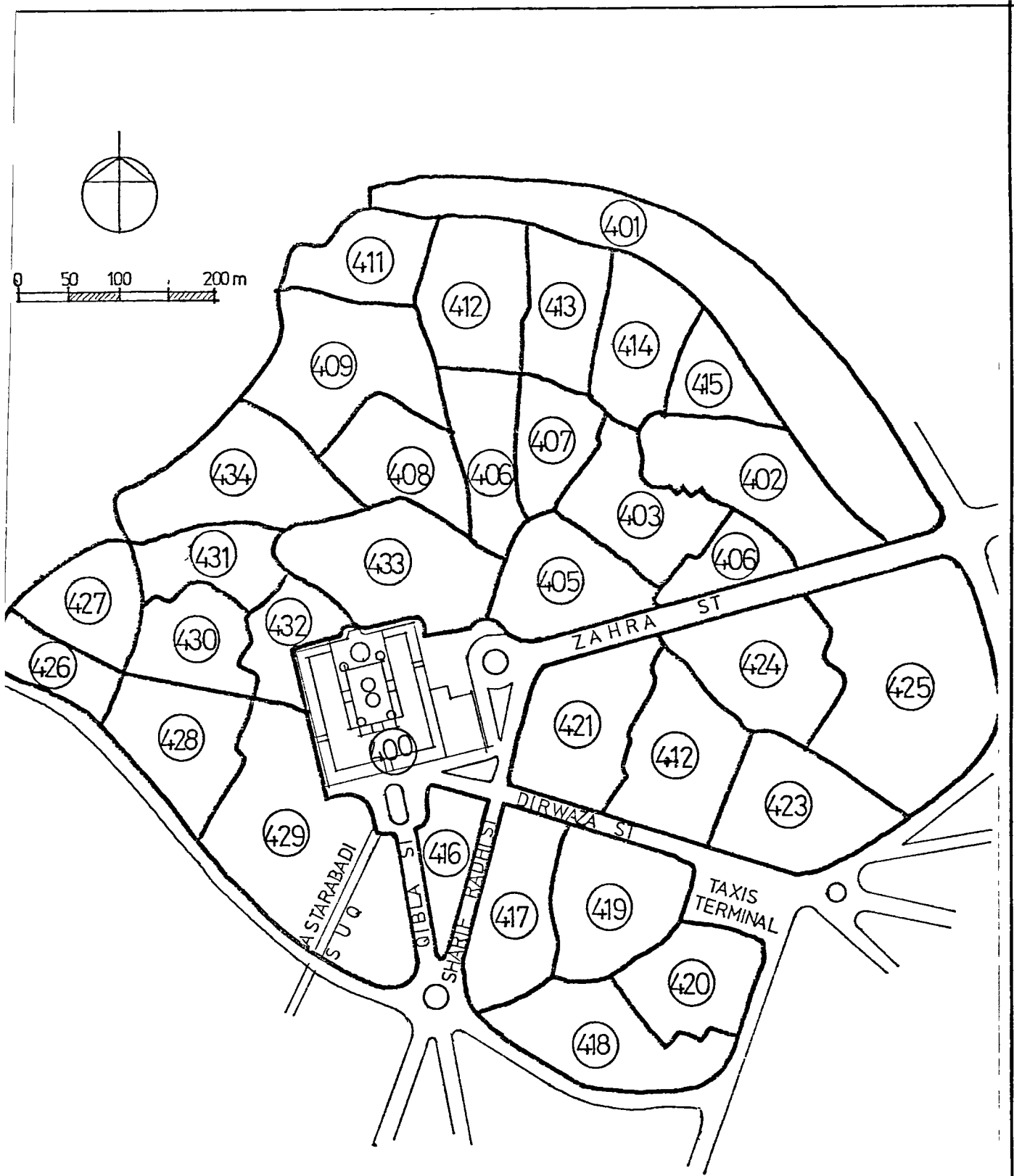


FIGURE 70 SURVEY BLOCKS OF KADHIMIYA

recently changed (in 1976), it was decided to include all shown numbers to ascertain identity. Furthermore, it was also decided to include the official census numbers which are usually found fixed on front doors. This was done to maximise the identifiability of the selected item and correlate it with official census records.

The names of owners of selected items were obtained either from the occupants themselves or from electricity and water bills where the name of the owner was printed. However, this was not always possible but they can be obtained easily if government records are made available. The Awqaf was the owner of the overwhelming majority of mosques and masjids, while other religious buildings such as takyas, husamiyas and tombs, were largely privately-owned. The Directorate of Antiquities owns all archaeological sites, and some buildings and monuments in Baghdad.

The names of mahallas were obtained from the 1957 Census and from Dr. Susa's Atlas of Baghdad, published in 1952. The names of particular alleyways (Aqids), which are not published in those documents, were obtained from local people. In such cases and in other enquiries, old men who had lived for a long time in the locality were invariably a very useful - though not a wholly reliable - source of information. Consequently, double checking was always necessary.

The author's own photographic equipment was used for the survey and inventory. Some 138 black and white films (about 5,000 exposures) and 25 colour slide films were used. A wide angle lens (24 mm.) was indispensable for recording small interiors and facades of buildings in very narrow alleyways. Each film was identified by a number and every exposure was noted in the Survey Card for subsequent identification and analysis. Most of the films were developed in Baghdad to check that they successfully exposed before returning to Sheffield.

8.4 Criteria of Selection

Some argue that the qualities of a building, at any one time, cannot be objectively evaluated by an individual, that his own assessment is inevitably based upon his whims or subjective criteria. However, while this argument may be true in some cases, it is largely false and even misleading. This is because the required standard of selection and assessment is not usually based solely on individual taste but rather on objective architectural or historical evidence. This view is effectively defended by Earl¹:

"When we are dealing with objects which can be described in terms of authorship, style, system of proportion and ornamentation, plan form, spatial organisation, structural system, innovating qualities and historical associations, we are dealing almost entirely with firmly ascertainable objective facts. The degree of architectural or historic interest is not too difficult to establish within sensible limits."

Similarly, the criteria used by the author in selecting items of cultural interest were based on largely factual and objective considerations. These included the age of the building, the scarcity or otherwise of its type, its restorability, its architectural or historic interest, locational significance and group value.

The age of a building was obviously a very important consideration in its selection. The existing Law of Antiquities of 1936 protects those built before 1700 AD. This particular limit was also used by the author to select all such buildings which exist now in anything like their original form. The date of 1869, which marks the arrival of Western-inspired modernisation by Midhat Pasha, was used because of its historic as well as architectural significance. Consequently, most buildings and items built between 1700 and 1868 - a period that included the important phase of the Mamluks - were also listed, while selection was necessary for those built between 1869 and 1917.

The end of the long Ottoman rule and the arrival of the British in 1917 witnessed, among other things, several urban and architectural changes. The date of 1932, which marks the end of the British Mandate of Iraq, was a convenient upper limit for listing buildings for the inventory.

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

The historic interest was related to a building when it was associated with well-known historic characters or historic events. Often, however, old buildings are bound to be of some historic value especially for architectural and urban historians. A historic place in the community such as a mosque, for example, can have high architectural interest as well as a high historic interest. On the other hand, cemeteries and tombs in Baghdad usually have more historic value than architectural value.

Only a very few buildings 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 artists, remain unknown. This is very regrettable indeed and there is a real need to initiate intensive research in this field. The authentication that a certain house has once been inhabited by a certain national leader, for example, can be a very good reason for listing it. It can also be a very effective and interesting way of enriching the nation's cultural heritage.

Occasionally, some buildings and items have an added topographical or locational value. This value is only applicable to items built before 1700 because it is usually associated with older buildings. For instance, the existence of a small part of a medieval city wall is usually of little architectural value but of a very considerable locational value. It represents indispensable historic physical evidence of the existence of such walls and helps to trace back earlier lines of fortifications. Thus, the Wastani Gate, the remaining wall of the Citadel and some road patterns help both urban archaeologists and historians to follow

the walls of Rusafa both visually and cartographically. Moreover, because surviving historic buildings and urban features are often referred to in old books and accounts of travellers, they help historians to use them as spatial fixations to locate historic features that have disappeared a long time ago. The location of Nidhamiya Madrasa is now known only because of the existence of such historic 'spatial anchorages' as the Madrasa of Mustansiriya and the vestiges of the Tuesday Market.

Lastly, the group value of a building was also used in the survey as a consideration for its selection. In Baghdad, this value was particularly relevant to terraced traditional houses where they appear to form one long building.

An attempt was made to quantify the relative importance of selected items according to these seven criteria. 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 selected items. It must only be used as a general guide and regarded as a crude approximation. The scoring table, which is included in every inventory card is, nevertheless, useful because it illustrates the main reasons for selecting a particular item in the first place. It shows graphically what outstanding qualities a selected item has without necessarily having to read the accompanying text.

A total of 100 points was apportioned to the seven above-mentioned criteria, to each 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. A minimum of 5 points was made obligatory to be scored on age and another 5 points on either architectural or historic interest for any building to qualify for listing. In other words, a building which is built after 1932 is automatically excluded even when it possesses high architectural interest. However, an exception was made for some historic mosques which have been rebuilt by the Awqaf recently. Similarly, a building built between 1918 and 1932 which does not possess any appreciable architectural or historic interest is also excluded even when it can score 15 points for its high restoration potential, and so on.

The listing of buildings built between 1918 and 1932 was highly selective and only those with a definite quality and character were, therefore, selected. The estimation of undated buildings, especially traditional houses, is discussed later under the analysis of individual urban and architectural elements.

The scarcity, or otherwise, of a particular type of building was another consideration which is obviously not subject to any value judgement. As far as Baghdad is concerned, traditional houses were more abundant than other types of selected buildings. Houses which show their date of original construction are relatively scarce in Baghdad (and Iraq) and, therefore, those with such provision deserved more attention than other similar but undated houses. Dated houses serve to testify certain architectural and constructional developments and as such they are extremely helpful to historians and architectural conservationists.

Second came mosques, masjids, and tombs. However, there are very few existing authentic takyas (religious hospices) and husainiyas (Shii religious buildings also used as mosques) and, consequently, they were given more consideration for listing than other abundant buildings of similar function. The scarcest types are hammams, madrasas, churches, walls and gates, cafes and shops (Table 47).

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 case of important buildings, the availability of documentary evidence such as measured drawings and old photographs, and adaptability for a new use. It follows, therefore, that a small traditional house, which is in such a poor condition that it would need a large sum of money for its repair, is obviously of a low restoration potential. The question of adaptability for a new use is perhaps more relevant to larger and more important buildings, such as mosques, hammams, than to small traditional houses.

Buildings and other items which scored between 100 and 70 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 were considered to qualify for grade C. Only eight houses scored between 60 and 65, but were listed grade A because of their exceptional qualities. 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 items of exceptional architectural and/or historic interest, of national importance, and must be preserved.
- Grade B. These are items of special architectural and/or historic interest, which warrant every effort being made to preserve them. Some of these items could be, eventually, upgraded to grade A.
- Grade C: These are items 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 future statutory list.

Table 42 shows the number of listed items according to their grade and location. All listed items of all three grades are distinguished by some quality or 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' items and allowed to be demolished without a very good and unavoidable reason. Some items older than 1700, which are supposed to have been protected under the present Law, have been demolished or substantially altered. It must be stressed that the three grades were 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 Britain decided to discontinue the use of grade III. 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 exist or not.

TABLE 42 Inventory Items: Their Grade and Percentage of Total

Core	Grade A	Grade B	Grade C	Total No.	% of Total No. of Items
1. Rusafa	50	115	124	289	47.9
2. Karkh	10	23	31	64	10.6
3. Aadhamiya	5	2	5	12	1.9
4. Kadimiya	11	86	138	235	38.9
5. Others	2	1	-	3	0.5
Totals	78	227	298	603	100.0%
Percentage of each grade of Total No.	13%	37.6%	49.4%	100%	

Source: Author's Conservation Survey, Baghdad, 1975-77

8.5 Analysis of Urban and Architectural Items of the Inventory

The data and architectural description of selected items and buildings, especially of grades A and B, were obtained from the following three major sources:

1. The author's conservation survey, field notes and observations,
2. The author's photographic documentation, sketches and measured drawings,
3. Published and unpublished works, including manuscripts, measured drawings by architectural students and several theses by Iraqi students in Baghdad University.

A list of published and unpublished references was compiled for all important buildings. These bibliographical references, which are found in the inventory for each building, were indispensable in documenting the historical background and factual data for these buildings. These references were continuously compiled and updated throughout the research period. They can be of considerable help to any future preservation and restoration work. One hundred and seventeen items were found to have written references. This low figure is due to the fact that nearly all houses, which represent sixty-nine per cent of the inventory, have no references (Table 43).

All the relevant data of each selected building was then coded and compiled for computer sorting and analysis. The data included: the grade, serial and block numbers, the title and address of item, the date of origin and the date of the last major restoration (if known), its physical condition, type of ownership, existing use, and availability of documentation. A key of explanations of codes is found at the beginning of every computer printout.

The computer was then programmed (using ICL Direct Access Sorting Package XSDC) to compile the inventory of 603 items according to five different arrangements:

1. According to serial and block numbers (see printout, Volume II)
2. According to three types of grades (see Appendix 3, Volume III)
3. According to six types of ownership (see Appendix 6, Volume III)
4. According to fifteen types of existing uses (see Appendix 5, Vol. III)
5. According to four types of physical condition (see Appendix 4, Vol. III)

TABLE 43 Inventory Items. Availability of Documentation

	Grade A	Grade B	Grade C	Total	% of Total (603 items)
Exact Date	39	33	35	107	17.80
Black and White Photographs (by author)	83	220	298	601	99.60
Colour Slides (by author)	52	70	32	154	25.53
Plans(and/or Sections)	48	19	4	71	11.77
Elevations	17	11	19	47	7.79
References	67	48	2	117	19.40

Source: Author's Conservation Survey, Baghdad, 1975-77

The 603 punched cards and the different computer printouts have the advantages of quick information retrieval, can be very easily corrected updated, or removed, and can be reproduced in any required quantity by computers in Iraq. The printouts, which were used extensively by the author throughout the research period for analysis, can also be of immediate help to any interested governmental body in Iraq. An Arabic version of the same inventory could very easily be made by using the same methodology but with Arabic codes.

The conservation survey and inventory resulted in the identification of three broad urban elements of cultural interest in Baghdad:

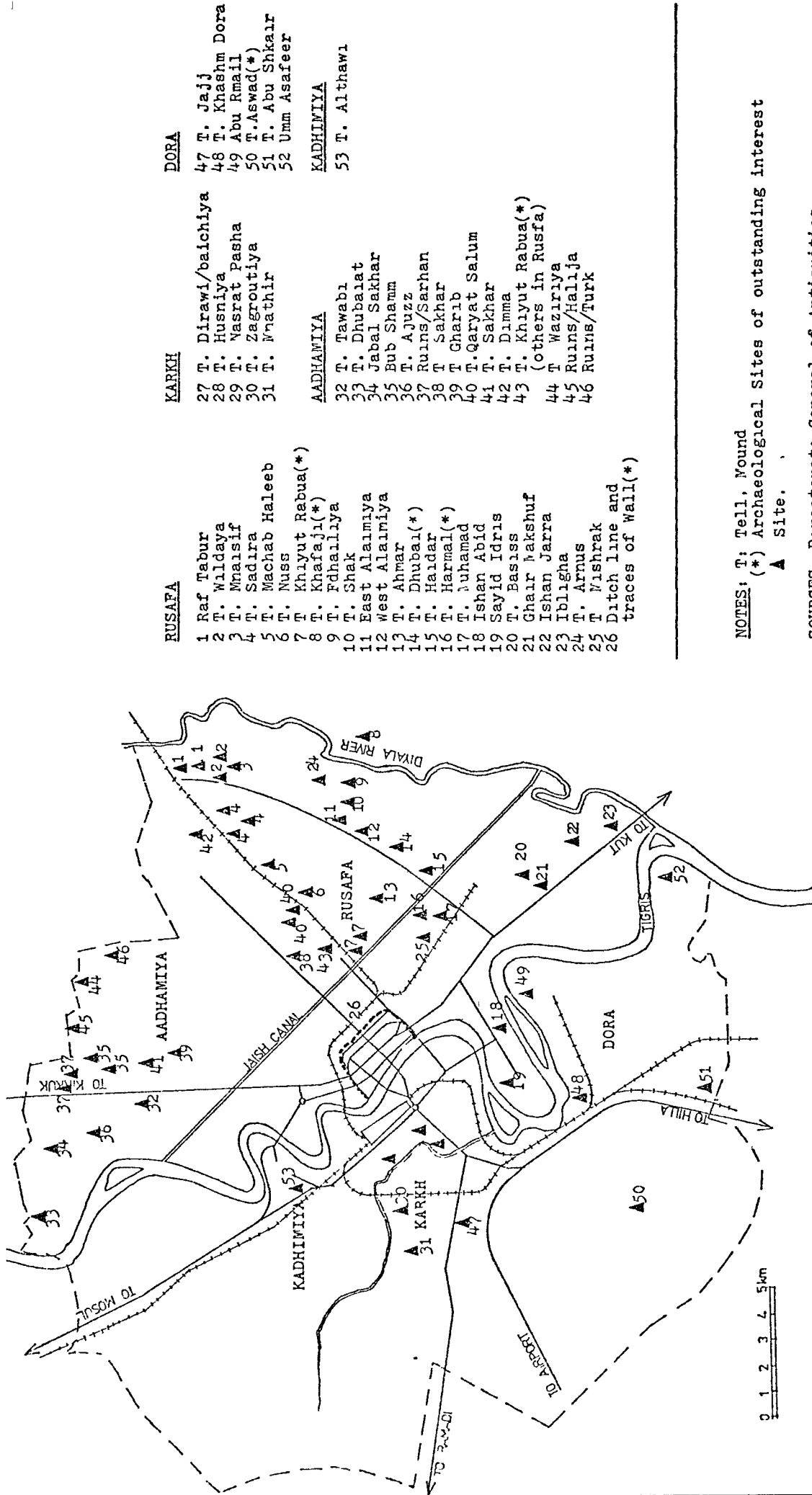
1. Archaeological Sites
2. Conservation Areas and Zones of Visual Interest
3. Individual items of interest

The proposed Conservation Areas and Archaeological Sites were not coded for computer analysis but are found in this chapter. This was because their data was different and could not be coded as individual items.

8.5.1 Archaeological Sites

According to the official 'Atlas of Archaeological Sites in Iraq' of 1976 and other sources², there are some 53 archaeological sites within the present municipal boundaries of the city of Baghdad (Figure 71). These sites vary in area, physical condition, and age. Some are simple mounds (Tells), while others are ruins, or excavated or unexcavated structures which have become buried over the centuries.

Because they are all within Baghdad they have been subject to serious encroachment and destruction by modern demands for urban land. Some very valuable sites have been allowed to disappear under modern residential neighbourhoods and public buildings. The Tells of Dirawi, Husniya, and Nasrat Pasha, for example, have now all been built over by residential developments in the Mansur area of Baghdad. The same unfortunate fate overtook the Tells of Althawi in Kadimiya, Zagrutiya, and Manathir north of Mansur. It is important to realise



- RUSAFSA**
- 1 Raf Tabur
 - 2 T. Wildaya
 - 3 T. Mnaissif
 - 4 T. Sadira
 - 5 T. Machab Haleeb
 - 6 T. Nuss
 - 7 T. Khlyut Rabua(*)
 - 8 T. Khaifajl(*)
 - 9 T. Fdhailiya
 - 10 T. Shak
 - 11 East Alamiya
 - 12 West Alamiya
 - 13 T. Ahmar
 - 14 T. Dhubaa(*)
 - 15 T. Haidar
 - 16 T. Harmal(*)
 - 17 T. Luhamad
 - 18 Ishan Abid
 - 19 Sayid Idris
 - 20 T. Basiss
 - 21 Chair Makshuf
 - 22 Ishan Jarra
 - 23 Ibligha
 - 24 T. Arnus
 - 25 T. Vishrak
 - 26 Ditch line and traces of Wall(*)
- KARKH**
- 27 T. Dirawi/baichiya
 - 28 T. Husniya
 - 29 T. Nasrat Pasha
 - 30 T. Zagroutiya
 - 31 T. Mnathir
- DORA**
- 47 T. Jajj
 - 48 T. Khashm Dora
 - 49 Abu Rmail
 - 50 T. Aswad(*)
 - 51 T. Abu Shkair
 - 52 Umm Asafeer
- KADHIMIYA**
- 32 T. Tawabi
 - 33 T. Dhubalat
 - 34 Jabal Sakhar
 - 35 Bub Shamm
 - 36 T. Ajuzz
 - 37 Ruins/Sarhan
 - 38 T. Sakhar
 - 39 T. Gharib
 - 40 T. Qaryat Salum
 - 41 T. Sakhar
 - 42 T. Dimma
 - 43 T. Khlyut Rabua(*) (others in Rusfa)
 - 44 T. Waziriya
 - 45 Ruins/Haliya
 - 46 Ruins/Turk

NOTES: T: Tell, Mound
 (*) Archaeological Sites of outstanding interest
 ▲ Site.

SOURCES: Directorate General of Antiquities
 Atlas of Archaeological Sites in Iraq, Baghdad, 1976.
 A Guide to Archaeological Sites in Iraq, Baghdad, 1970.
 Dr. Ahmad Susa, Atlas Baghdad, (Arabic), Baghdad, 1952.

FIG(71) ARCHAEOLOGICAL SITES IN BAGHDAD

that all these Tells were supposed to have been 'protected' by the Directorate of Antiquities. This can only show the apathetic way with which the Directorate regarded its sites.

There are many other regrettable examples. The famous site of Khuyut Rabua, which belongs to the Parthian Period (148 BC to 126 AD), has now been largely disrupted by modern development. The site was excavated in 1936 and is now reduced to only a small area which is completely engulfed by the modern 'Recreation City' of Eastern Rusafa. Similarly, Tell Dhubai, which belongs to the Sumerian-Akkadian Period, is now reduced to a site of only 150 x 300 metres in area and again surrounded by modern houses. Other man-made urban features such as canals, which can sometimes be of high archaeological interest, e.g. the Masudi Canal, have been destroyed. Even the assumed site of the Round City has now been extensively disrupted by the vast railway complex of Shalchiya.

The archaeological sites of Baghdad are only indicated in the official Atlas maps by a small dot. What is needed is their precise location and boundaries in relation to existing modern growth around them so that any future encroachment can be avoided. The protected archaeological area should not only include the excavations or tells themselves but also a part of their surrounding area. This would allow for further discoveries in the future and provide a sort of 'buffer zone' against offenders.

Another important but seemingly neglected aspect of urban archaeology is related to the frequent finds of archaeological material during excavation works by building operations. More often than not, building contractors are reluctant to report such finds to the authorities because of their fear of the inevitable bureaucratic delays or even the appropriation of the site itself. Consequently, the majority of such finds go unreported and what might be archaeological evidence of great significance is often destroyed simply because of this understandable fear.

This unfortunate situation leads to the proposal of several remedial measures. First, it seems necessary that the Directorate of Antiquities

should prepare special maps which chart all urban areas that have an archaeological potential. It is not too difficult to prepare such charts. The four historic cores of Baghdad must have considerable archaeological evidence buried underneath them. This potential for finds was attested by Duri when he reported³:

"In digging the foundations of the new building of the Rafidain Bank (a multi-storey block), about fifty yards from Samawal Street, a kitchen was struck, very likely that of Dar al-Khilafa.... The limits of Mustain Wall eastwards corresponds approximately to the Nazim Pasha Bund as is shown from digging foundations of new houses."

Second, any new building or other large-scale operation, that requires relatively deep excavation work within these charted areas, should be reported by the planning authorities to the Directorate of Antiquities prior to commencing work. A qualified inspector could then be allocated the responsibility of reporting any find. As a corollary, an 'emergency squad' of specialist archaeologists and architects should be set up to rescue sudden finds within these areas. Its most important task would be first to assess the scale and archaeological significance of the find and, second, to organise quickly a team to document immovable finds and salvage movable items.

Third, depending on the significance of the find itself, there should be adequate legal provision for financial compensation (possibly on a daily-rate basis) to contractors who suffer delays and stoppages, and attractive rewards and incentives for any person who reports such finds. In this way, it is hoped that, even when a contractor attempts to hide such finds, his workers will find it profitable to inform the authorities. This would, in turn, expose the negligent offender who would be open to appropriate fines or other punishment.

Last, but not least, the Directorate of Antiquities must be made aware of the tremendous importance of urban archaeology and it must act quickly to safeguard its stock of urban archaeological sites. Immediate measures are needed to surround these sites by appropriate protective fences. It is not incorrect to assume that the majority of such sites are perhaps even more important, in terms of their cultural value, than most listed buildings. Therefore, an even greater effort is needed to preserve them.

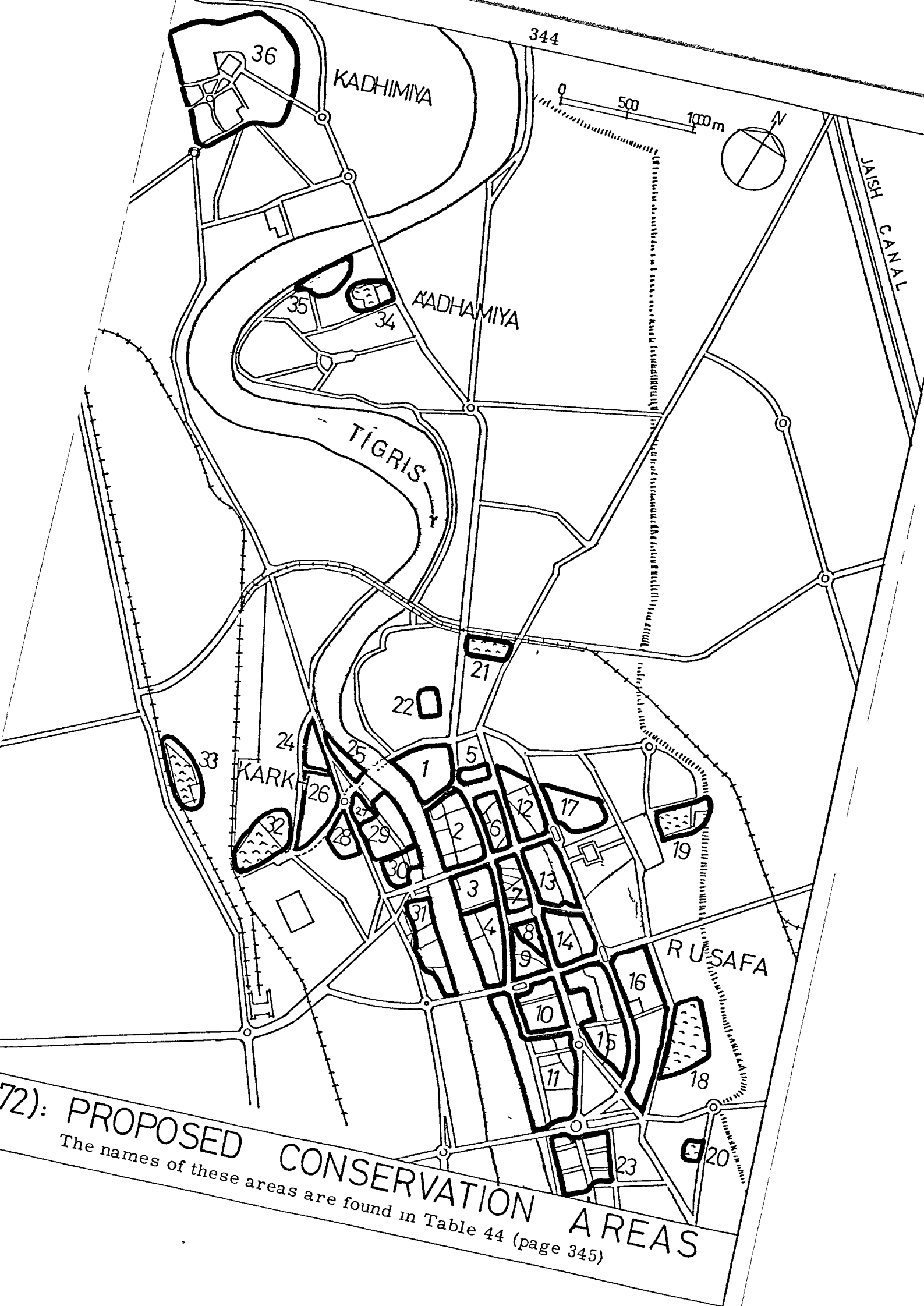
8.5.2 Conservation Areas and Zones of Special Visual Interest

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 conservation survey resulted in the identification and designation of twenty-three such areas in Rusafa, nine in Karkh, and two in Aadhamiya, while the historic core of Kadhimiya is designated as one Conservation Area (Table 44, Figure 72).

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 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 arrangements 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. , Amanat al-Assima 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, listed building control including demolitions and alterations, infill, and enhancement including landscaping, provision of street furniture and removal of unsightly poles and overhead electricity and telephone wires.

The boundaries of the proposed Conservation Areas are broadly based on the official block divisions of Baghdad by the Amanat. They were not based on the Census boundaries because these boundaries are not physically defined as the blocks are. The blocks have been defined along existing street patterns or other physical features such as railways



72): PROPOSED CONSERVATION AREAS
 The names of these areas are found in Table 44 (page 345)

TABLE 44 The Proposed Conservation Areas in Baghdad

	Corresponding Block (Approximate)
<u>Rusafa</u>	
1. Citadel Complex	114
2. Sarai and Jadid Hasan Pasha	114
3. Suqs Area/Bab al-Agha	110
4. Ras al-Qarya/Mustansir Street	110
5. Sabounchiya	112
6. Haidarkhana/Aqouliya	112
7. Imam Taha to Shorja 1	108
8. Churches/Dahana	108
9. Ammar	108
10. Murabaa	104
11. Sinak	104
12. Fadhil/Qaraghol/Hammam Malih	115 & 113
13. Qanbar Ali/Tawrat/Shorja 2	111
14. Qushal/Hitawiyin	111
15. Saraj al-Din/Ras al-Saqya	109
16. Bab al-Shaikh	119, 117 & 107
17. Abdulla/Mahdiya	123
18. Ghazali Cemetery	129
19. Wardiya Cemetery/Sahrawardi	131
20. British Civilian Cemetery	103
21. British Military Cemetery	143
22. Turkish Cemetery	116
23. Batawiyin	101
<u>Karkh</u>	
24. Jaifir	212 & 210
25. Tikarta	212
26. Shaikh Ali	210
27. Sitta Nafisa	212
28. Jami Atta	212 & 210
29. Suq Jadid	212
30. Shaikh Bashar	212
31. Sif/Shawaka/Kraimat	216
32. Shaikh Maaruf Cemetery	208
33. Shaikh Junaid Cemetery	202
<u>Aadhamiya</u>	
34. The Mosque and Cemetery	312
35. Safina	312
<u>Kadhimiya</u>	
36. The Mosque and Surrounding Core	400-434

NOTE: The location of these proposed Conservation Areas is shown in Figure

and canals. The proposed areas vary in size, character - both functionally and architecturally - and in the number of selected buildings 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 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.

The number of selected buildings within these proposed Conservation Areas usually gives an indication of the intensity of its cultural interest. Table 45 shows the incidence of selected buildings and other items per hectare. The highest incidence in Rusafa is claimed by block 110 which includes the historic mahallas of Bab al-Agha and Ras al-Qarya. The same block also contains the greatest number of grades A and B in the whole of Baghdad. In absolute terms (of all grades), block 104, which includes Murabaa and Sinak mahallas, contains the greatest number. Kadimiya's historic core, which contains 235 selected buildings within an area of about 59 hectares, has an incidence ratio of about four items per hectare - the highest in Baghdad.

However, it must be emphasised that these incidence figures should only be taken as general indicators and not as 'absolute' facts. 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 C grade, thereby arriving at different incidence ratios.

Most of 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 possess certain nodes and landmarks which have managed to maintain some of their former visual interest and contribution to the historic skyline of parts of the old city. Such areas have been identified by the author as Zones of visual interest. In general, they fall into three main categories (Table 46, Figure 73):

TABLE 45 Grades and Incidence of Inventory Items per Hectare in Survey Blocks of Rusafa, Karkh and Kadhimiya

Block No.	Area (ha.)	Grade A	Grade B	Grade C	Total	Incidence Items/ha.
<u>Rusafa</u>						
114	18	12	16	11	39	2.90
110	16	12	30	9	51	3.18
112	18	4	5	18	27	1.50
108	20	5	13	24	42	2.10
104	46	4	19	45	68	1.48
113	12	1	4	7	12	1.00
111	35	1	10	2	13	0.38
109	24	4	5	2	11	0.45
107	20	-	3	5	8	0.40
<u>Karkh</u>						
218	40	4	17	13	34	0.85
210	50	-	3	1	4	0.08
216	25	-	2	16	18	0.72
<u>Kadhimiya</u>						
402	2	-	-	1	1	0.50
403	1.2	-	4	10	14	11.70
404	0.45	-	-	2	2	2.20
405	0.9	-	3	6	9	10.00
406	0.9	-	3	3	6	6.70
407	0.7	-	2	1	3	4.30
408	1.35	4	1	5	10	7.40
409	2.25	-	1	2	3	1.30
412	1.35	-	-	5	5	3.70
413	0.97	-	2	2	4	4.12
414	1.5	-	1	1	2	1.30
416	0.6	-	5	4	9	15.00
417	1.6	-	2	3	5	3.12
418	1.5	-	-	4	4	2.70
419	1.6	-	2	5	7	4.40
420	1.0	-	1	3	4	4.00
421	1.5	1	9	3	13	8.70
422	1.8	1	10	6	17	9.34
423	1.8	-	-	3	3	1.70
426	0.6	-	1	3	4	6.70
427	0.8	-	2	1	3	3.75
428	1.26	-	2	7	9	7.14
429	2.7	-	10	20	30	11.11
430	1.0	-	6	7	13	13.00
431	1.0	-	3	2	5	5.00
432	0.5	-	2	11	13	26.00
433	1.5	1	7	11	19	12.70
434	1.65	1	4	5	10	6.00

Source: Author's Conservation Survey, Baghdad, 1975-77

1. Landmarks, such as large mosques with lofty minarets and domes
2. Nodes, such as those represented by a small group of buildings of high visual interest
3. Views, especially long continuous views, such as riverfronts or streets.

Forty-seven such zones have been identified in the conservation survey. They include twenty-six landmarks, ten nodes, and eleven views. Although all of these zones are within the proposed Conservation Areas, they demand, nevertheless, more strict visual and planning controls. For landmarks, a protective visual 'buffer' circle of not less than 150 metres radius is proposed. Within these circles, high-rise development (more than two storeys) should be strictly banned and, depending on the size and character of the landmark itself, special development regulations and guidelines should be formulated. For nodes and continuous views, on the other hand, buffer circles are obviously not practicable, but again they should be treated with special care.

It is not realistic, nor perhaps desirable, to issue 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 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. 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 incentives for continued care and investment in maintenance.

A Conservation Area should not be treated as a 'line on a map', its designation is only a necessary preliminary to ensure that suitable steps are taken and policies formulated to retain its special character by a conservation plan of action within the larger framework of the City's Development Plan.

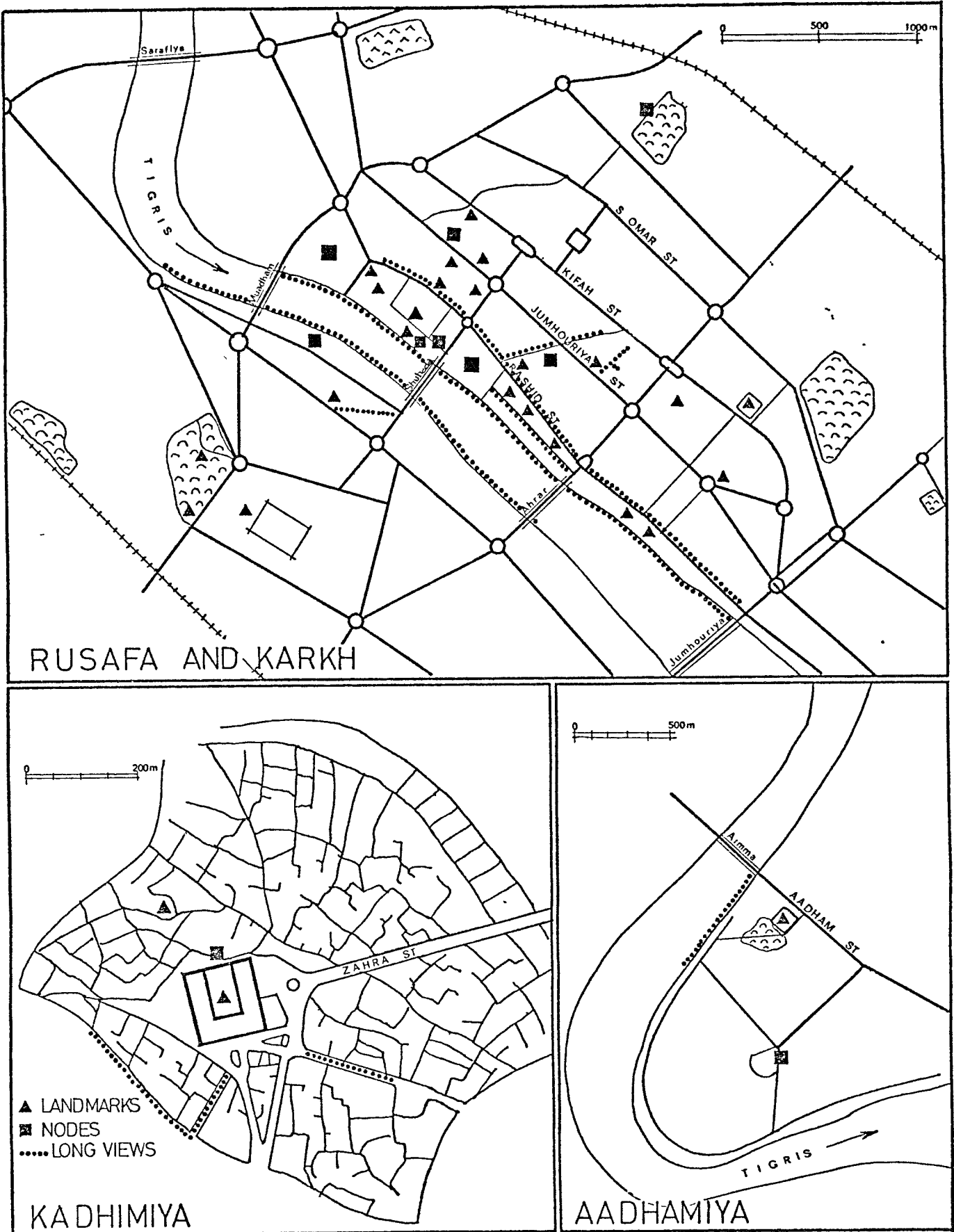


FIG. 73 ZONES OF VISUAL INTEREST IN BAGHDAD

TABLE 46 Proposed Zones of Visual Interest in Baghdad

Landmarks	Nodes	Long Views
<u>Rusafa</u> 1. Ahmadiya Mosque 2. Haidarkhana Mosque 3. Sarai Mosque 4. Numaniya Mosque 5. Adiliya Mosque 6. Khasaki Mosque 7. Husain Pasha Mosque 8. Aqouli Mosque 9. Sultan Ali Mosque 10. British Residency 11. Fadhil Mosque 12. Mnawra Khatun Mosque 13. Khulafa Mosque 14. Saraj al-Din Mosque 15. Khulani Mosque 16. Gailani Mosque 17. Qushla Clock Tower 18. Mirjan Mosque 19. Lynch House	1. Citadel 2. Sarai Buildings 3. Suqs Area 4. Churches Complex 5. Sarajin and Sagha Suqs 6. Tabat al-Kurd 7. Sahrawardi/Wastani	1. Rashid Street 2. Mustansir St. 3. Riverfront/Citadel to Sinak 4. Al-Ghazil Suq 5. Shorja Suq
<u>Karkh</u> 20. Sandal Mosque 21. Hallaj Tomb 22. Zumarrad Khatun Tomb 23. Maruf Karkhi Mosque	8. Qumriya/Ajmi Mosques	6. Hidadha Suq 7. Riverfront/Tikarta to Kraimat
<u>Aadhamiya</u> 24. Aadham Mosque	9. Royal Cemetery/Aal Bait College	8. Riverfront/Sifina
<u>Kadhimiya</u> 25. Khadhimain Mosque 26. Haidari Husainiya	10. Aaraji Mosque/Cemetery	9. Bab Dirwaza St 10. Astarabadi Suq 11. Mufid St. Suq

NOTES: The location of these zones is shown in Figure
 Areas of landscape interest are excluded

8. 5. 3 Individual Items of Cultural Interest

The conservation survey and the inventory of Baghdad resulted in the identification of several broad-use groups into which fell most of the selected items. These groups are as follows:

1. Residential: Mostly houses, but also some hotels and hostels (Manzils). This group makes up about 69% of the inventory.
2. Religious: Mostly mosques and masjids, but also madrasas, tombs, takyas, husainiyas, and churches. This group makes up about 22% of the inventory.
3. Commercial: Includes suqs, khans, shops. This group makes up 5.8% of the inventory.
4. Others: Includes hammams and schools. It makes up 3.2% of the inventory.

Between them, residential and religious uses make up 91% of the total number of items in the inventory (Table 47). The same table shows that the order of abundance of the different types of items is as follows

Houses
 Mosques
 Tombs
 Khans
 Suqs
 Others
 Hammams
 Churches
 Takyas
 Madrasas
 Husainiyas
 Shops
 Cafes

The table shows that out of a total number of 603 items, 104 have been either converted into another use or are being used for a purpose that is different from their original use. This represents a change in use of 17.24%, most of which has affected houses.

Table 48 indicates that about 74% of the items of the inventory are privately owned, and some 18% are owned by the Awqaf Ministry. Table 49 shows that while 45% of the items are in fair physical condition, more than 51% are either in poor or very poor physical condition

TABLE 47 Inventory Items. Original and Existing Uses

	Existing Uses														As Original	Different to Original	Total	Percentage of Change		
	Houses	Mosques	Tombs	Takyas	Husainiyas	Khans	Shops	Suqs	Workshops	Hammams	Stores	Churches	Museums	Madrasas					Others	Vacant or Abandoned
Houses	333				3	9	10		26		10		4		9	8	333	79	412	19.17
Mosques		86										1			1	3	86	5	91	5.49
Tombs			18													4	18	4	22	18.18
Takyas				5												1	5	1	6	16.66
Husainiyas					3												3		3	
Khans						17						1					17	1	18	5.5
Shops							2										2		2	
Suqs										15							15		15	
Hammams							1		1							1	5	3	8	37.50
Churches														5			5		5	
Madrasas													3		1			4	4	100.00
Others							2						4		10	1	10	7	17	41.17
Totals	333	86	18	5	6	26	15	15	27	5	10	5	13	-	21	18	499	104	603	17.25%

Source: Author's Conservation Survey, Baghdad, 1975-77

TABLE 48 Inventory Items: Types of Ownership

Ownership	Grade A	Grade B	Grade C	Total	Percentage of Total
Private	16	155	275	446	13.96
Awqaf	48	54	8	110	18.25
Government	2	11	5	18	2.98
Government - Mujammada	2	5	9	16	2.65
Antiquities	8	-	-	8	1.33
Church	2	2	1	5	0.83
Totals	78	227	298	603	100.00

Source. Author's Conservation Survey, Baghdad, 1975-77

TABLE 49 Inventory Items: Physical Condition

Condition	Grade A	Grade B	Grade C	Total No.	Percentage of Total (603)
Good	4	7	3	14	2.32
Fair	38	102	136	276	45.78
Poor	26	102	146	274	45.44
Very Poor	10	16	13	39	6.46
Totals	78	227	298	603	100.00%

TABLE 50 Inventory Items: Percentage of Condition Types According to Each Grade

Grade and Number	Physical Condition			
	% Good	% Fair	% Poor	% Very Poor
A (78)	5.12	48.70	33.3	12.88
B (227)	3.08	44.90	44.90	7.12
C (298)	1.00	45.63	48.99	4.36

Source: Author's Conservation Survey, Baghdad, 1975-77

TABLE 51 Inventory Items. Estimated Cost of Repair and Restoration

Estimated Costs of Repair and Restoration	Grade A	Grade B	Grade C	Total No.	Range of Total Cost*
Under 5,000 ID	20	51	200	271)	1,355,000 ID
Under 20,000	28	134	92	254)	1,270,000-5,080,000
Under 50,000	18	32	-	50	1,000,000-2,500,000
Under 100,000	3	2	-	5	250,000-500,000
Over 100,000/ Special Fund	9	8	6	23	2,300,000
Totals	78	227	298	603	6,175,000-11,735,000

Source: Author's Conservation Survey, Baghdad, 1975-77

NOTE: *The costs are calculated between minimum and maximum estimates and do not include maintenance costs

According to grades, Table 50 shows that more than 46% of all Grade A items are in poor or very poor physical condition, and that more than 52% of all Grade B and Grade C items are in poor or very poor physical condition.

The costs of repair and restoration of each item in the inventory was indicated by a general estimate falling into five groups from 'under 5,000 ID' to 'over 100,000 ID'. The estimate is indicated on each inventory card. Table 51 shows that the cost of repairing and restoring all the selected items of the inventory ranges between six million and twelve million Dinars, or around an average of about nine million Dinars. Obviously these figures are only general approximations and must therefore be considered with some caution. However, it is significant to notice that as many as 87% of all items (the first two groups in Table 51) only require between 2,625,000 and 6,435,000 Dinars to repair and restore. It is also important to realise that thirty-four Grade A items (40%) are already restored by the various protective agencies.

Because of the many unknowns and variables involved in this sort of estimation, it is difficult to arrive at more definite figures. These figures, however, contrast sharply with the estimated costs of the conservation of Kadhimiya's historic core by Polservice. They show that the planners' figure of about 2.5 million Dinars is considerably underestimated. The costs of implementing conservation plans for the Conservation Areas proposed in this research would obviously require special central government funds and regular allocations in the national development plan.

A. Houses

Frequent floods, fires, wars and other disasters, have resulted in the total destruction of all medieval houses in Baghdad. Consequently, it must be stressed at the outset that none of the surviving traditional houses date back beyond the early decades of the nineteenth century. The word 'Traditional' is used here to describe houses which are older than 1918 and of vernacular design, while 'Transitional' describes those built between 1918 and the late 1930's because of their differing architectural and constructional characteristics. Arabic architectural words (Iraqi usage) are explained in the glossary at the beginning of this volume. Because houses form the major part of the inventory they are discussed here in more detail than other items.

Despite the disappearance of medieval houses it can be safely assumed that existing traditional ones are essentially a continuation of their predecessors. This assumption is based not only on historical accounts but also augmented by contemporary illustrations such as those by Hariri⁴. It should be realised that the majority of medieval houses were probably built of mud-bricks and not of kiln-fired bricks and, therefore, they could not have survived the ravages of man, time and nature. It is known, for example, that most houses of the Round City of Baghdad were built of mud-bricks. Only important buildings such as mosques, madrasas, hammams and large houses of the rich were built of durable materials.

Another reason for the disappearance of older houses was perhaps that they were not regularly maintained or restored. In contrast to mosques and other revered items, houses were allowed to dilapidate before being eventually demolished and replaced by new ones. In other words, there seems to have been a continuous urban renewal process in traditional mahallas throughout Baghdad's history. Thus, while some items of public interest survive from the late eleventh century (Wastani Gate) the oldest surviving houses date back only to around 1840 (Nos. 642, 855 and 905). More than 91% of all inventory houses were built between 1869 and 1932, while only 8.7% of the listed houses were built between c. 1840 and 1868 (Table 52). (Figure 74)

TABLE 52 Inventory Houses: Age Groups, Grades and Percentage of Total

Age Group	Grade A	Grade B	Grade C	Total	Percentage of Total Number of Houses (333)
pre-1700	-	-	-	-	-
(1701-1868)	5	21	3	29	8.70
(1869-1917)	3	80	100	183	54.95
(1918-1932)	-	15	106	121	36.35
Totals	8	116	209	333	100.00%

Source: Author's Conservation Survey, Baghdad, 1975-77

NOTE: The percentage of inventory houses according to their grades A, B and C are 2.4, 34.8 and 62.8% respectively.

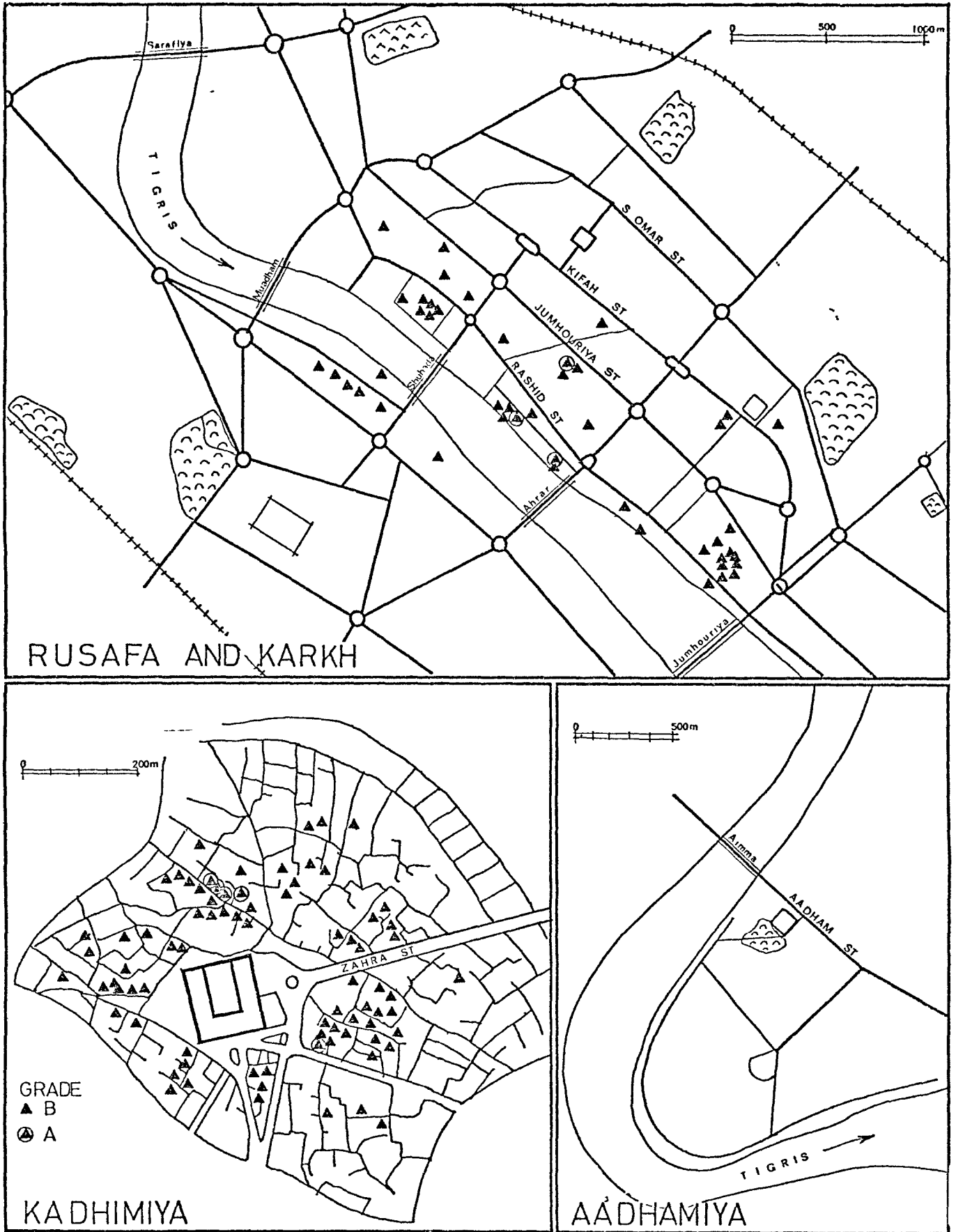


FIG. 74 INVENTORY HOUSES IN BAGHDAD (grades A & B only)

TABLE 53 Inventory Houses: Physical Condition and Grades

Physical Condition	Grade A	Grade B	Grade C	Total No.	Percentage of Type of Condition of Total
Good	-	-	2	2	0.60
Fair	3	63	55	121	36.35
Poor	4	44	145	193	57.95
Very Poor	1	9	7	17	5.10
Totals	8	116	209	333	100.00%

Source: Author's Conservation Survey, Baghdad, 1975-77

Table 47 shows that nearly twenty per cent of listed houses have either been converted to another use or are being used for purposes other than residential, such as workshops and stores. The survey also shows that nearly 94% of all listed houses are privately-owned, while the rest are owned by the government. Over 63% of all listed houses are either in a poor or very poor physical condition, while about 36% are in a fair physical condition and only 0.6% are in a good condition. It should be stressed that houses which were in a very poor state were listed only if they possessed exceptional architectural or historical qualities. This explains the relatively low figure of items in poor condition. (Table 53).

The Plan

All traditional houses in Baghdad are planned around a central open courtyard. The courtyard (Hosh, Fana) represents the focal element and its use has been effectively employed over the past several millennia. An over-riding consideration in the design of such houses was privacy. Although the courtyard provided privacy, it evolved as a response to the severely hot-dry climatic conditions. In addition to using it as a general working space, it acted as an effective temperature regulator cooling the house during the daytime. (Figure 75)

It is significant that the Arabic word for a house - 'Maskan' - is derived from 'Sakina' or 'Sikun' which literally means 'quiet'. The traditional life of Moslems was sharply divided between the private and the public, between man and woman. Each house was a private introvert enclosure; shut off from its surroundings by high and solid walls, it provided its occupants with a marked contrast to the hustle and bustle of public life. It is important to understand the social and spiritual implications of Islam on architecture. These sharp social and traditional divisions were reflected in physical terms by the division of the house into two distinct sections; the 'Diwan-khana' - for the males and their male guests, and the 'Haram' - for the women, servants, and women guests. Often, these two sections had their own separate entrances. Similarly, the preoccupation with privacy resulted in a

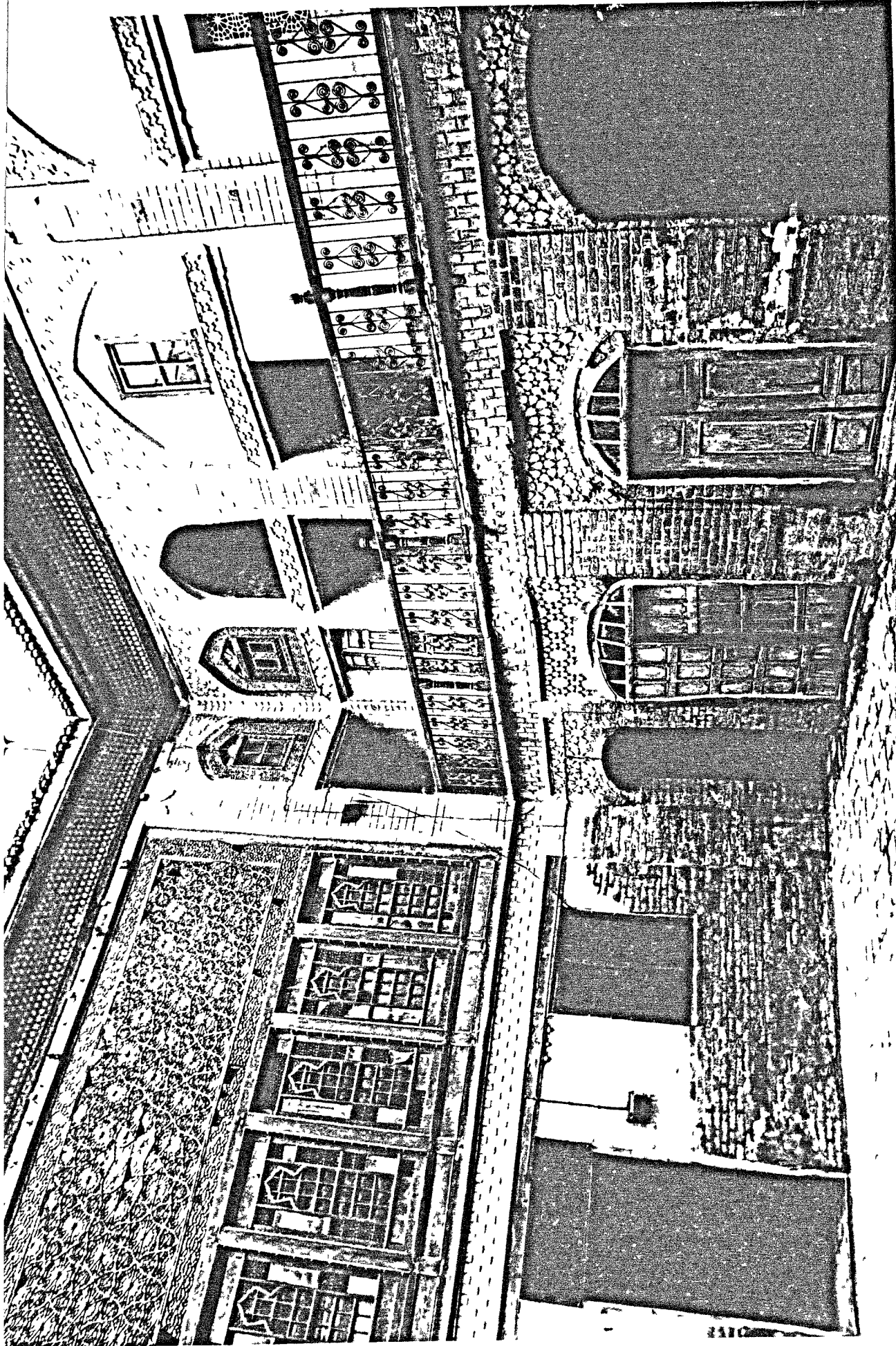


FIGURE 75 THE COURTYARD OF ABAIDA HOUSE IN KADHIMIYA (Inventory No. 642) Source of Photograph: Author

general neglect of external elevational treatment and in a concentration on the interior. The interior was always more important than the exterior and in time this emphasis began to shift in the opposite direction. Thus in more recent traditional, but especially in transitional houses, external surfaces began to play an increasingly more important role.

The social requirements of the traditional Iraqi family were substantially different from those of today. This fact is particularly important when the individual architectural elements are considered. For instance, the majority of rooms were not designed for a specific fixed purpose. While houses in the West are divided according to various functions: living rooms, dining rooms, studies, and so on; houses in the Near East provided for more people at a time and are divided largely according to social criteria. There is no fixed dining room or bedroom, the occupants could eat anywhere they liked depending on the occasion and the season. This was possible because of the simple and easy eating-customs of Muslims. Meal times were not rigidly adhered to as in the West, tables and chairs were not needed because people sat cross-legged on the carpeted floor and ate communally from large trays.

Similarly, people preferred to distinguish individual rooms according to whether they are more pleasant to live in, or sleep in, in summer or winter, at morning, noon or night. Thus they moved according to season or time of day from the cellar up to the roof and, therefore, the idea of 'bedroom' is as meaningless as that of 'dining room'. In the summer people slept in the cellar during the hot afternoons, and on the flat roofs during the cool breezy nights. In winter, they slept in first-floor rooms and especially in those facing south.

In general, the ground floor did not get as much architectural attention as was given to the first floor. More often than not, it was the arrangement and planning of rooms (Tafsil) of the first floor that determined the position of walls and partitions of ground floor rooms. There are several possible explanations for this peculiarity. First, the ground floor was nearly always reserved for service rooms, such as stores

(Umbars), kitchens (Mutbakhs), hammams, and toilets, all requiring a basic 'functional' architectural approach. In contrast, the upper storey was often used to include the 'Diwankhana' section of the house and, therefore, it required the maximum architectural attention and detailing. The elaborate ornamentation and decoration of some first-floor rooms was meant to impress the guests and enhance the social status of the owner.

The restricted space within the confines of the old walls of Baghdad resulted in a scarcity of urban land and high residential densities. In contrast to country houses which were usually large and spread horizontally in one floor, urban houses were always built with two or more floors. With the exception of a few large mansions or palaces, the overwhelming majority were built on small, irregular plots of an area which ranged between 50 and 150 square metres.

Upper storey rooms could be projected over the street in such a way that their irregular shapes could be corrected. It was often the case that these projections took the shape of a serrated row of oriel windows (Shanashils). This serration only occurred because of the need to correct the irregular shape of the plot and not because of the need to observe the street from the narrow side-windows of the projected shanashils. This fact explains the non-existence of serrated shanashils in more recent mahallas such as those in Sinak, Batawiyin, and Karbala, where a grid-iron layout is used. The serration occurred only when two streets intersected at an angle of less than ninety degrees.⁵

The plan of a typical medium-sized traditional house in Baghdad consists usually of the following elements:

Ground Floor

- An elaborate portal
- L-shaped entrance
- Open Courtyard, sometimes two
- A central room, either as 'talar' or 'liwan'
- Service rooms, such as kitchens, hammams, stores, etc.
- Cellars (sirdabs) and/or half-cellars (neems)
- Stairs
- Occasionally, an 'ursi room'

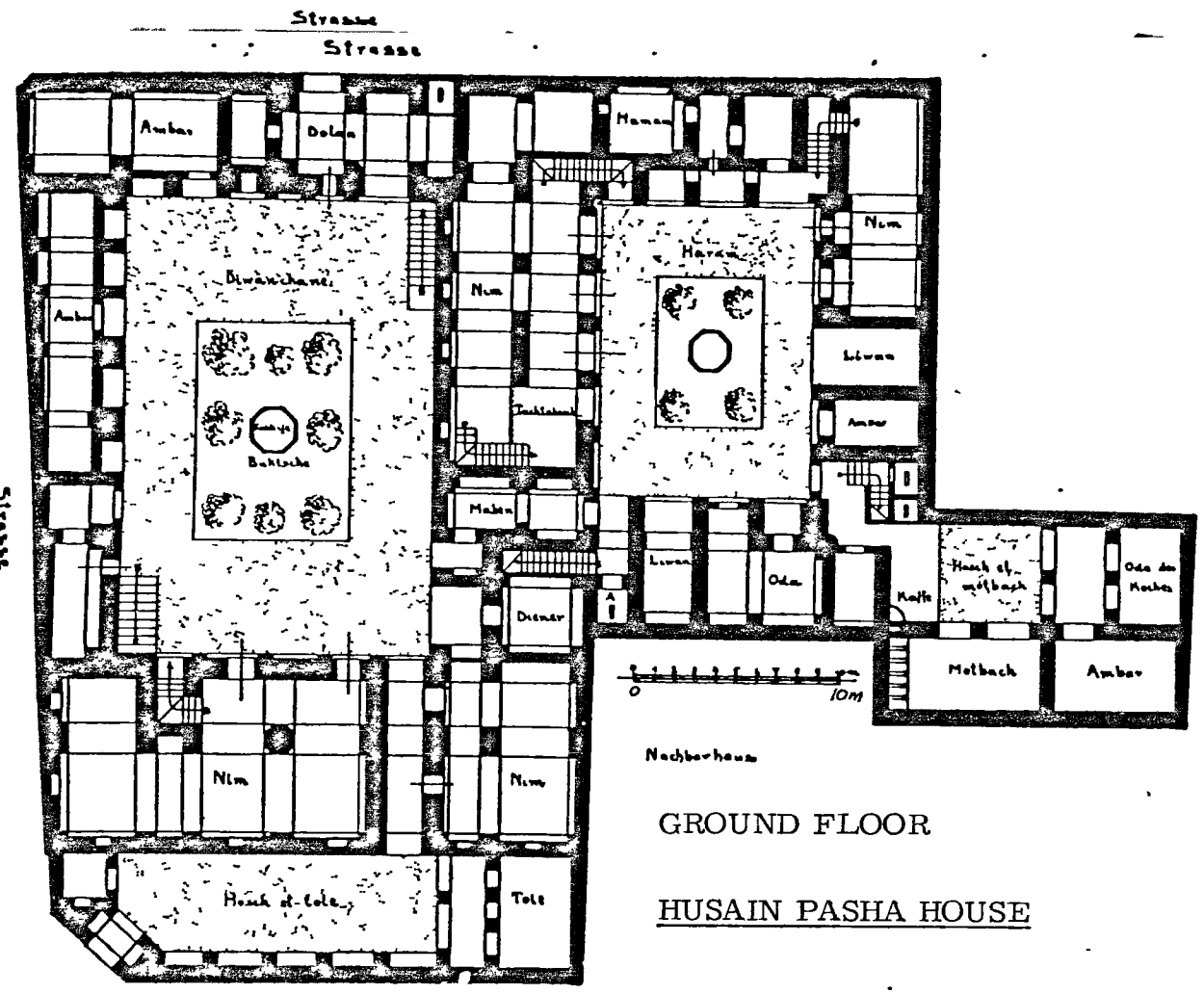
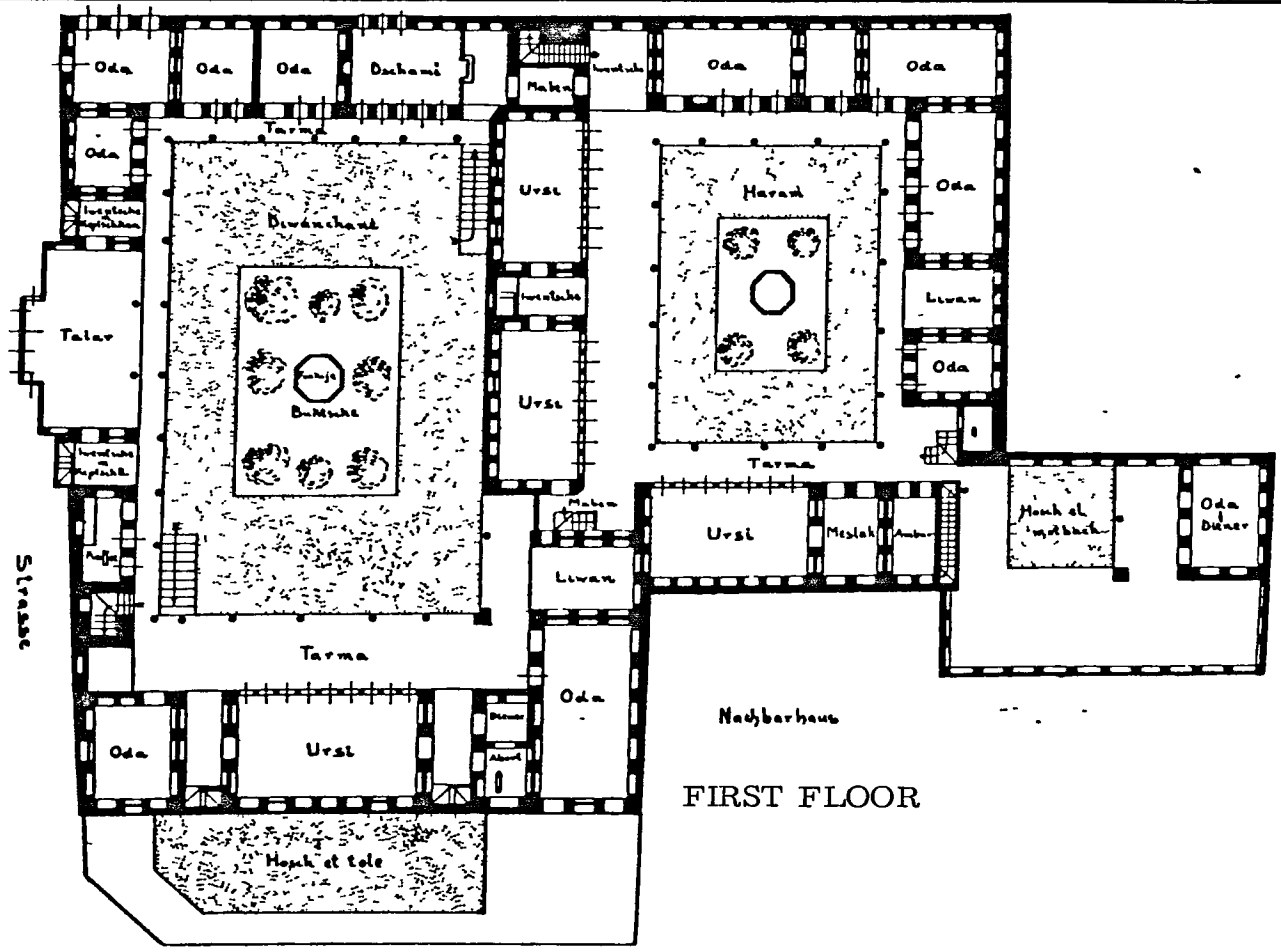


FIGURE 76 AN EXAMPLE OF A LARGE HOUSE IN BAGHDAD
 Source: Reuther

First Floor

A colonnaded 'Tarma', a sort of colonnaded gallery, provided with a balustrade and used as the main circulation corridor
 A central room, either as 'talar' or 'liwan' or 'ursi'
 Wing rooms, at either side of the central room
 Iwanchas, or side access corridors
 Shanashils
 Kabishkans, small corner rooms at mezzanine level
 Stairs
 Flat roof, with a balustrade around the courtyard opening, and a parapet wall on the perimeter.

For most traditional houses, even modest ones, an elaborately ornamented entrance portal was nearly always provided. In larger houses or important public buildings, these portals can be very imposing indeed, and often help the surveyor or investigator to deduce the architectural importance and date of the house from external signs (Figures 77 and 78). The entrance and its corridor was always broken by a ninety-degree turn to make it impossible for strangers and passers-by to see accidentally the women of the family. As was indicated earlier, this was a device that was used by the Abbasids in the Round City of Baghdad. The corridor was usually either a long vaulted passage (Mijaz), or a square, heptagonal, or hexagonal domed room called 'Dolan'. It was sometimes closed off from the interior by a lockable door or at least provided with a curtain. In larger houses, a room was provided off this entrance lobby for the porter or door keeper. Masonry benches (Dakas) were incorporated within wall niches and acted as seats for the door keeper and visitors' servants.

The entrance corridor, which was usually located at one side of the house, opens directly on to the open-air courtyard. The courtyard was always rectilinear in plan and its dimensions ranged from 3 x 3 metres in small houses to over 10 x 10 metres in larger ones. Its height, which was often more than eight metres, was generally greater than its plan dimensions, thus affording adequate shade even from the near vertical midday summer sun⁶. Many courtyards were provided with a fountain (Shithirwan) which was placed at the centre and helped to raise the level of humidity and cool the air within the walls. They were also planted with trees which helped to provide more shade as well as cool and enliven the area.

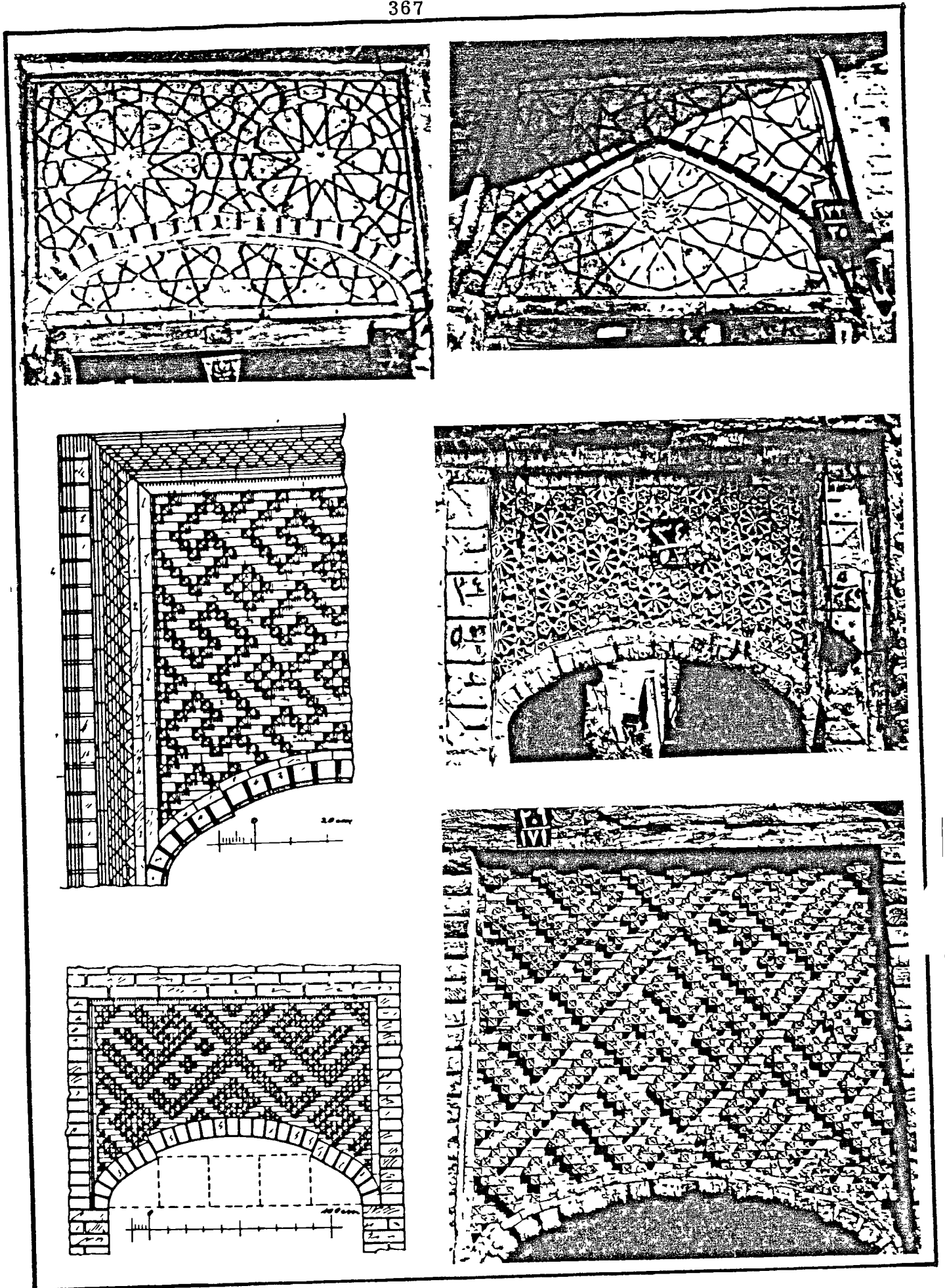


FIGURE 77 DECORATIVE BRICK PORTALS - (PRE AND) EARLY 19th C. TO EARLY 20th C.

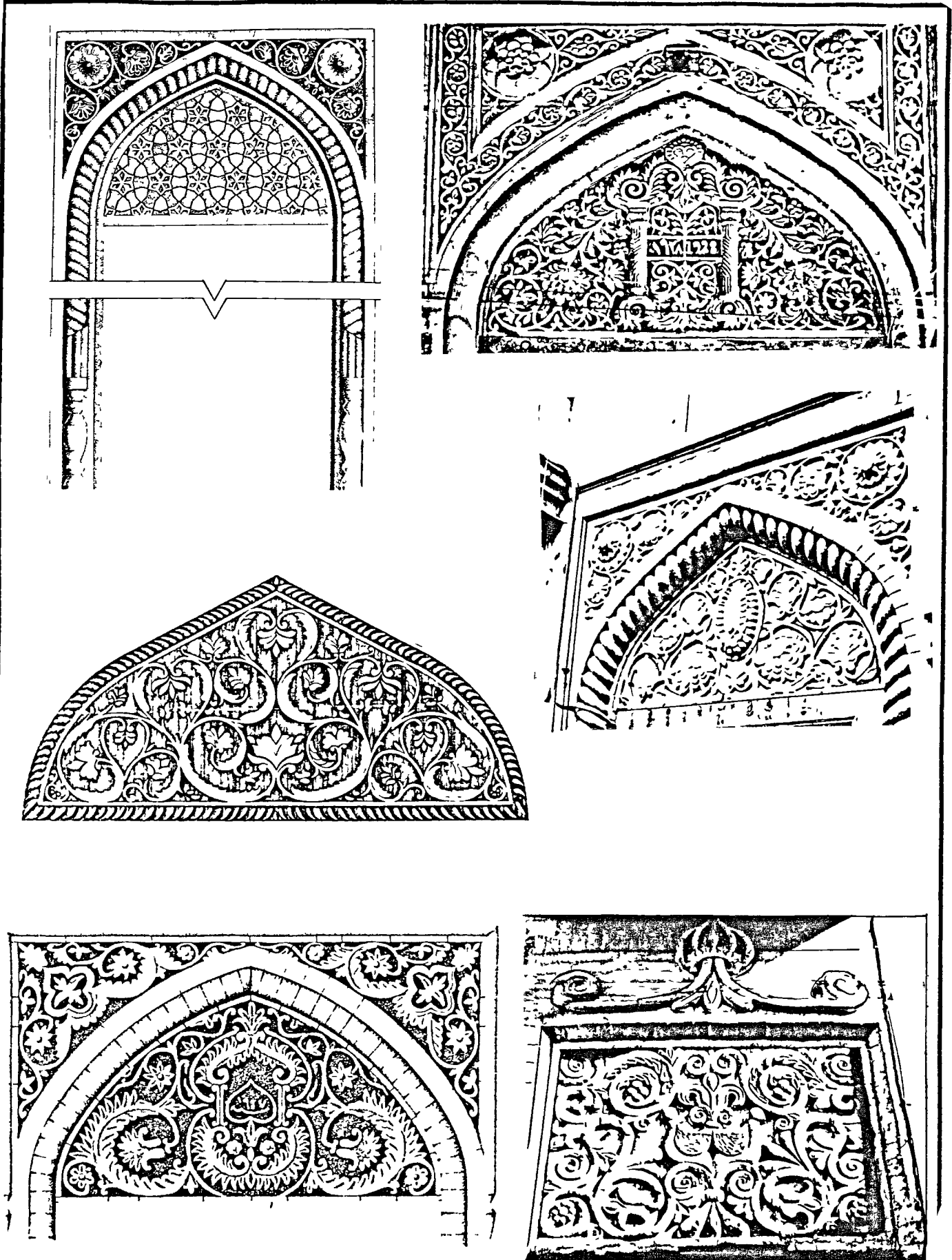


FIGURE 78 DECORATIVE STUCCO PORTALS - C. 1918 TO EARLY 1930'S

The terms 'Liwan' and 'Iwan' are used to describe a room, usually placed centrally at the side of a house, with its three sides walled but with its front side opened towards the courtyard at ground level or towards the tarma at first floor level. It is not provided with columns and this is the basic difference between it and the 'Talar' which is always provided with two or more wooden columns. Some traditional builders use the term 'liwan' for these rooms if they opened through an arch as in most mosques, for example. According to Reuther, it is characteristic of the liwan to lie perpendicular to the tarma and along its longitudinal axis⁷.

The talar and iwan are summer or winter spaces according to their orientation and position in plan. If they faced north, they were shaded and therefore were cooler in summer, if they faced south, they were used mostly in winter where the inhabitants could enjoy the warmth of the winter sun. Some of the latter traditional houses of early twentieth century were provided with removable ursi-windows which covered the iwan. In winter, this window was put in position to provide shelter against cold and wind, in summer it was removed and the space used as a proper iwan. Both iwans and talars were usually provided with windows at their side walls to allow some light to penetrate into adjacent rooms or half-basements behind (neems). These windows were usually screened either with wooden lattice-work or lattice work with inlaid geometric pieces of coloured glass.

The talar was used as a living space and for many other daily activities. The talars of upper storeys were often raised higher than the tarma by three to four steps. In such cases, the talar was sometimes separated by a bannister which meant that it was only possible to enter it through side doors. The talar, like the ursi-room, was arranged so that its longitudinal axis was parallel to the tarma⁸. Very few houses with talars that lie behind the tarma were encountered by the author during the conservation survey. A rare example of this arrangement is provided by the house listed as number 303 in the inventory.

Service rooms, such as kitchens, stores, bathrooms, toilets, and servants' rooms, were always placed on the ground floor. If the house

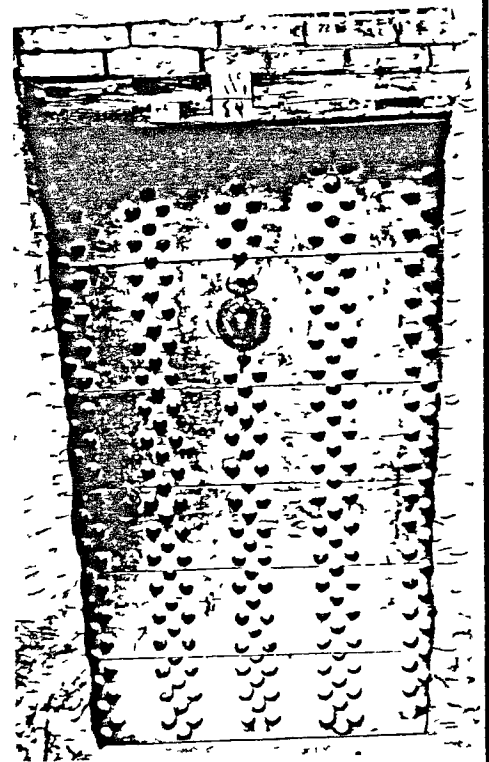
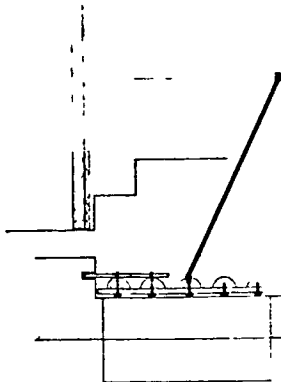
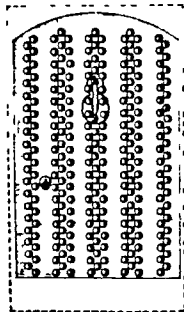
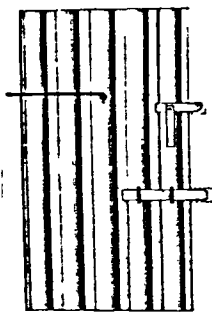
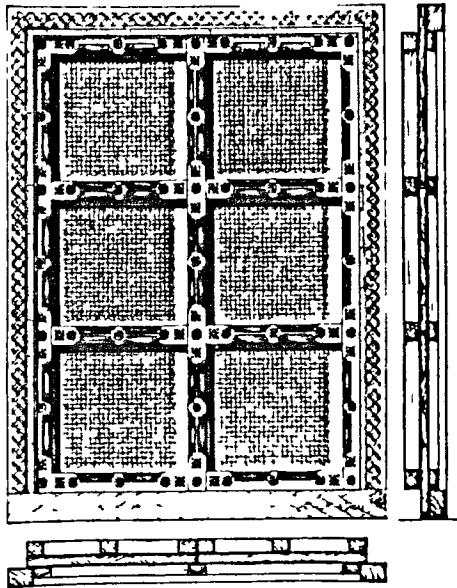
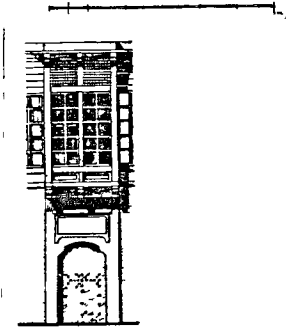
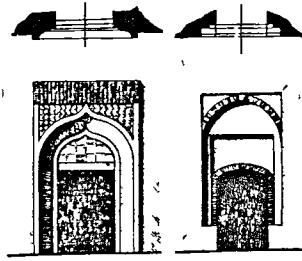
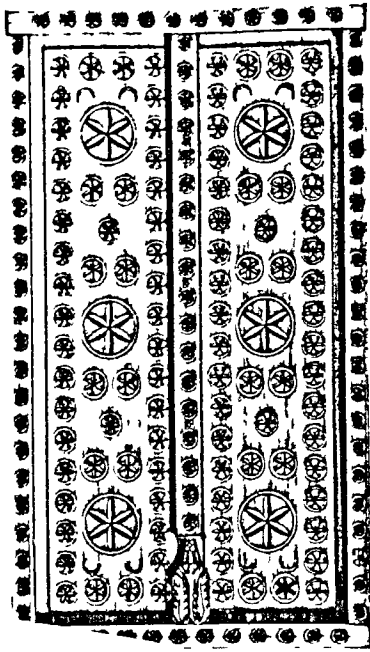


FIGURE 79 DOORS - (PRE AND) EARLY TO MID 19th CENTURY

was not a complete peristyle, then service rooms were placed together on the open side of the courtyard in a one-storey row. In houses of the rich, the servants' rooms were positioned close to their place of work, the cook near the kitchen, the porter near the gate, the horseman (Sayis) near the stable (Tole). The hammam was usually a small room with an asphalt floor and walls and was provided with an asphalt bowl for hot water. Small houses of the poor did not have bathrooms and the occupants used nearby public hammams. In larger houses of the rich, the hammams had a proper steam-room, a disrobing ante-room, and a servant's room.

The toilets (Adabs) were usually very small and of the squatting type, but even in smaller houses there were several. They did not have a fixed position on the ground floor plan and were slotted anywhere. In the ideal peristyle plan (Hosh Murabaa) they were often placed within the thick walls behind the main stairs. According to Reuther, earlier toilets built on the roof were abandoned by the beginning of the nineteenth century⁹. This is a useful dating device for traditional houses in Baghdad.

The kitchen of the smaller houses of the poor was usually a small open room, often simply a recess within the walls of the courtyard. In the larger houses of the rich, the kitchen was not included in the main courtyard but was provided with its own small open courtyard (Hosh al-Mutbakh). Around this smaller courtyard the cook's and other servants' quarters were located as well as other store-rooms. In such houses, two or more kitchens were provided - one for the Diwankhana section and a main one for the haram section of the house. Occasionally, small coffee kitchenettes were placed near the main rooms of the diwankhana, either in an iwancha or on one side of the tarma (Inventory number 25). (Figure 76)

Drinking water was provided by special water-carriers called 'Saqqa' who brought the water from the Tigris and poured it into large barbotine vessels (Hibbs). These hibbs were always located in shady niches, usually near the main entrance. Larger houses also had their own water. The wells were either in the courtyard or were provided with a proper opening within wall niches. (Inventory number 642).

Storage was a very important consideration even in small houses. Food, especially grain and animal fat, was stored in large quantities in particular rooms. Food requiring cool temperatures like fresh fruits and date syrup (Dibis) were kept under the 'Takhtabosh', i. e. in the 'Rahrau' in the half-cellar. This store was often directly linked to the kitchen or the kitchen-yard by a special stairway. Bulky objects like saddles and sacks of produce were kept in stores on the ground floor. Clothes, blankets, and other similar objects were kept in ornate wooden chests. Small objects were stored in numerous recessed shelves (Rufufs), some of which were provided with wooden doors which made them into built-in cupboards. In older houses, these recesses (Razunas) were so numerous that they often occupied the whole area of the main wall thereby creating a very interesting pattern of solid and hollow masses.

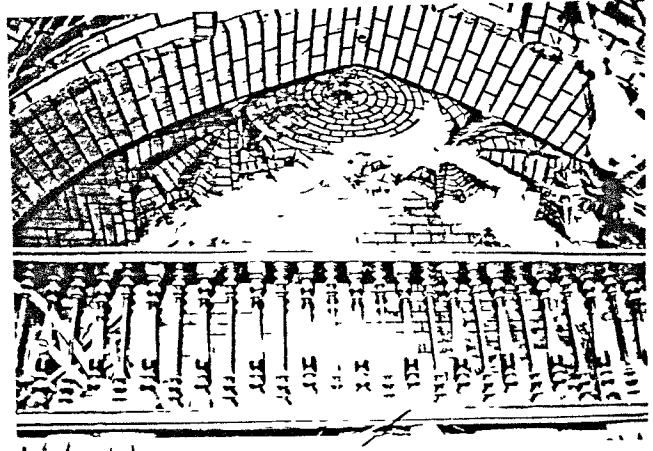
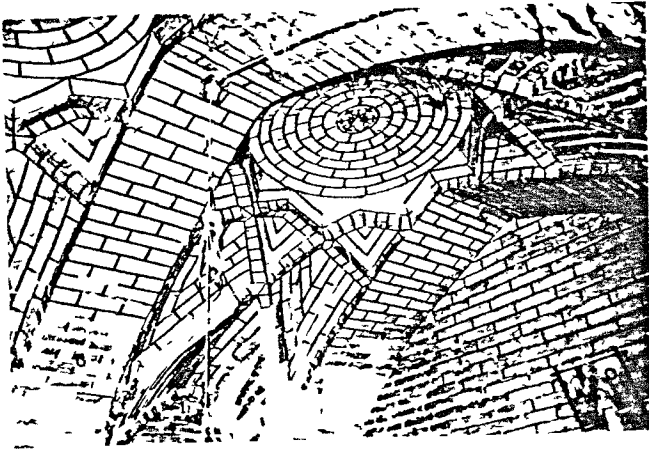
In traditional houses in Baghdad and elsewhere in Iraq, the cellars (Sirdabs) and half-cellars (Neems) were very important elements of the ground floor plan. They were extensively used for siesta sleeping as well as for storing large quantities of food. The etymological derivation of the word 'Sirdab' is from the similar Persian word meaning 'cold water'.

In traditional houses in Baghdad the concept of 'Tarma-House' design was, as a rule only implemented in the upper floor. However, the same basic concept was sometimes employed in the arrangement of the neem cellar which was placed behind and around the central room of the talar, as were the wing rooms around the talar, ursi, or liwan in the first floor. The central area of the neem cellar was usually built lower than the wings, its floor could be up to three metres below the courtyard. Because direct and steep stairways were not popular for the neem, each side of the ground floor talar had steps leading to the neem which was lit by several screened windows in the back wall of the talar. (Figure 82) The neems under the wing rooms often joined the large central neem through an arch which was closed off by a wooden railing so that one could see the central neem as from a balcony. This arrangement of neems is typical of Baghdadi houses and, for this reason, the talar which is in front of the neem is known as the Baghdadi talar.

Sometimes, the place of the Baghdadi talar was taken up by the neem cellar. The wall of this enlarged neem was then supported by columns thereby creating two aisles. Reuther found that this particular arrangement was akin to the Persian style¹⁰. The two aisles followed closely the arrangement of the central room of the first floor. Side neems or wings were sometimes constructed with timber and then called 'Takhta-bosh'. Two-aisled neems had their wooden takhtaboshes mostly on the narrower aisle which lay under the tarma. The space under the wooden platform, or takhtabosh, was often a few steps lower than the main area of the neem and served as a store room called 'Rahrau'. The takhtabosh was often preferred to the neem because it offered cooler temperatures without the dampness of the neem or the sirdab. It was also used by the servants or younger members of the family as a platform from which the fan (Punka) was kept moving and thus allowed the older members to sleep comfortably. The etymological derivation of this word comes from the Persian 'Takht' or platform, and the Turkish 'Bosh' or hollow, and therefore, it signified a platform with a hollow space underneath.¹¹

Older Baghdadi houses also had deep underground cellars called 'sirdabs'. These were illuminated by daylight from several skylights at courtyard level. Their planning was largely limited to an ante-room and a main room, but sometimes the whole courtyard had cellars underneath it. The commonest type of sirdab was the domed room with elevated liwans on its four sides often with a fountain (Fasqiya, Shithirwan) of an octagonal bawn in the middle.

The use of proper underground sirdabs seems to have been abandoned by the turn of this century. Very few sirdabs exist today in Baghdad but are still found in other cities such as Karbala and Najaf. They have either been blocked up or are no longer used because they tend to collect water from adjacent areas or act as seepage tanks for underground water. The roof structure of all neem cellars consists of pointed arches which are vaulted by shallow round domes from which the load is transferred by cross-ribbed, triangular, pendentives. The domes, which are commonly known as 'Araqchins' are often very elaborately ornamented by geometric patterns in brickwork (Figure 83).



Takhtabosh

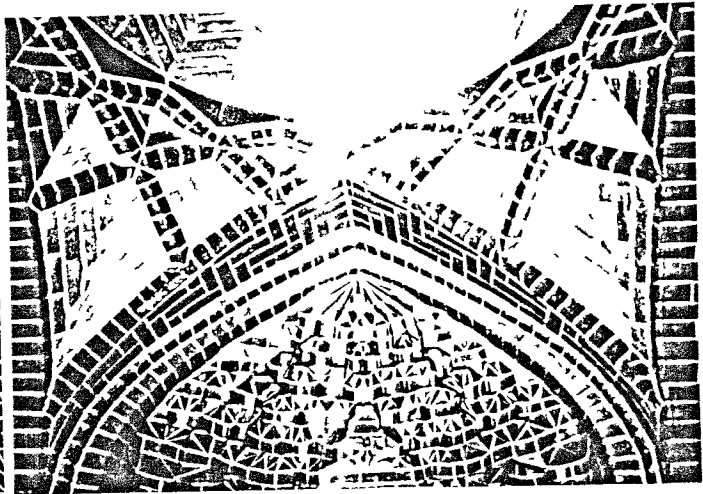
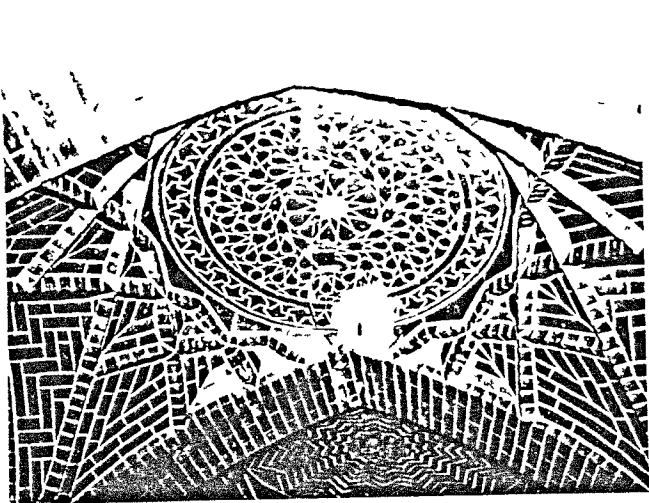
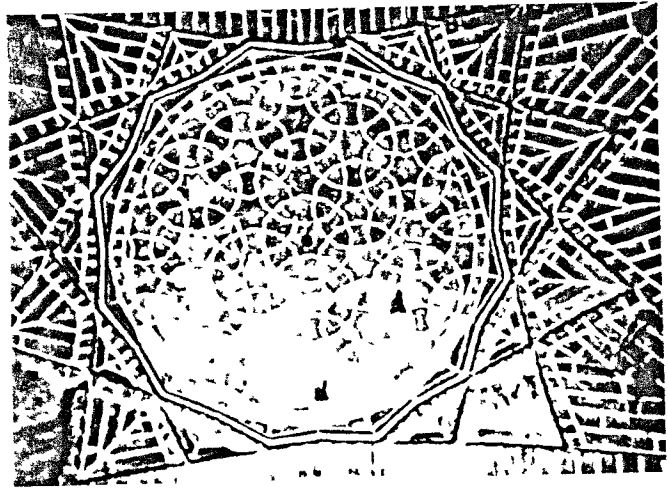
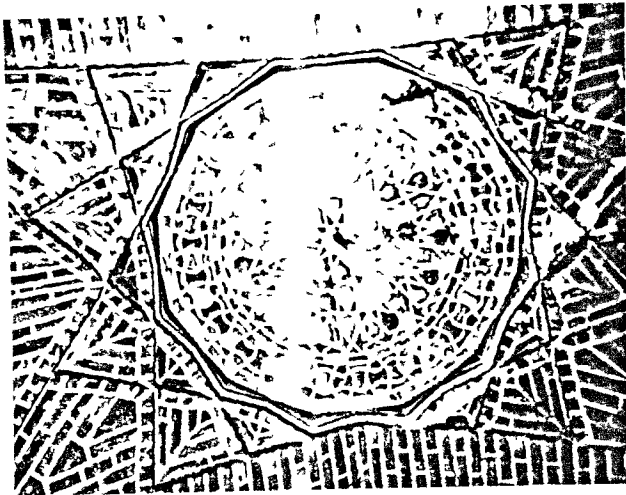


FIGURE 83 EXAMPLES OF VAULTED CELLARS IN TRADITIONAL HOUSES IN BAGHDAD

Source of Photographs: By Author

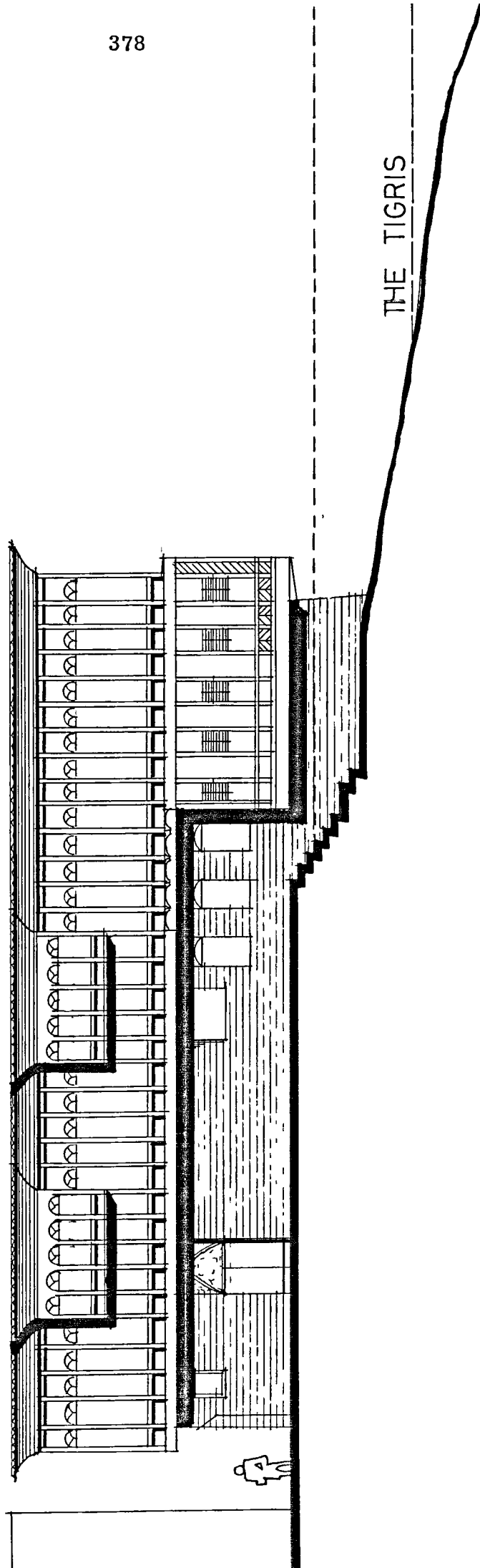


FIGURE 84
THE NORTH_WESTERN ELEVATION OF HOUSE 5/38
RAS ALQARYA, BAGHDAD DRAWN BY IHSAN FETHI

The neems and sirdabs were ventilated and cooled by several wind-catching shafts called 'Badgeers'. On the roof these wind-catchers are always higher than the parapet wall and were oriented so that they could catch the maximum amount of wind which, in Baghdad is from the north-west. Occasionally, water jars were placed at the base of the badgeer in the neem, which was called 'Zanbour', so that they were cooled by the action of passing breeze and evaporation. Excellent neems and takhtaboshes are found in houses listed as numbers 192, 193, 642, 645, and 729, in the inventory.

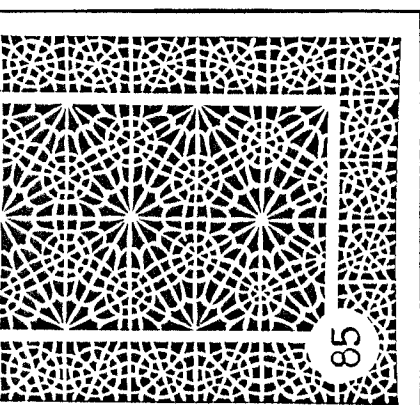
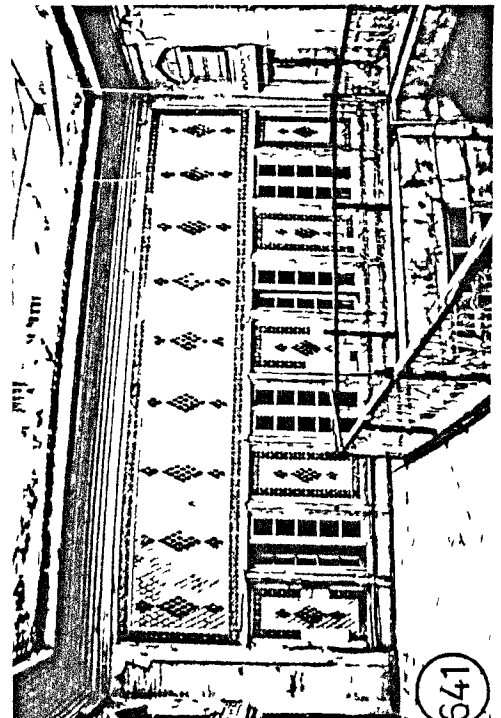
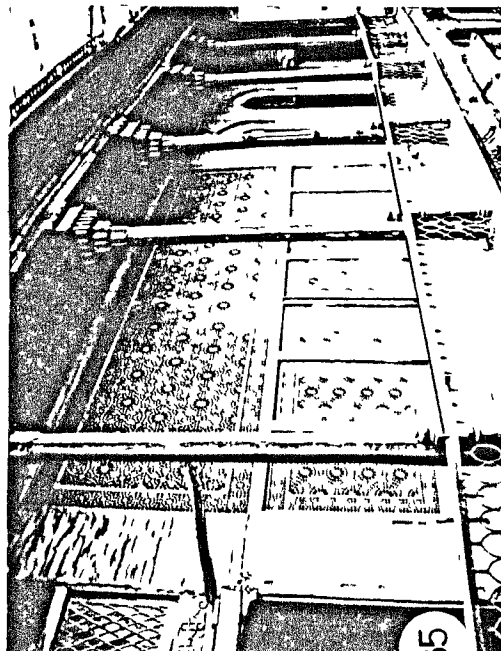
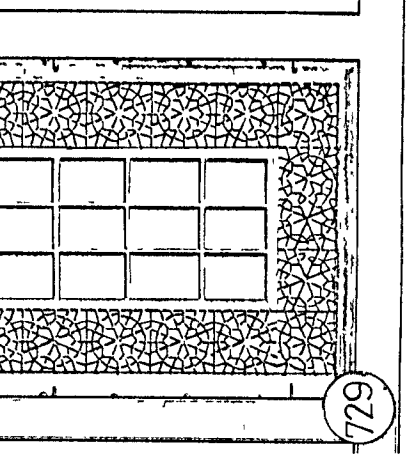
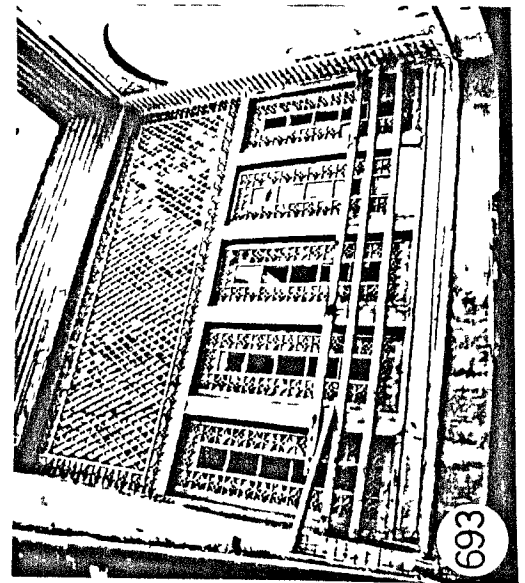
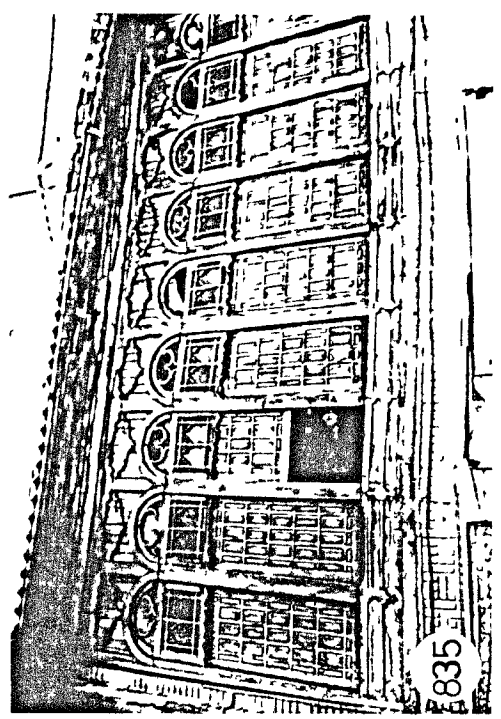
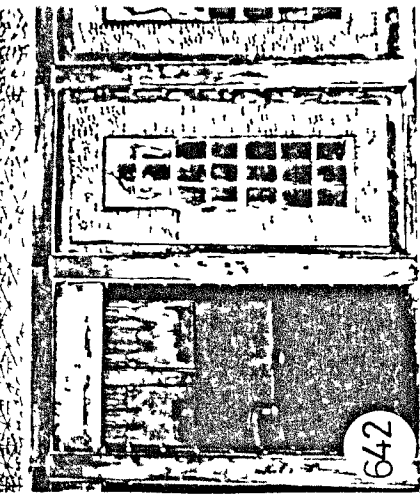
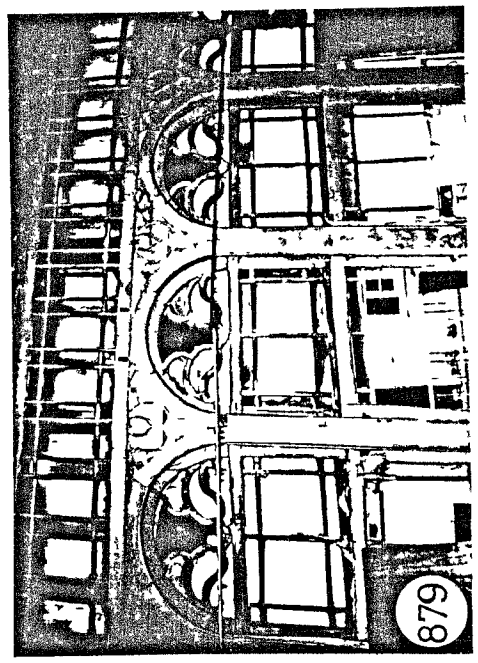
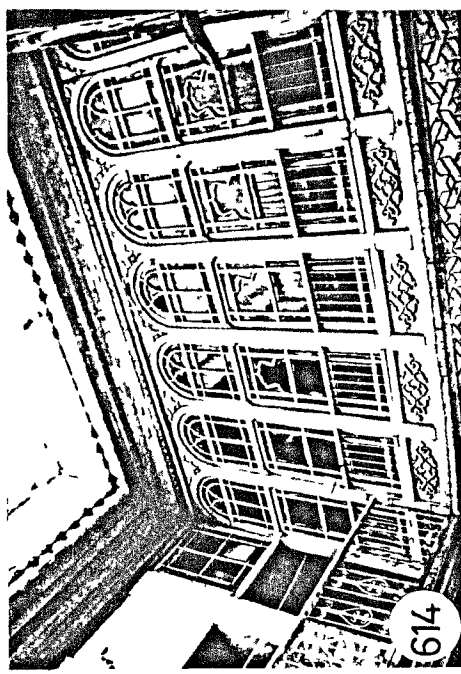
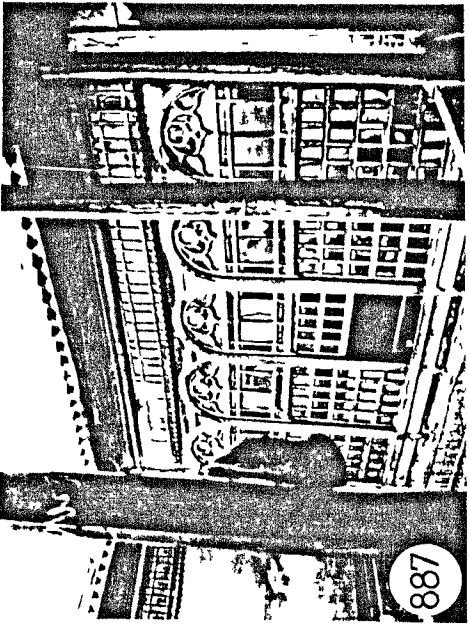
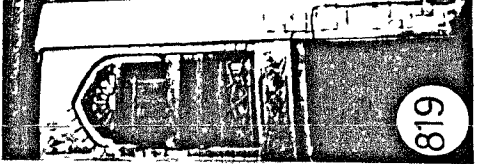
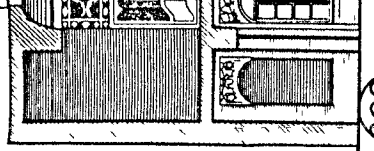
Architecturally, the stairs were not regarded with importance by traditional architects in Baghdad. There were no staircases in the European sense but merely masonry steps within the usually thick walls. Consequently, they exerted little if any influence on the overall design but had the advantage of flexibility. In houses with only one courtyard, this stairway was located conveniently near the entrance and sometimes directly off it. However, in the peristyle ('Hosh Murabaa' design) the stairs lay between the central room of the first floor, e. g. ursi, or talar, and the wings. If the central room was an ursi that was divided by two 'Iwanchas', they were then sandwiched between these iwanchas and the side wings. Stairways of this arrangement were also used to provide access to 'Kabishkans' at mezzanine level through a small stairway. The stairways seldome went up in straight flights but were always constructed with a quarter or half a turn, either above or below.

The 'Ursi' is a large sash-window which usually took up the whole width of a room on the first floor (Figure 85). This Persian term is carried over to the type of room with such window. Sometimes, this window is replaced by a row of glazed doors and this arrangement was especially common in Kadhimiya and Karbala¹². In a normal ursi, the sash window was placed on the long side of the room which lay behind the tarma. When it took up the whole width of the wall, as it usually did, the entrances to this room had to be placed on the narrow sides. Sometimes, however, walls stood on either side of the sash window to provide the entrance doors, but this was more common in Karbala than in Baghdad.

The ursi window was often the show-piece of the house. It was usually made up of an odd number of smaller, vertically sliding, sash-window units. These modular units were about 1.7 metres high and their width ranged between 70 and 95 cms, in Baghdad the commonest number of units seems to have been seven. The units were always very elaborately and richly ornamented by extremely complicated geometric patterns of wooden and colour glass lattice-work. The upper part of the ursi window, which was always fixed, was about two metres in height and was also ornamented in similar manner. Double-sided ursis were also found, especially in richer houses and are a sign of their relatively recent date, i. e. 1850 onwards¹³.

The inside view of an ursi window is always more interesting and dramatic than its external view. This is because, inside, the richly colourful patterns are fully seen against the light of the courtyard and the black silhouette of the lattice-work. The ursi room was usually used in the winter especially when it faced south. According to Reuther, the ursi-type of room was also common in Chinese houses¹⁴. The most outstanding ursis which still survive are found in houses listed as numbers 85, 642, and 729 in the inventory (Figure 85) In Iraq, the ursi room was never used for the wing spaces in contrast to Persian houses where the ursi room was especially reserved for wings¹⁵.

The word 'Shanashil' is used to describe oriel windows which project into the streets. They also were made up of smaller, modular, sash-window units but were generally less elaborately detailed than ursis. The word itself is also used to describe the room which contains the shanashil windows. Occasionally, a room was provided with an ursi window inside and with a shanashil outside. As was mentioned earlier, the use of staggered shanashil windows was mainly for correcting the odd shape of the plot. However, the serration of these projected wooden windows often gave the traditional house its typical external characteristic appearance. In Egypt and some other Arab countries, it was called 'Mashrabiya' but also 'Roshan'. The etymological origin of the word is from the Persian word 'Shah Nashin' meaning the 'King's Seat'.

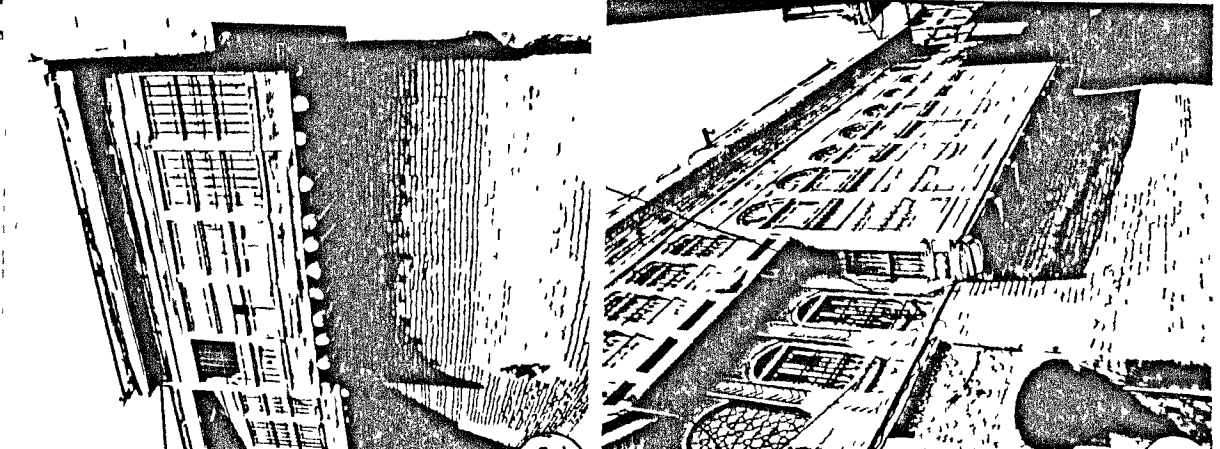
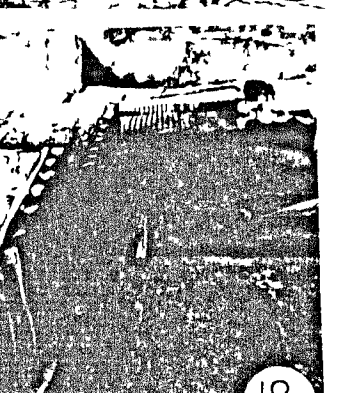
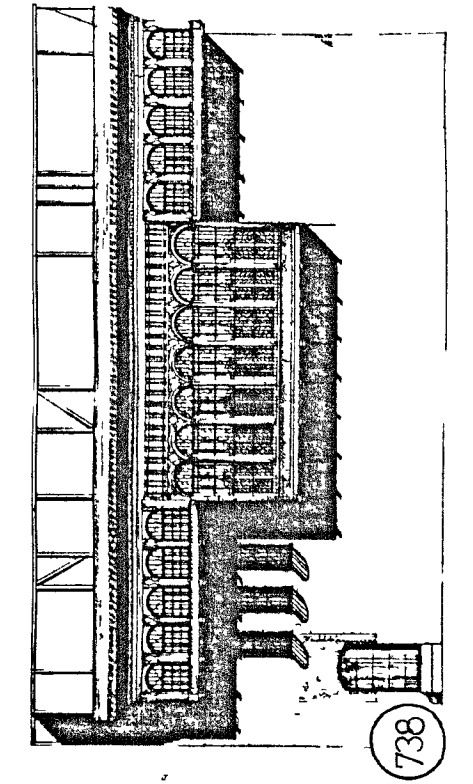
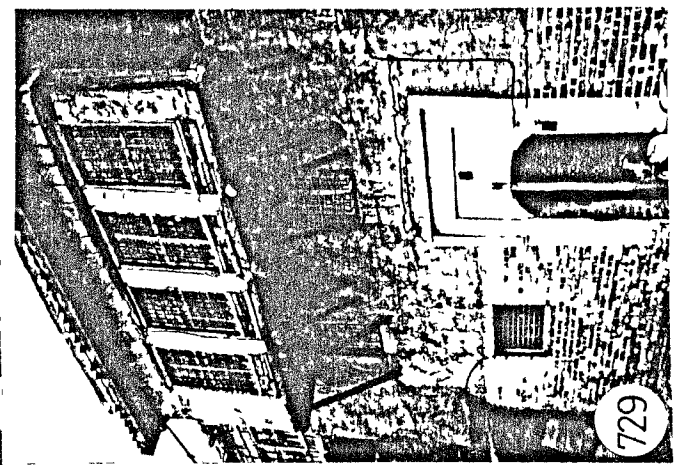
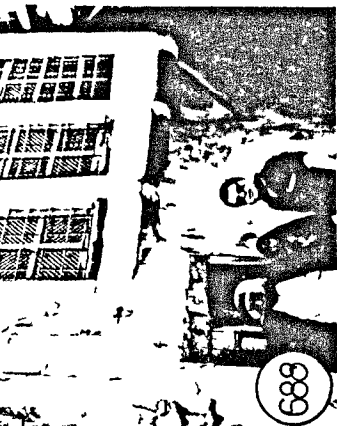
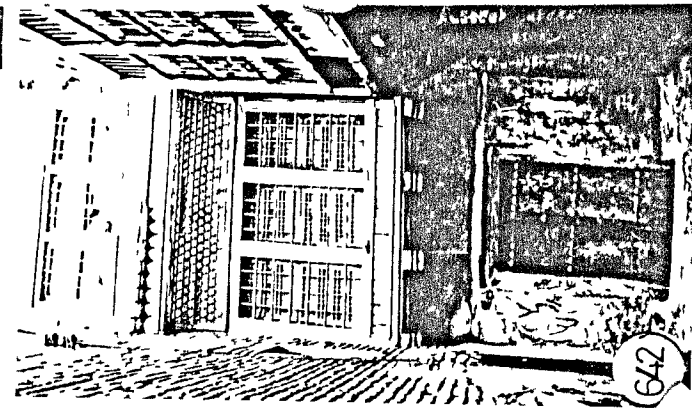
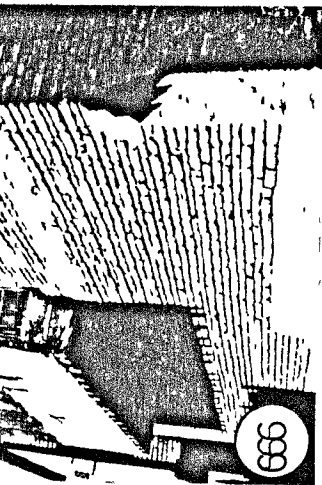
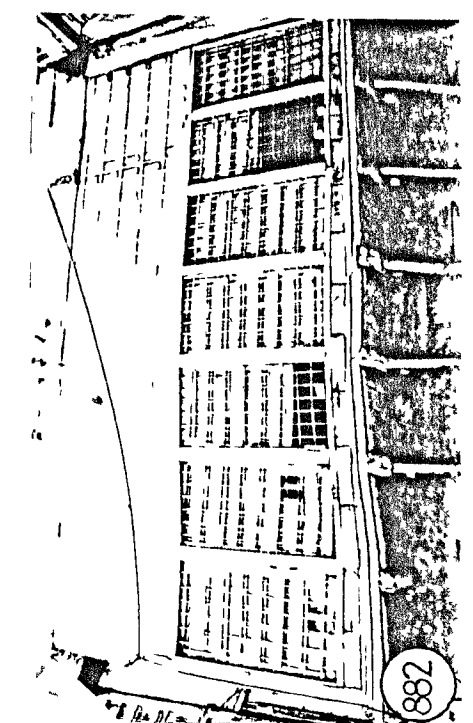
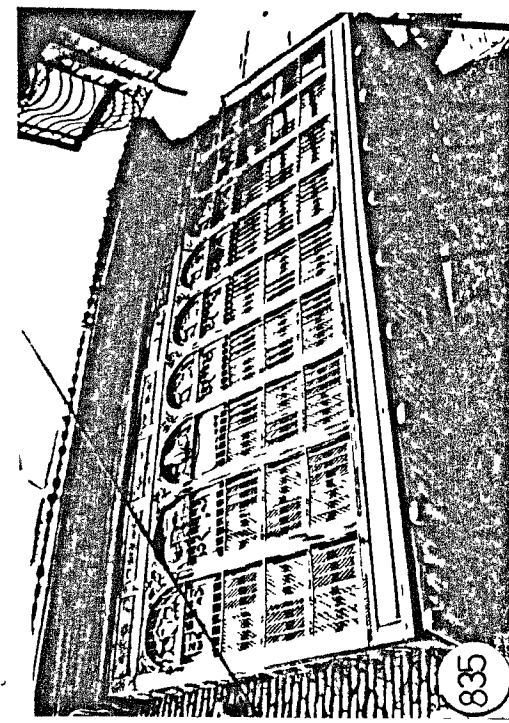
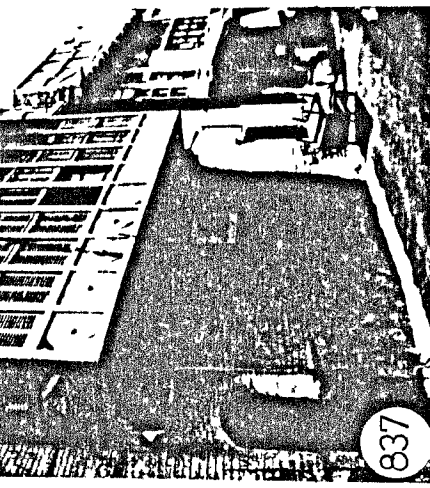
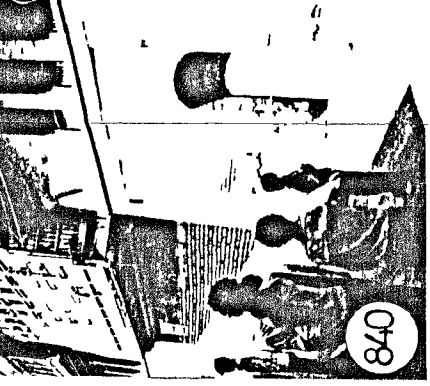


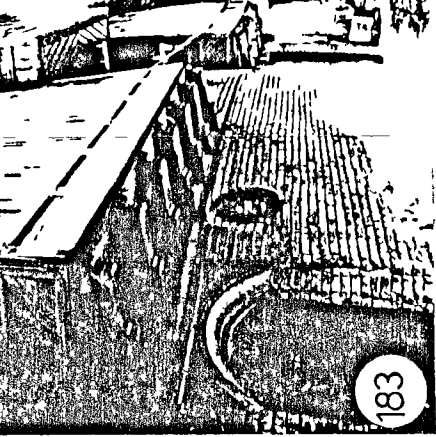
Earlier shanashils had little or no glazing, their individual sash-window units were made of wooden panels and were often devoid of any protective iron bars. In later houses, probably from 1880 onwards, coloured glass and vertical iron grilles were extensively used. This observation could also be useful for dating traditional Baghdadi houses from external evidence. Outstanding examples of shanshil windows are found in houses listed as numbers 193, 236, 323, 641, 646, 731, 738, and 740 in the inventory (Figures 86 and 87)

It was a strictly established rule in traditional design to plan the first floor so that each room was always directly accessible from the circulatory tarma. This rather rigid and self-imposed stipulation had obvious planning implications. By having to use unnecessary corridors, a lot of space was wasted. In rooms like the ursi or an elevated talar on the first floor, the 'problem' of providing the central room with direct access was solved by using a device called 'Iwancha' which literally means a 'small Iwan'. These were placed, for example, between the ursi and the adjacent rooms so that they were directly entered from the tarma. Moreover, because of the over-riding preference for symmetry, one iwancha was placed at either side of the ursi or talar.

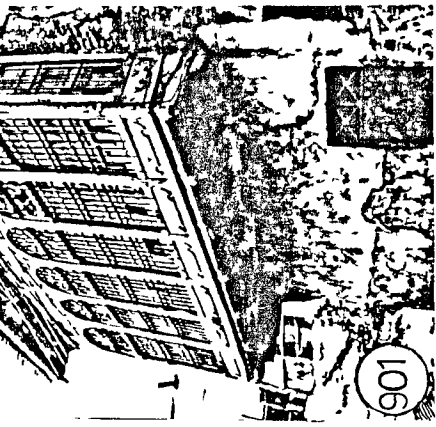
Iwanchas and wing rooms were usually provided with mezzanine-level small rooms called 'Kabishkans'. These kabishkans, which were often of very low ceiling height sometimes as low as 1.50 metres, were provided with their own ursi windows. These small windows overlooked the central room of ursi or talar and were, therefore, used by the women of the family as 'theatre boxes' in certain festivities which occasionally took place in the ursi room. Externally, kabishkans were expressed by their own small oriel windows which projected like the shanshils of the first floor. These small shanashils were very effective architectural elements that helped improve the external facade of traditional houses. According to Reuther, these kabishkans were used in Syria and Egypt by singers and musicians on festive occasions, but this does not seem to have been the case in Iraq¹⁶.

Transitional houses in Baghdad show significant departures in their planning and construction from their traditional predecessors. These

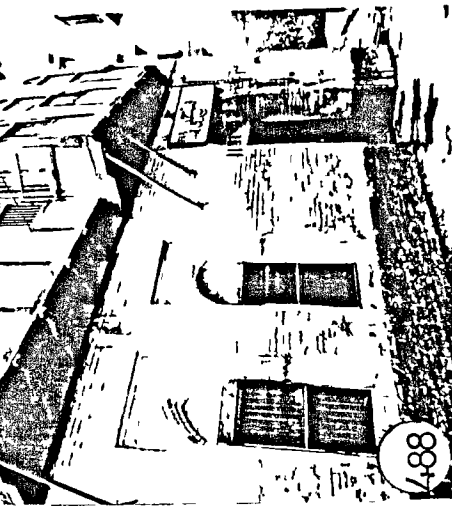




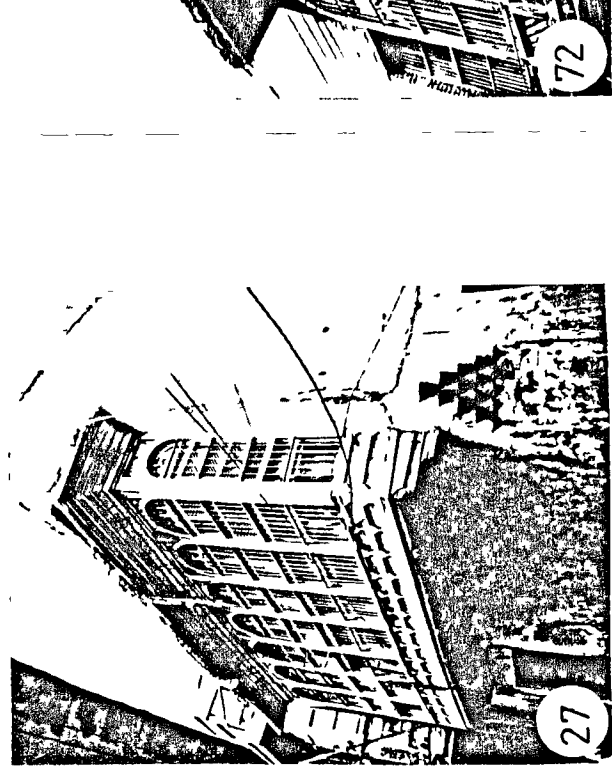
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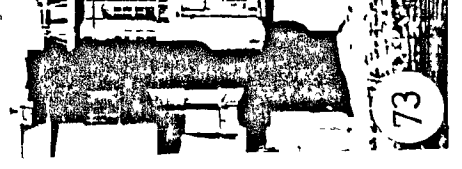
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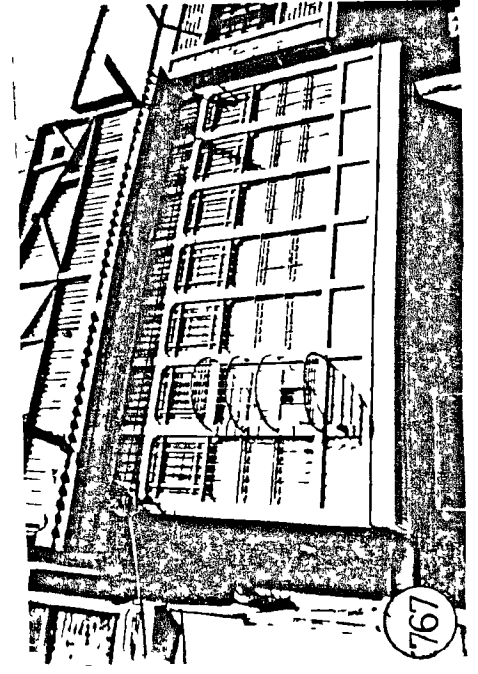
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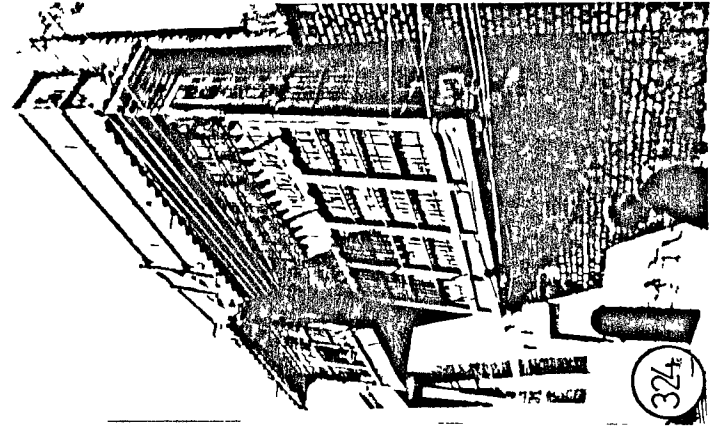
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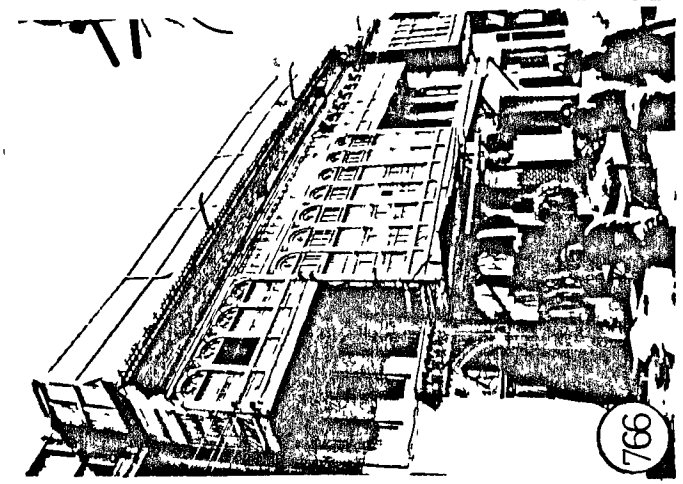
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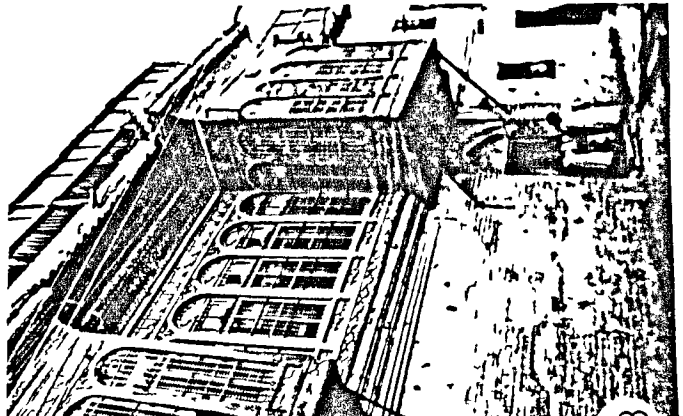
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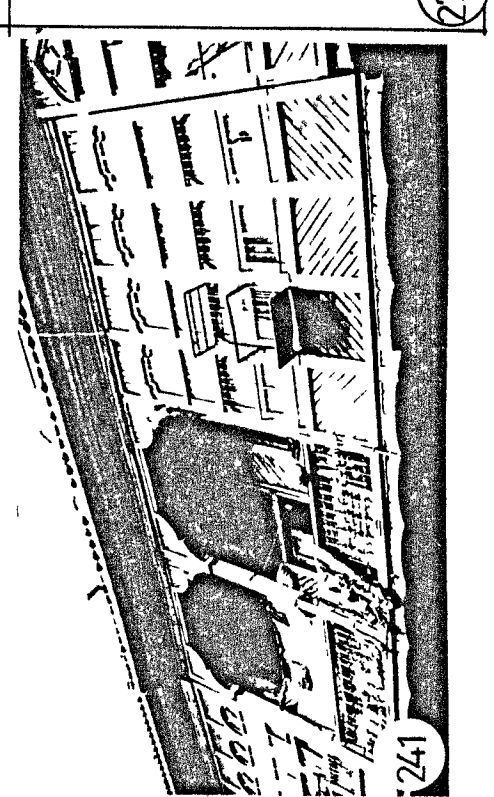
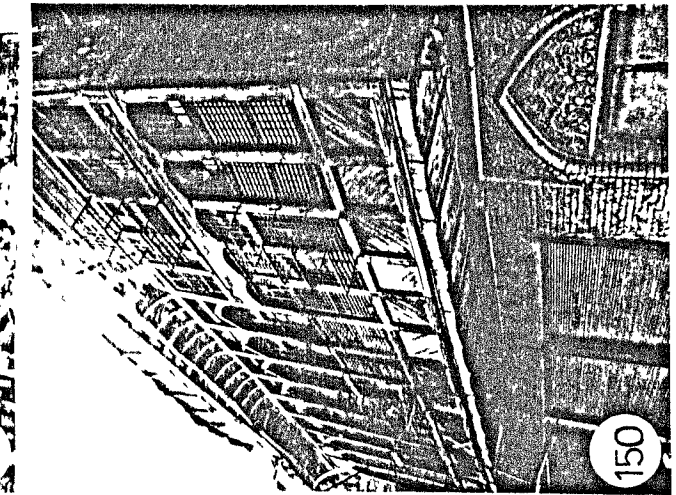
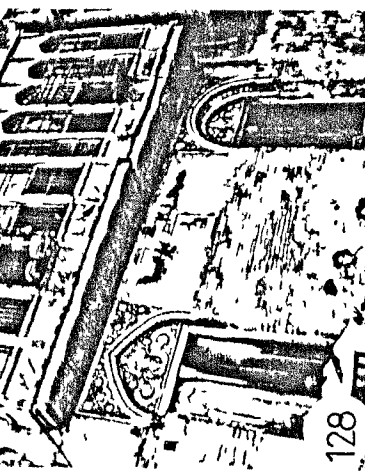
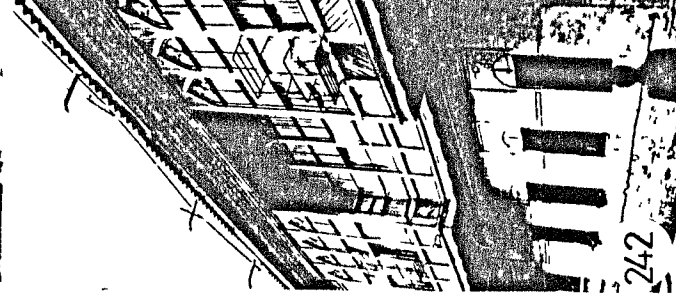
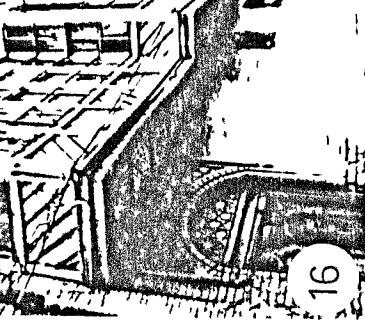
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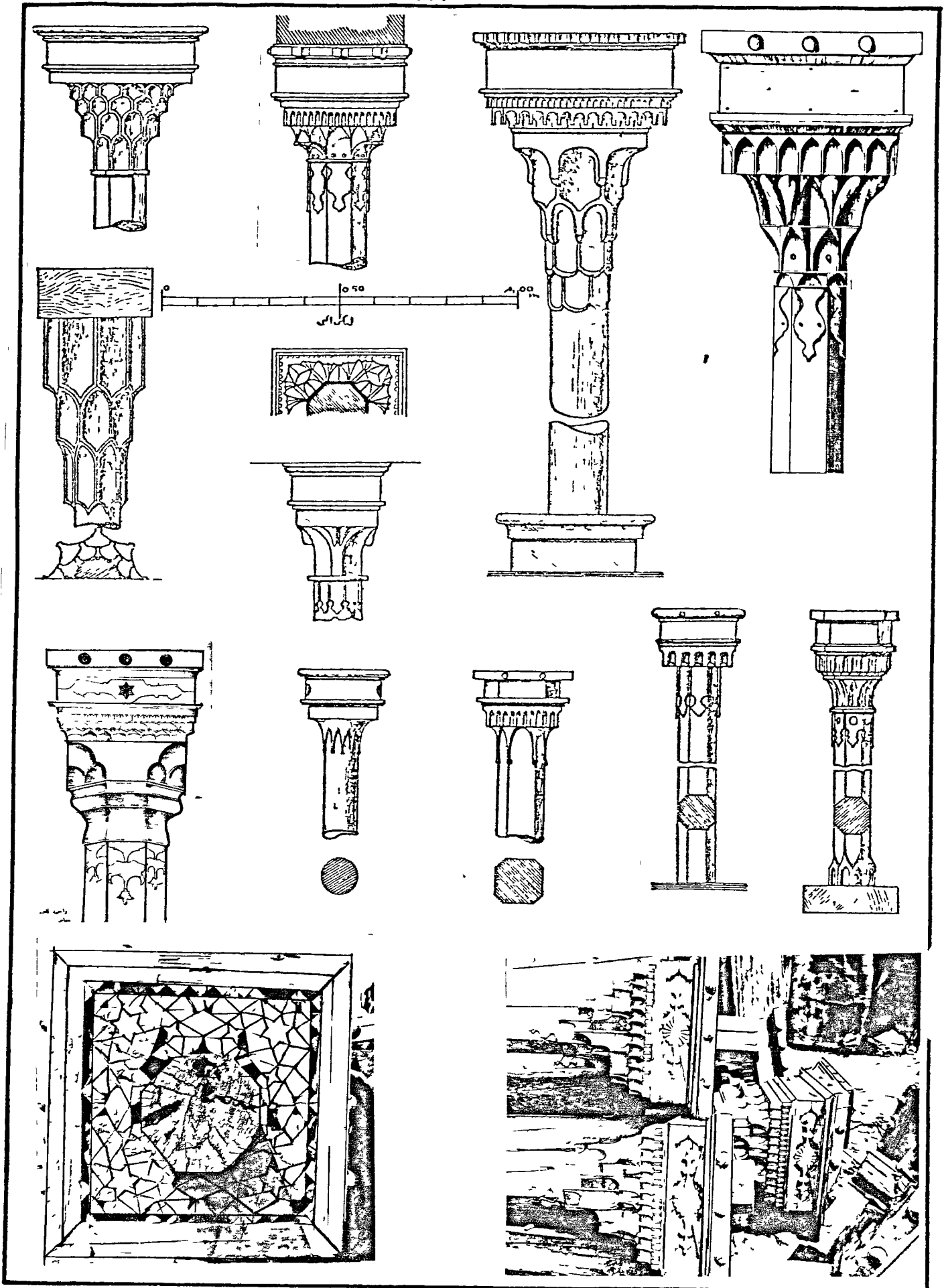
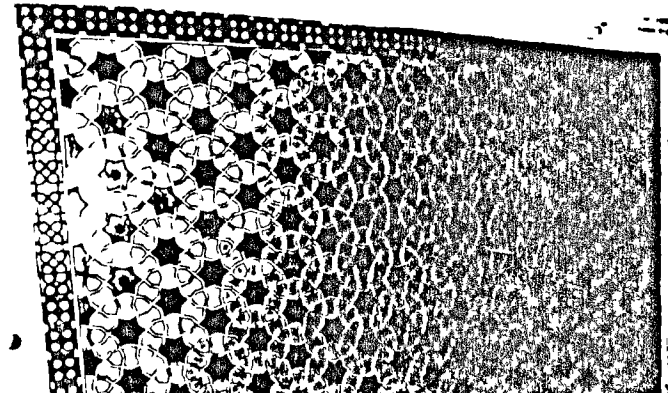
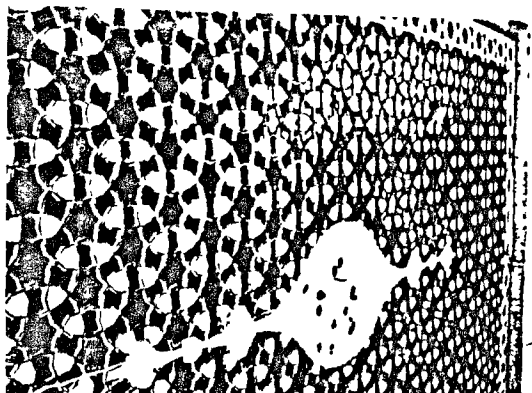
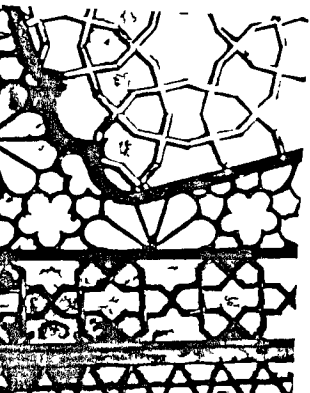
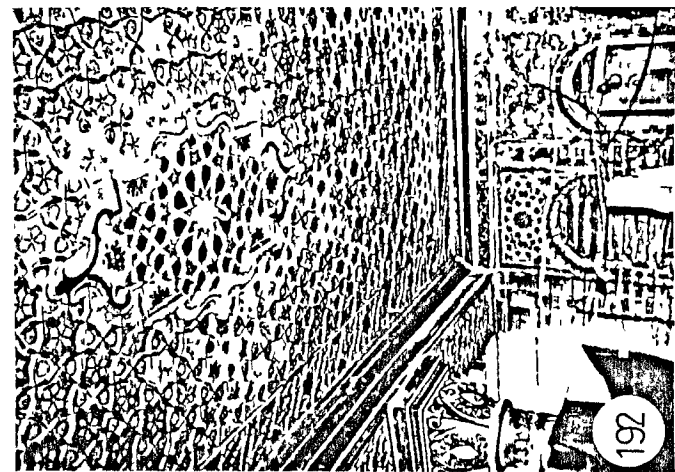
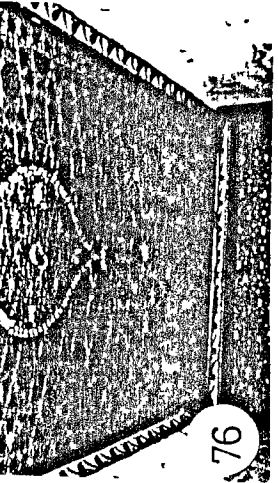
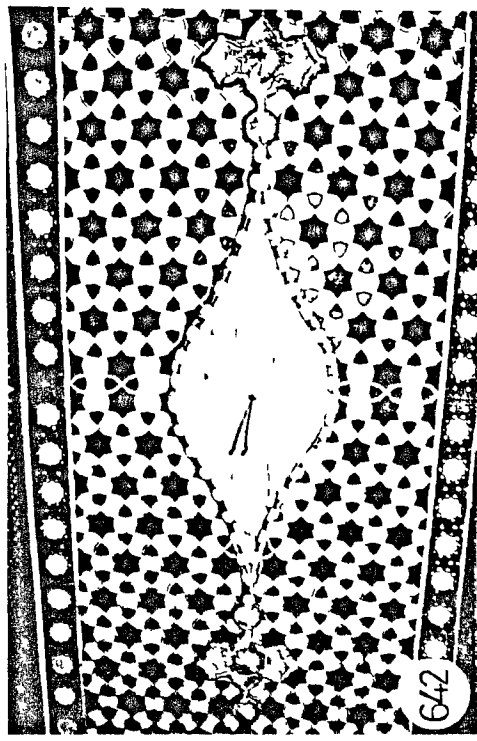
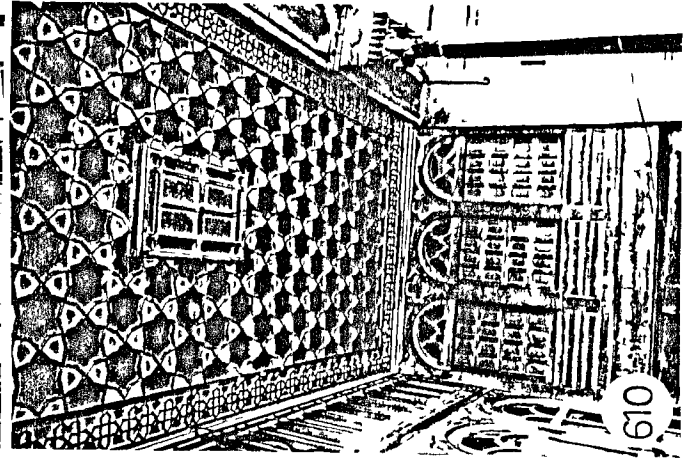
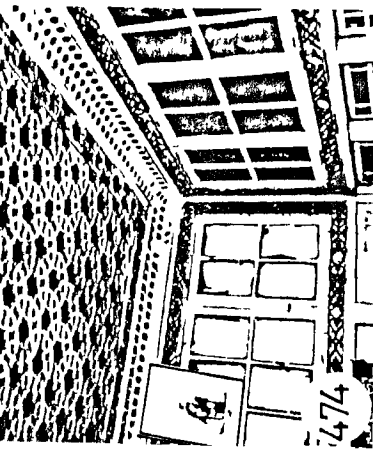
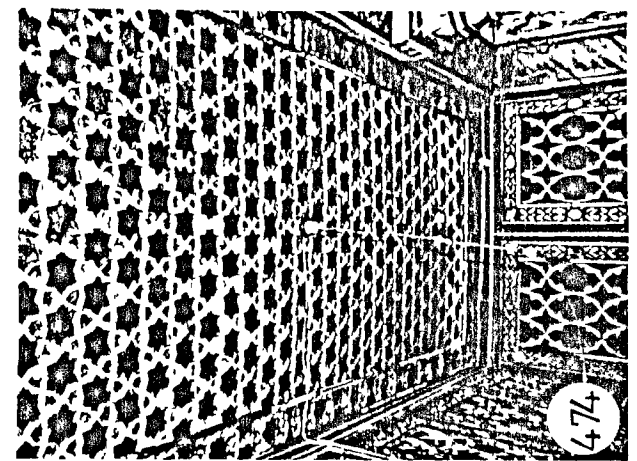
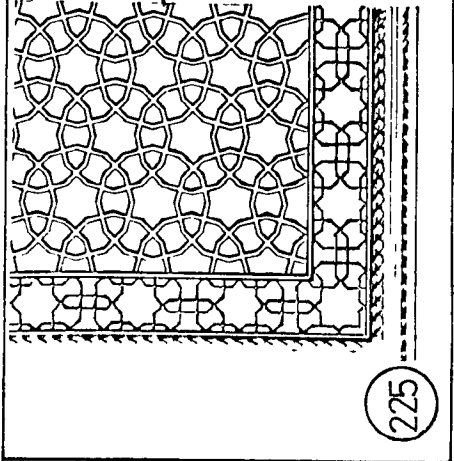
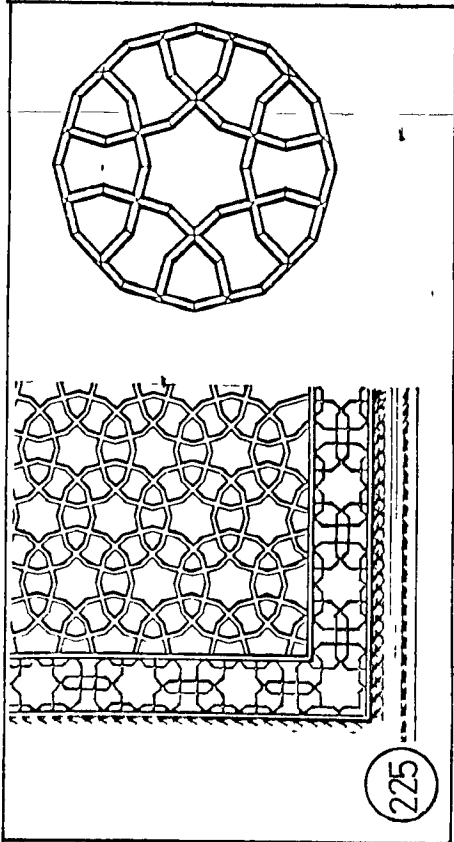
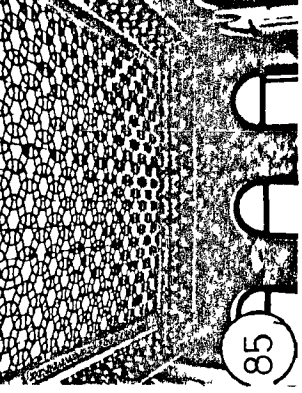


FIGURE 89 EXAMPLES OF WOODEN COLUMNS IN TRADITIONAL HOUSES IN BAGHDAD

The most obvious difference between the transitional and the traditional house was the method of construction. Traditional houses had palm tree-trunks or round timbers for joists spaced at about 40 cms. centres and on top were woven reed mats, covered with a layer of earth and with shallow square bricks forming the floor surface. The roof was constructed in a similar manner but finished with a mixture of wet earth and straw gently sloped for drainage. The ceilings of many traditional houses were very richly ornamented which reached an almost unbelievable complexity and woodwork sophistication (examples are found in Nos. 76, 192, 642, 645, 646, and 729). (Figure 90)

External walls were often very thick indeed, between 36 and 80 cms, while internal partitions were between 12 and 24 cms. thick. The first floor of a traditional house was nearly always constructed in a timber-framework with brick infill. Timber studs were placed at about 90 cms. centres and the intermediate spaces were filled with either 12 cm. thick brick walls or standardised unit sash-windows.

With the end of World War I, however, the British occupation of Iraq led to the introduction of the so-called 'Jack-Arch' structural system. This involved the use of I-section rolled steel joists, at about 70-80 cms. centres, supporting very shallow brick tunnel vaulting. Precast terrazzo tiles (Kashi) became popular as a floor finish. In other words, steel joists simply replaced timber joists and, consequently, the new system did not alter the basic appearance of the transitional house. In dating such a house the use of jack-arching indicates that it was built after 1918.



B. Mosques

Islam is such an all-embracing religion that it is inextricably related to the socio-cultural life of community. The importance of Islam is therefore evidenced everywhere by the large number of mosques. Mosques represent the physical expression of its spiritual message, they function not merely as places for worship but are used for educational, legal, political, and intellectual purposes.

Hijra, the first year of the Muslim Calendar (AH 1 = AD 622), marks the flight of the Prophet from the persecution by Meccan pagan lords to Madina where he built the first mosque in Islam. The Quran itself, which was transmitted by the Prophet as inspired utterances and in a series of dicta, is regarded by Muslims as the literal word of God (Allah). Tradition (Hadith), on the other hand, records the Prophet's words, actions and judgements. Because of the complexity of Islamic Law and the archaic and obscure language of the Quran, professional scholars (Ulama), became a very influential class in Muslim society by their responsibility for theological interpretation.

The mosque as the place of prayer (Salat) was demanded by Islam and all Muslims are required to attend the Friday prayer at noon every week. However, the five obligatory daily prayers may be performed at one's home or virtually anywhere provided it is conducted facing the direction of Mecca which, in the case of Baghdad, is due south-east. Small masjids, which are usually erected by individuals as pious works and endowed as waqf for God, are also used for daily prayer especially by the local inhabitants of its immediate environment. Only on Fridays was the attendance at the great mosque (Jami) compulsory for every adult Muslim (male and female).

The first mosque, built by the Prophet in Madina, consisted simply of an open courtyard with a shaded area surrounded by a wall which had three entrances in it¹⁷. This mosque could be regarded as the prototype for all subsequent mosques. In Iraq, as well as in other Arab countries, early mosques were built largely to resemble the Prophet's model. In Basra, founded by Ghazwan in 14/635 as a military centre, the mosque

was linked with the administrative block of 'Dar al-Imara'. In Kufa, founded by Waqass in 17/638, the same arrangement was followed. Again it consisted simply of a large open court (Sahn) with a shaded area (Dhulla) erected on its southern side, and the whole building was surrounded by a trench¹⁸. However, occasionally and to emphasise the victoriousness of the new religion, christian churches and other temples were converted to mosques. The Iwan of Kısra at Ctesiphon, for example, was made into a mosque by Waqass, in Damascus, St. John's Church was first divided so that its eastern part was used as a mosque but later converted into a fully-fledged mosque by Walid in 89/705.

Essentially, the basic requirements of a mosque remained very few and simple: an open court for prayer in hot weather and a sheltered room for prayer in cold weather. A niche, called 'Mihrab' incorporated in the wall, indicated the direction of Mecca (Qibla). Because cleanliness is a necessary preliminary ritual to prayers, mosques are always provided with ablution places. The call to prayer (Ithan) is usually made by a 'Muathin' from the balcony of a minaret, although today electric loudspeakers are largely used instead. The faithful always leave their shoes outside and step inside the carpeted prayer area (Haram, Musalla). Masjids do not usually have minarets, but now they are often provided with loudspeakers; they have no pulpit (Minbar) for there is no sermon (Khutba) but only a mihrab.

However, with the expansion of the Islamic Empire and the subsequent increase of contacts with other cultures, mosques evolved into a variety of types and a high degree of architectural sophistication. Gradually, memorial tomb-mosques became popular and a vast number of such mosques now exist throughout the Islamic World. Graves of revered ancestors and saints were turned into mosques. Today, nearly 42% of all listed mosques in Baghdad are in this category. By tradition, tombs were always separated from the prayer area and, similarly, mosques near cemeteries were discouraged. In Iraq and elsewhere the tombs were nearly always surmounted by a dome. Often another dome, or domes, were present especially over the mihrab area and to

differentiate between them the tomb's dome was finished with glazed 'kashani' tiles. It must be noted that Muslims are not buried in sarcophagi or coffins but directly in the ground, tombs are marked by a dais-like cenotaph (Sanduq) made of wood for mosques or masonry for cemeteries. (Figure 91)

Other types of buildings in Iraq in which prayers are conducted include 'Husainiyas', 'Takyas', and Madrasas. Husainiyas are religious buildings used only by the Shi'i sect for prayers and for other Shi'i religious occasions. Therefore, they are mostly found in predominantly Shi'i areas of Baghdad such as Kadhimiya. Two outstanding examples of such buildings are those of Haidari (No. 906) and Sheikh Bashar (No. 469). All are privately owned and administered, the former contains tombs of its founders and its plan closely resembles domestic architecture, while the latter contains no tombs but is built in the much sought after 'Hosh Murabaa' style.

Takyas (Khanqa in Turkish) are usually privately owned and administered but, in contrast to Husainiyas, they are used by Sunnis for prayers as well as conducting regular sittings (Thikr). They normally consist of individual cells, assembly rooms, sheikhs' rooms and, as in mosques, an arcaded portico. Takyas are associated with the numerous Sunni religious methods (Tariqas), such as the Qadiriya and Rifaiya in Iraq. Outstanding examples of takyas in Baghdad today include those of Bandanigi (No. 360), Sheikh al-Halqa (No. 337), and Ihsa'i or Khalidiya (No. 69), all of which contain the tombs of their founders and have mihrabs for prayer. Both husainiyas and takyas have no minarets but can have domes.

Madrasas are theological colleges for teaching the Quran, exegesis, tradition, and canon law. In Iraq, madrasas became very important institutions and, under the Seljuqs and late Abbasids (late eleventh to mid twelfth centuries), they became patronised by the state with salaried staff. Architecturally, they are often more interesting than other types of religious buildings. Three outstanding examples of madrasas in Baghdad today are those of Mustansiriya (built in 1234, No. 40), the Abbasid Palace or Sharabiya (built in 1226, No. 1), and Aliya (built in

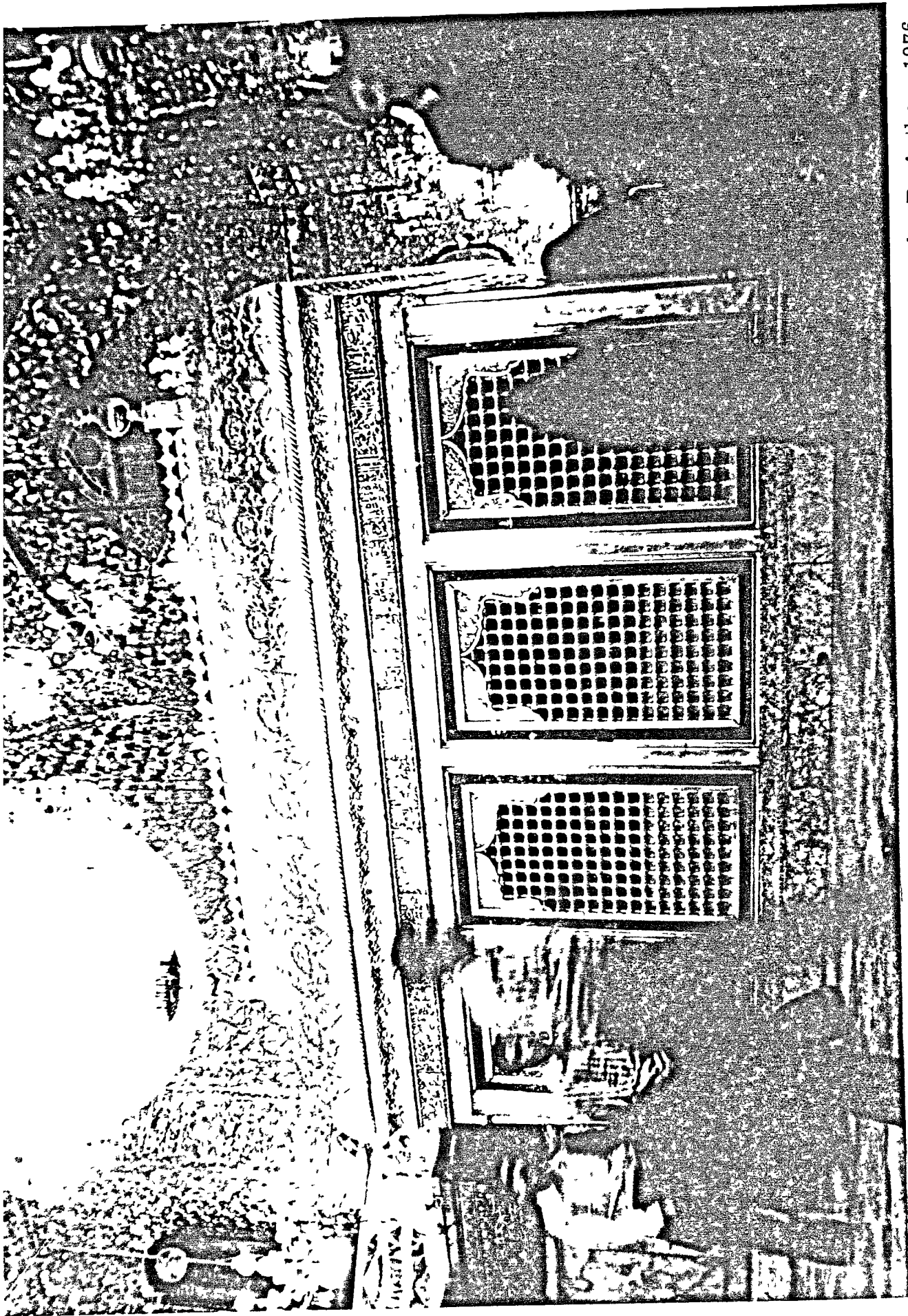


FIGURE 91 THE MAGNIFICENT TOMBS OF KADHMAIN MOSQUE Source of Photograph: By Author, 1976

1762, No. 4). All of them are designed in two floors with arcaded galleries and cloisters around a central open courtyard. All contain mihrabs to indicate the direction of Mecca. Mustansiriya was designed to cater for all four Sunni Schools (Mathahib) - Shafi'i, Hanafi, Maliki, and Hanbali - to each of which was allocated a corner. All of these madrasas are now used only as museums by the Directorate of Antiquities. Shi'i madrasas follow the same architectural planning of Sunni ones, the most outstanding example of which is the superb Madrasa of Yazdi in Najaf. Today's religious schools, which are run by the Awqaf, do not resemble their earlier predecessors, they are obliged to teach almost the same curricula as that of ordinary schools under Act No. 44 of 1967.

Originally, there was only one Friday Jami in every Muslim town. But with the growth of Islam and its urban centres, the need arose for several such mosques for large towns. Yaqubi (278/891) mentioned two Friday mosques in Baghdad, one at either side of the Tigris. Another was built near the Palace of the Caliphs in Eastern Baghdad in 893. Khatib (1058) reported four such mosques for Western Baghdad and two for its eastern side. Ibn Jubair (1185) mentioned the existence of eleven Friday mosques in the whole city. The proliferation of Friday mosques has resulted in an unfortunate linguistic confusion, the words 'Jami' and 'Masjid' are now freely interchanged to describe any type of mosque.

There are about 150 mosques in Baghdad today. Ninety-one of them have been selected by the author for listing. The Conservation Survey revealed that mosques are amongst the most interesting buildings of the city, and that forty-six per cent of all grade A's and twenty-one per cent of all grade B's are mosques (Table 54). Table 55 shows that nearly twenty-two per cent of all the listed mosques are either in very poor or poor physical condition. However, the figure of more than seventy-three per cent, which indicates the percentage of those in 'fair' physical condition, should be seen against the figures shown in Table 57. This deceptively high figure is due largely to the fact that more than forty-six per cent of all listed mosques have been completely rebuilt recently (not scientifically restored to their original condition) by the Awqaf.

Table 57 also shows that only about a quarter of all listed mosques, including relatively recent ones, have managed to keep their original fabric. This is very alarming indeed and justifies the criticisms made against the Awqaf in Chapter V of this work.

The majority of the listed mosques in Baghdad belong to the Ottoman period while the majority of mosques in Iraq show a hybrid mixture of Abbasid, Persian, and Ottoman influences on their plan and architectural treatment. Although it is difficult to formulate safe generalisations about mosques in Baghdad because of the successive and often major restorations, the survey revealed some common planning and architectural elements. This concerns only their constituent elements which are:

1. An open courtyard in which ablution places (Matahir) are located.
2. The mosque building proper is normally provided with a colonnaded or arcaded portico in front of the prayer area. It is sometimes provided with its own mihrab and is used as a summer prayer area. The entrance, usually centrally located off the portico, leads directly to the carpeted prayer area.
3. The prayer area is usually rectangular in plan with its south-western wall containing the mihrab. In older mosques, i. e. before the advent of jack-arching or reinforced concrete, it was always divided into two or more aisles and roofed by a system of domes (Figure 92) which were supported by pointed arches and, in large areas, heavy brick piers became necessary. The load was transmitted from the domes to the piers or walls by characteristic triangular cross-ribbed pendentives. Often the dome over the mihrab area was the largest and highest. In tomb-mosques, the tomb is always placed separately in a single square room off the haram area. The tomb itself is presented as a cenotaph-box (Sanduq) always covered with green drapery and surrounded by an elaborate wooden screen.
4. In Friday mosques (Jamis), a pulpit (Minbar) is always provided for the sermon (Khutba). It is basically an elevated chair reached by steps and is always located at the right of the mihrab. Some minbars can be extremely rich in their ornamentation. They are made either of wood or marble but sometimes of brick.

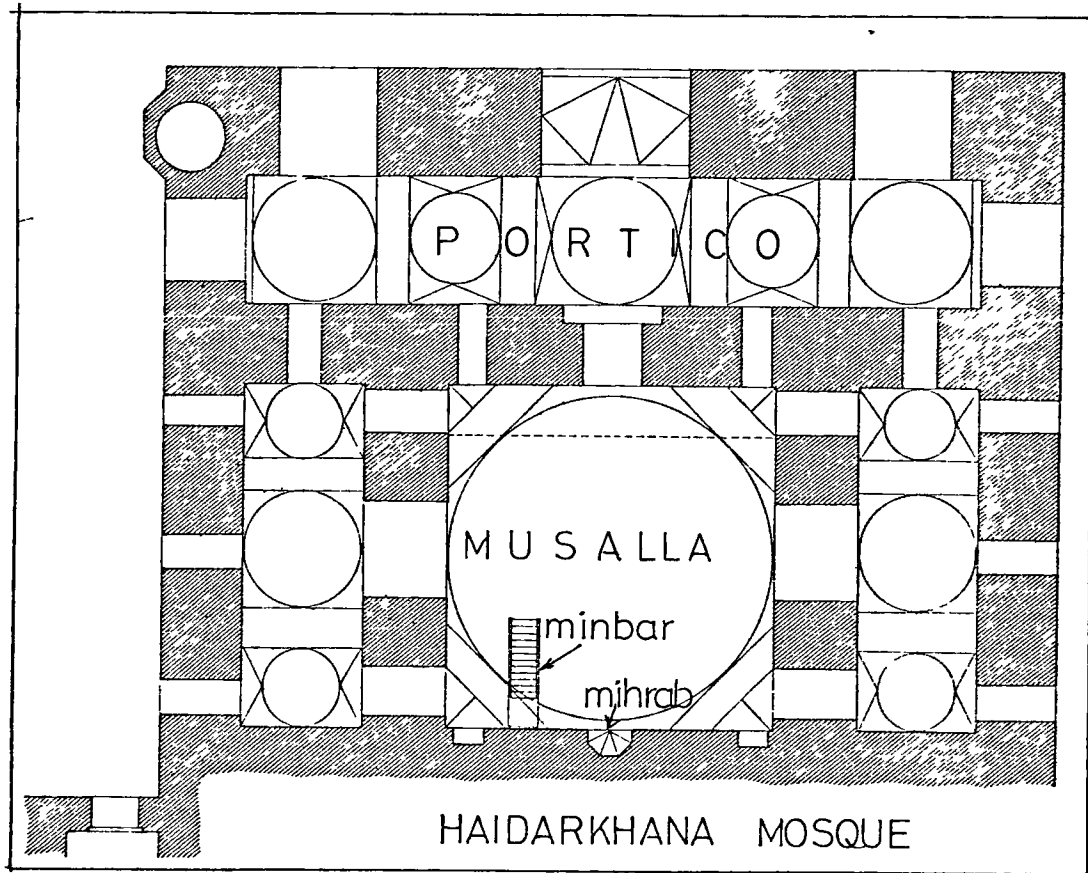
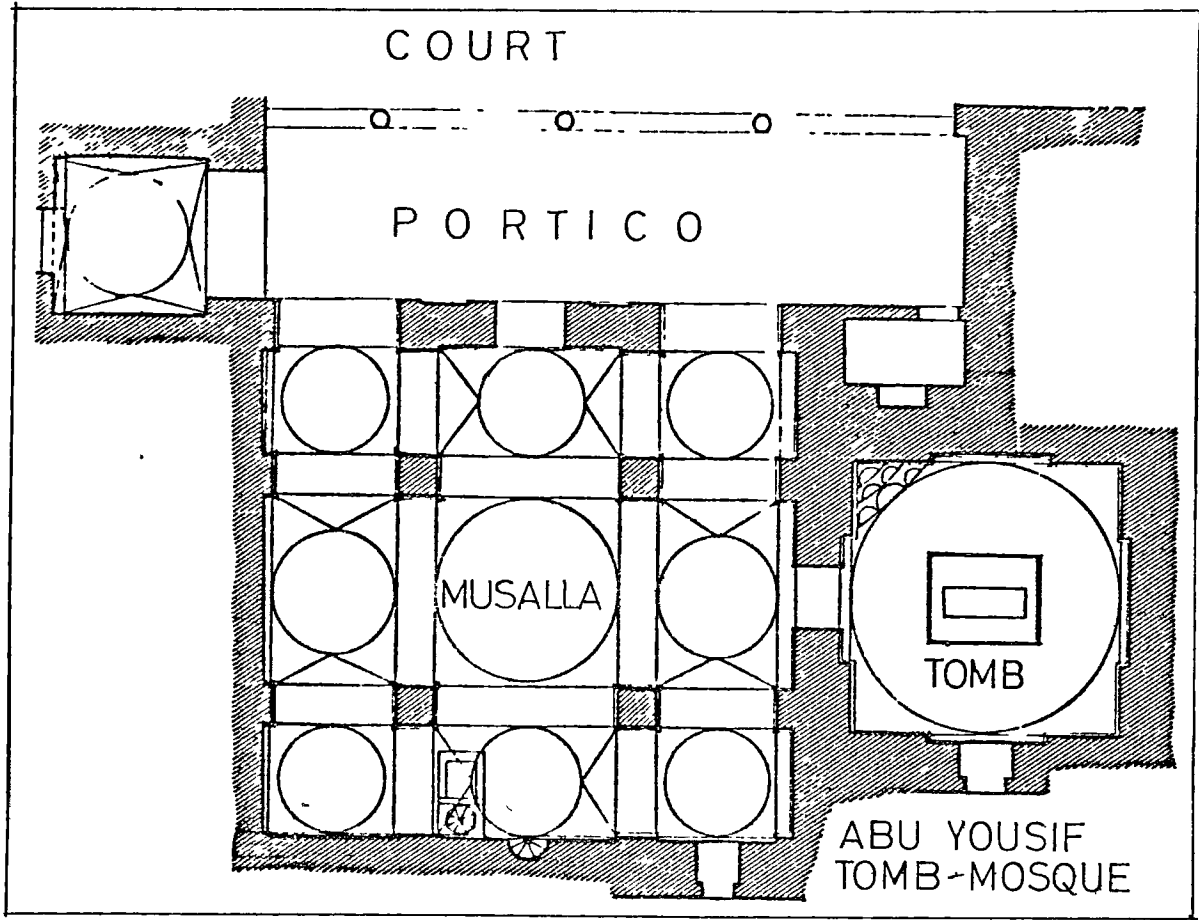


FIGURE 92 TWO EXAMPLES OF MOSQUES IN BAGHDAD

Source: Strika and Khalil

TABLE 54 Inventory Mosques: Age Groups, Grades and Percentage of Total

Age Groups of Mosques	Grade A	Grade B	Grade C	Total	Percentage of Total Number of Inventory Mosques
pre 1700	12	3	-	15	16.48
1701-1868	8	12	-	20	21.97
1869-1917	3	3	2	8	8.80
1918-1932	13	30	5	48	52.75
Totals	36	48	7	91	100.00%

Source: Author's Conservation Survey, Baghdad, 1975-77

- NOTES:
1. If the last 'restoration' of a mosque was in effect a complete rebuilding operation, then the date of this rebuilding is taken for the age group in this table. Otherwise, the original date is taken.
 2. The percentage of inventory mosques according to their grades A, B and C are 39.5, 62.8, and 7.70 respectively.
 3. The percentage of inventory mosques according to grades A, B and C of all items are 46.15, 21.15, and 2.35% respectively

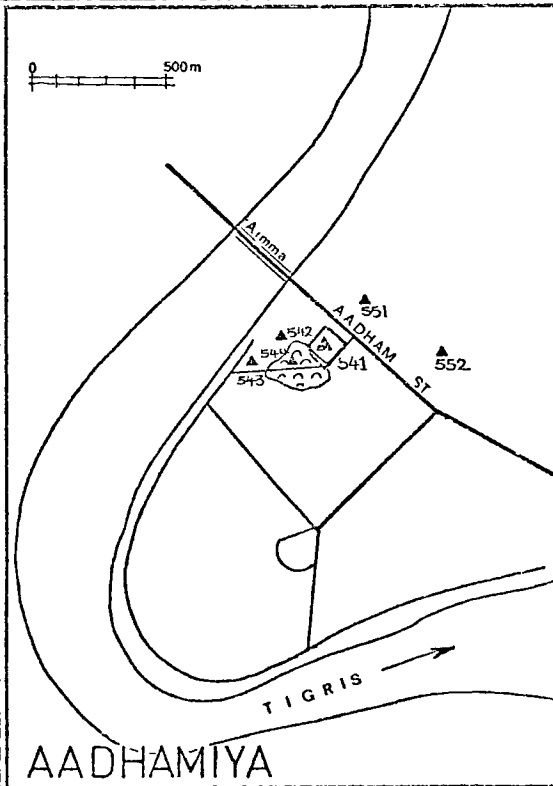
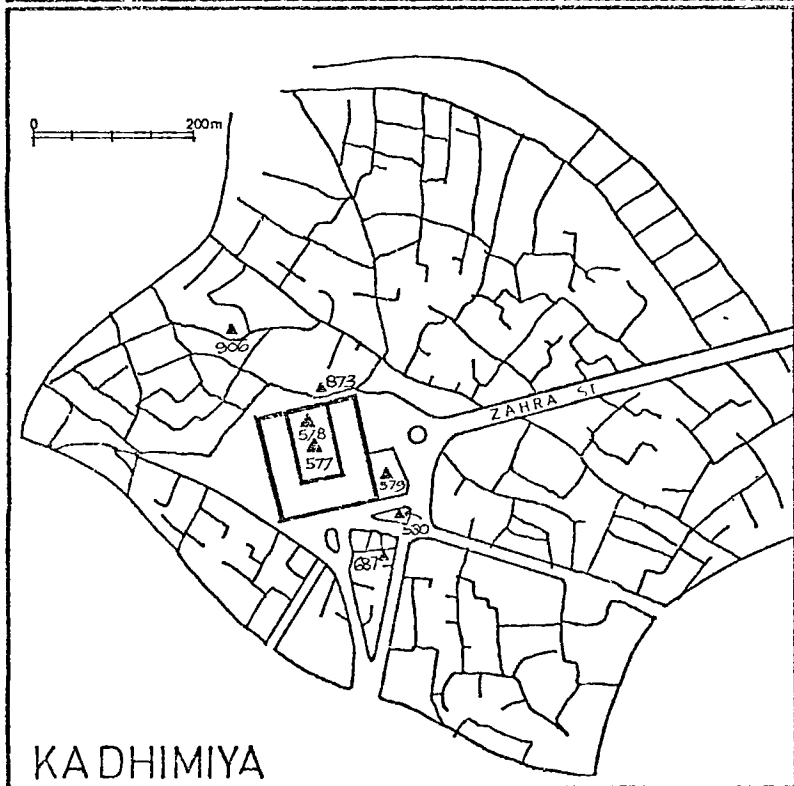
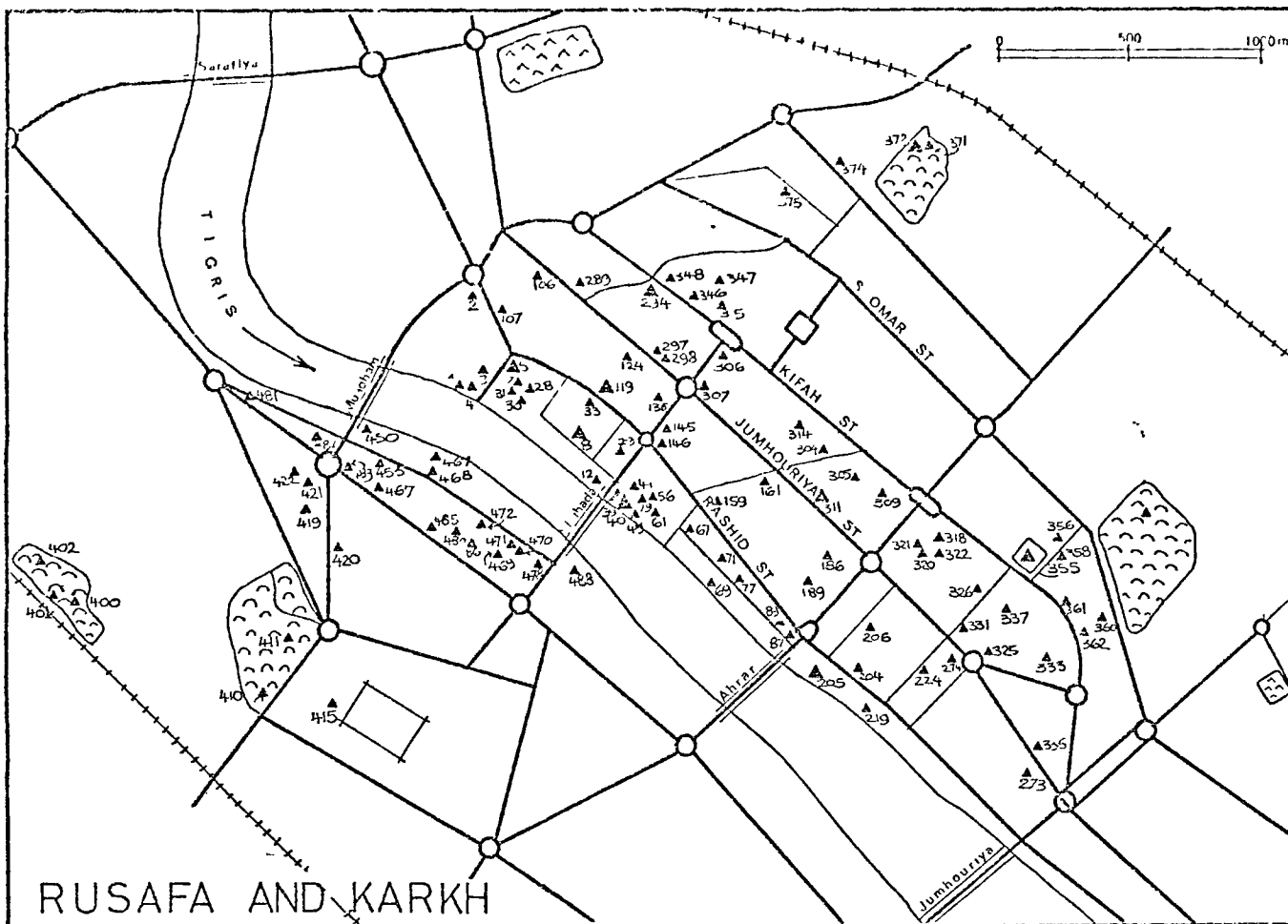


FIG. 93 INVENTORY MOSQUES AND OTHER ISLAMIC BUILDINGS IN BAGHDAD (with inventory numbers)

TABLE 55 Inventory Mosques. Physical Condition

Physical Condition	Grade A	Grade B	Grade C	Total	Percentage of Total Number of Mosques (91)
Good	2	2	-	4	4.40
Fair	31	29	7	67	73.62
Poor	2	15	-	17	18.68
Very Poor	1	2	-	3	3.30
Totals	36	48	7	91	100.00%

Source: Author's Conservation Survey, Baghdad, 1975-77

TABLE 56 Inventory Mosques: Types and their Number

Type of Mosque	Number	Examples
Grand Memorial Tomb-Mosques	3	Kadhıman, Aadhamı, Gailanı
Major Tomb-Mosques	14	Karkhı, Sahrawardı, Idrıs
Small Tomb-Mosques	21	Sheıkh Alı, Ajamı, Askari
Sub-Total (1)	38 Tomb-Mosques	
Major Mosques (without tombs)	8	Haidarkhana, Ahmadiya, Muradı
Small Mosques (without tombs)	45	Ammar, Naqıb, Aarajı, Masraf
Sub-Total (2)	53 Mosques without tombs	
Grand Total	91 Mosques	

Source: Author's Conservation Survey, Baghdad, 1975-77

TABLE 57 Inventory Mosques: Authenticity of Historic Fabric

Authenticity of Historic Fabric of Mosque	Number of Mosques	Percentage of Total Number of Inventory Mosques
Mosques which survive substantially in their original condition*	24	26.37
Mosques which survive partially in their original condition	25	27.47
Mosques which have been substantially altered by total rebuilding	42	46.16
Totals	91	100.00%

Source: Author's Conservation Survey, Baghdad, 1975-77

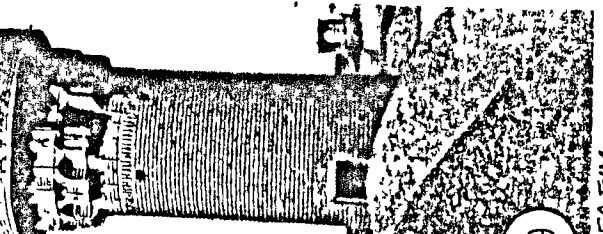
NOTE: *Including relatively modern ones, i. e. 1917-1932

5. Minarets are only present in Friday mosques. They are usually located at one corner of the mosque near the portico but sometimes incorporated within the entrance arch. In Iraq, minarets are usually cylindrical in body, unlike the square minarets of Syria and North Africa. They rise from an octagonal base to a round balcony from which the call for prayer used to be made. The balcony is usually corbelled out in two or more rows of 'muqarnas' brickwork. The upper section of the body is smaller in diameter and crowned by a fluted cupola and a metal beaded finial. Most minarets are provided with one internal spiral stairway, but the minaret of the Mosque of the Caliphs - unique in Baghdad - contains two (Figure 94).

All mosques in Baghdad contain one minaret with the exception of Kadhiman Mosque which contains four, all minarets are provided with only one balcony with the exception of that of Asifi which has two; all cupolas of minarets are fluted except eight mosques (Khafafin, Karkhi, Qumriya, Caliphs, Mirjaniya, Fadhil, Numaniya and Gailani). The cupola of Aquli Mosque was originally plain but is now wrongly restored with flutings (Figure 94). Some minarets have a second low-level 'balcony' (Caliphs, Gailani, Maslub) but it is usually used as a platform to ascend the minaret and not for prayer call. The majority of minarets in Baghdad are finished in very richly coloured and patterned glazed kashani tiles. These tiles often include one or two bands containing inscriptions in Kufic or some other type of Arabic script.

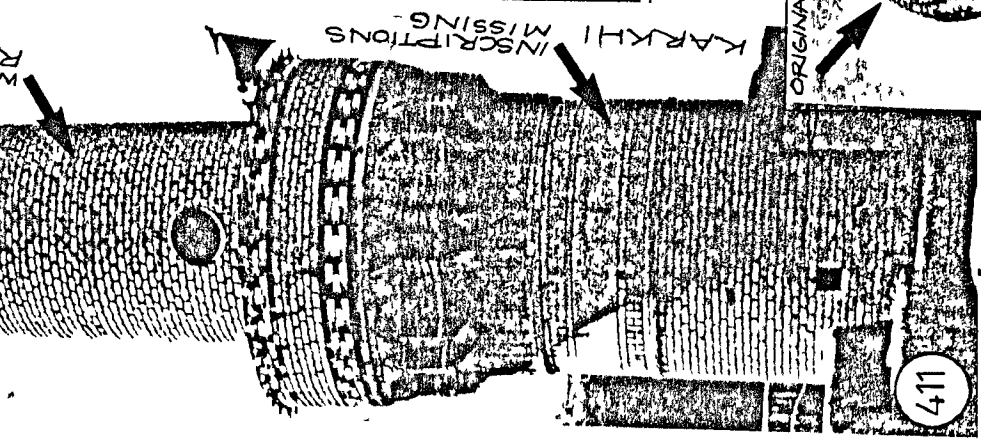
It is more difficult to generalise about domes. They range from the pointed type, depressed, shallow, raised on a drum, to the conical. Often they are finished in plain turquoise colour tiles, but some mosques contain richly ornamented domes in geometric or foliated patterns. The domes and minarets of important Shi'i mosques, such as Kadhiman, are often finished in gold-plated tiles. Generally the glazed kashani tilework in Baghdad shows close resemblance to that of Persian mosques (Figure 95).

6. Miscellaneous: Most mosques in Baghdad had what is called 'Saqa'ya' or 'Sabil-Khana'. These are public water fonts which were erected by pious individuals as waqf endowments. Although their idea was probably adapted from the Roman or Hellenistic



FAFIN

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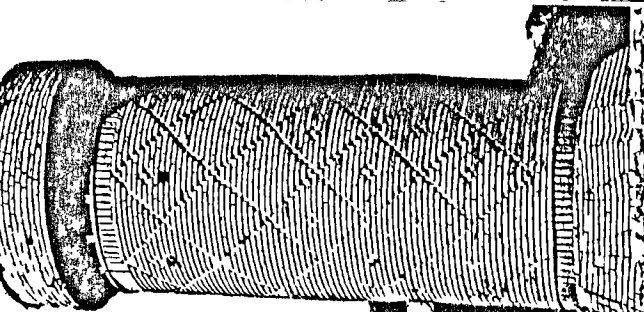


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WRONG RESTORATION

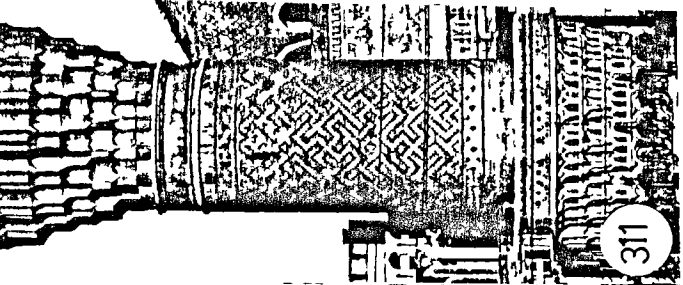
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KHAFAFIN



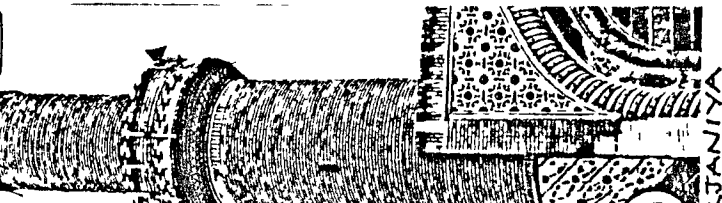
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QUMRIYA

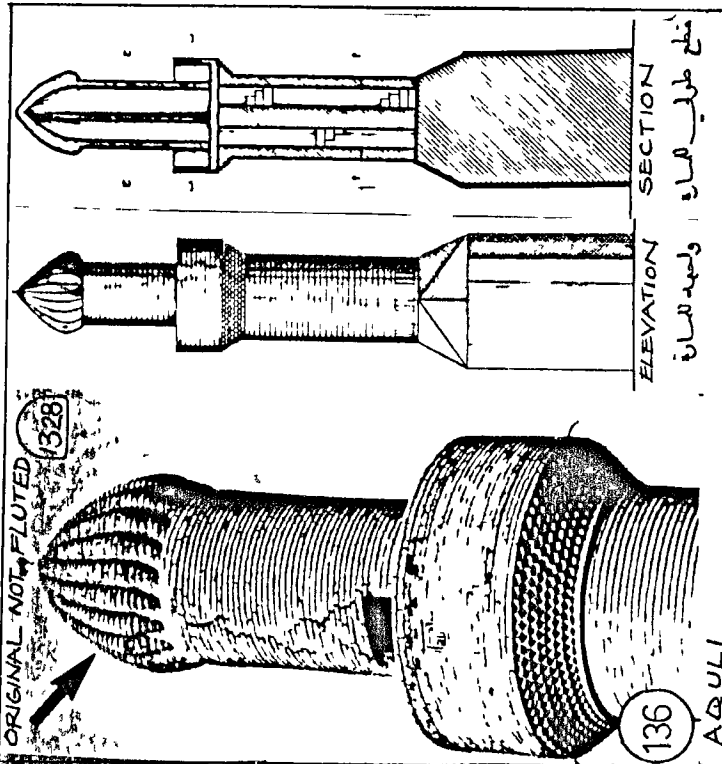


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KHULafa

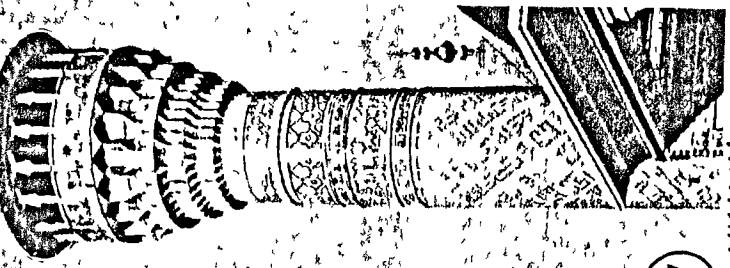


JANIYA



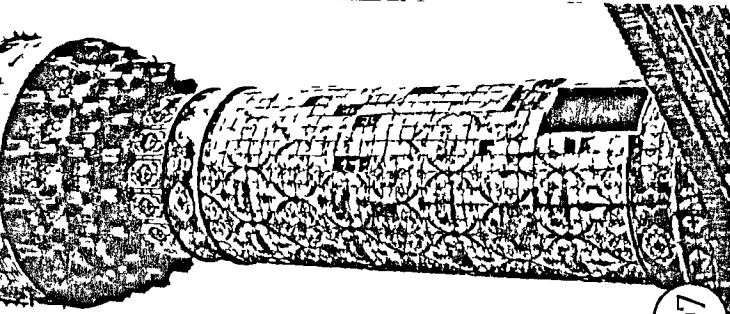
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ADULI



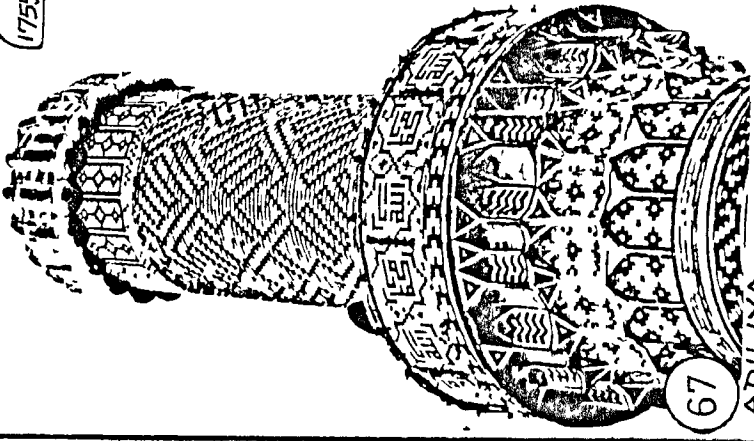
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KADHIMAIN



107

MURADIYA



67

ADILIYA

1755

1684

124

HUSAIN PASHA



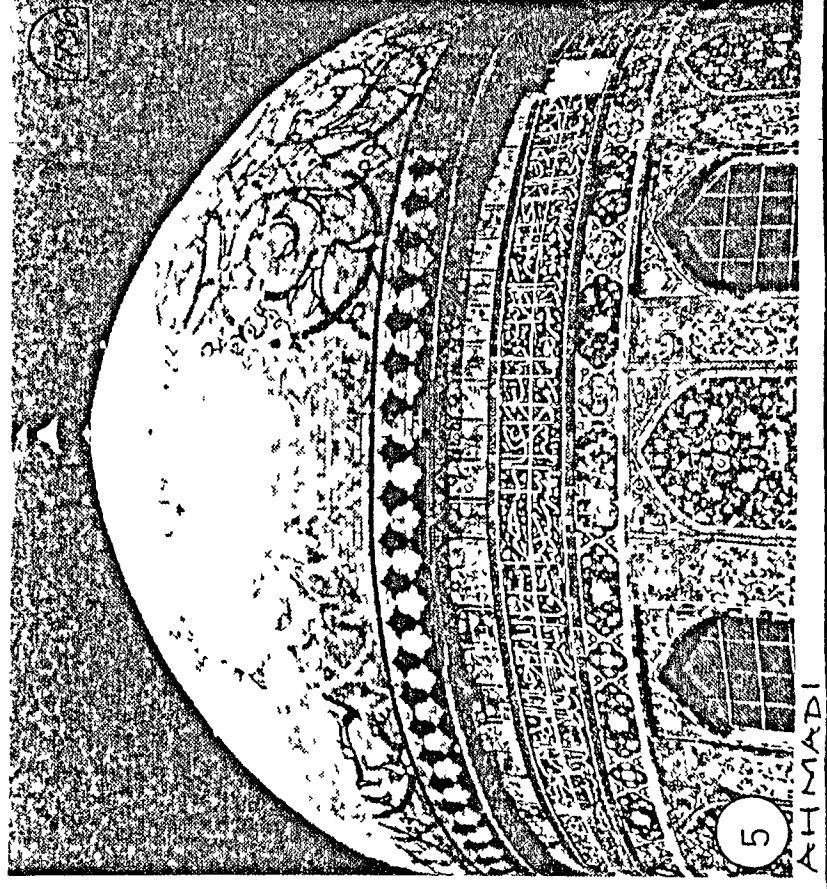
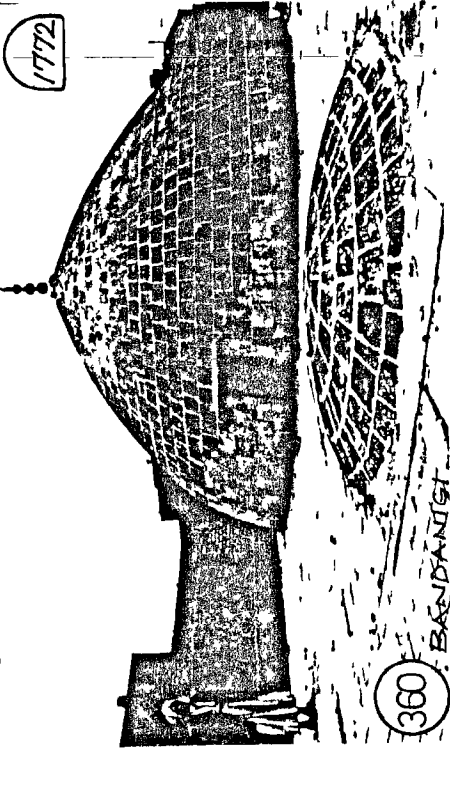
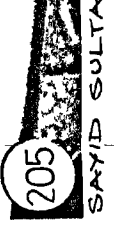
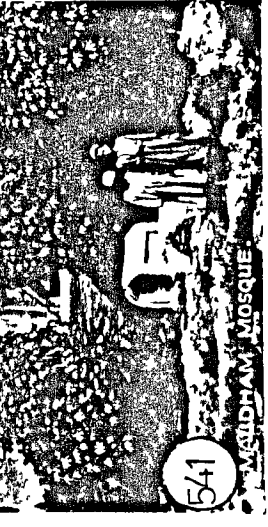
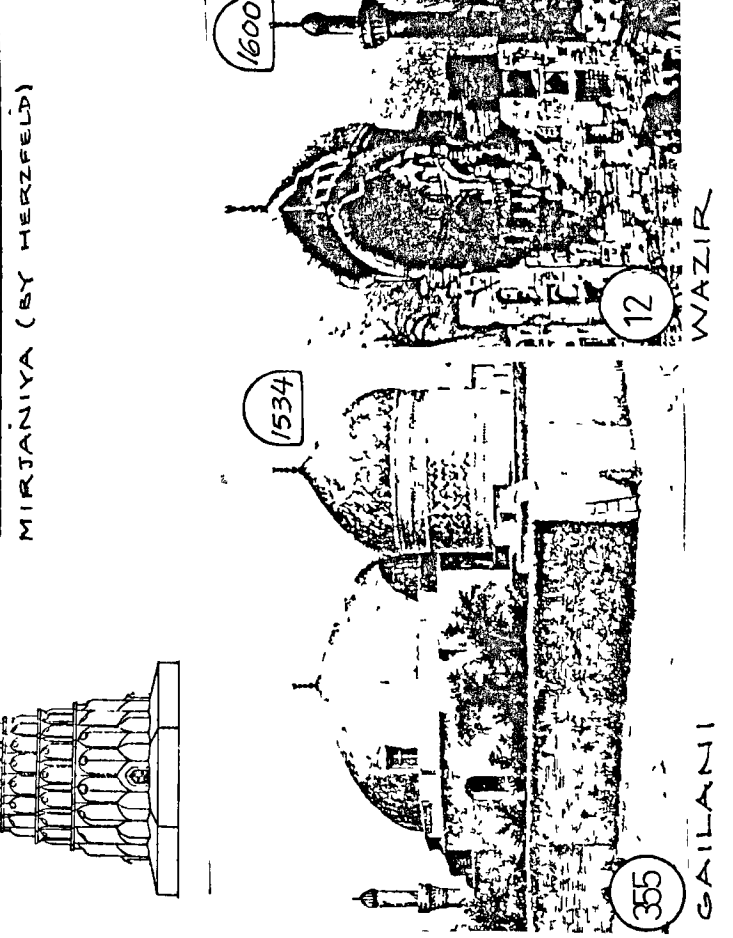
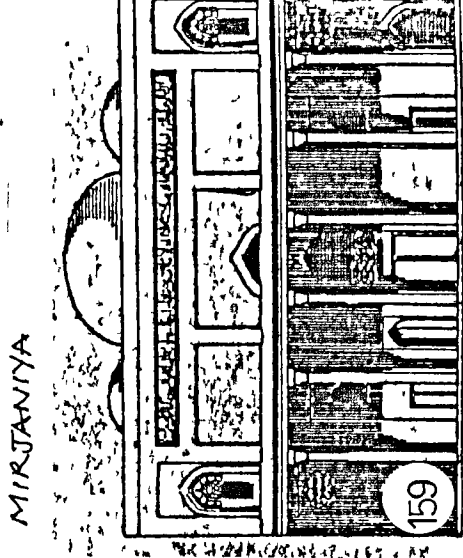
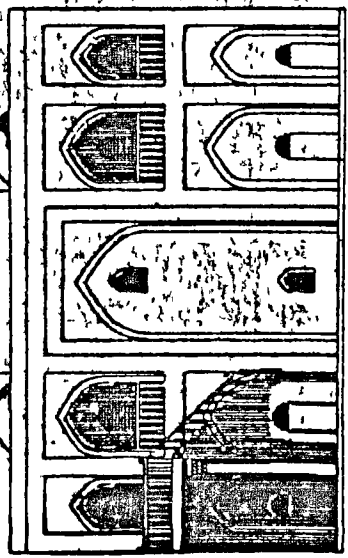
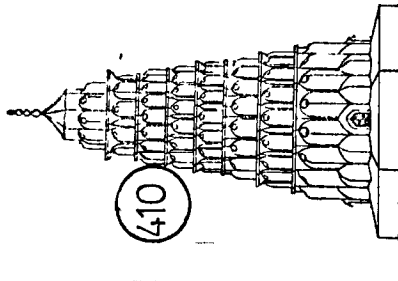
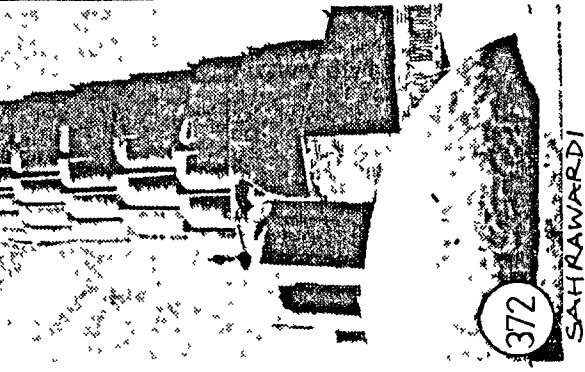
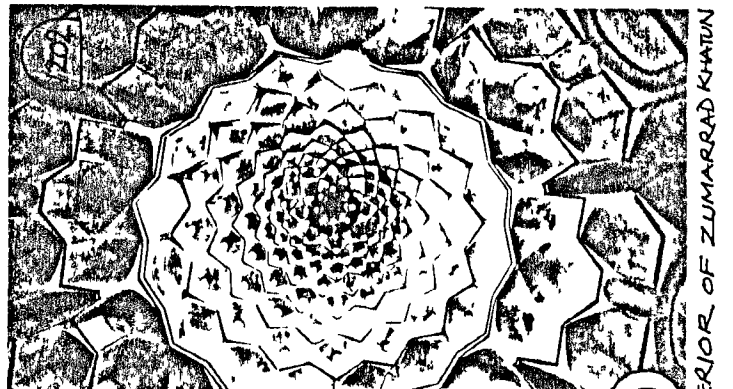
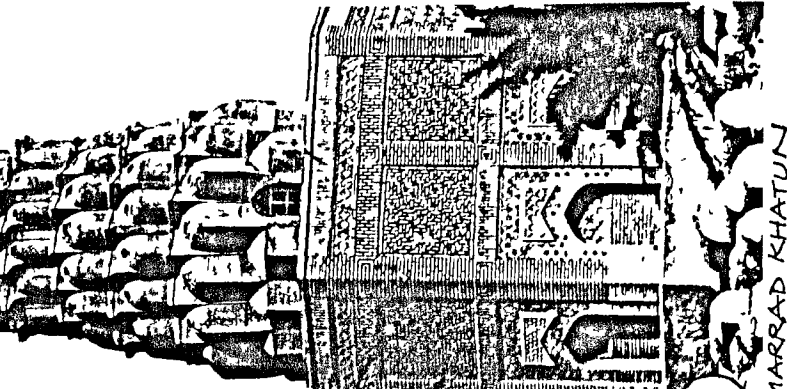
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KHASAKI



39

ASIFI



'Nyphaeum', they soon became almost an essential part of the mosques. They were often very richly ornamented and usually located on an outside wall overlooking the street. It is unfortunate that none of the originals exist today in Baghdad, the few which are present are only modern versions. Elaborate water fountains which once existed in the open courtyards of mosques have now been either removed or disused. Instead, prayers use modern water taps for their ablution.

Other changes due to modern technological developments include electric lighting and air-conditioning. Originally, mosques were lit by oil-lamps and later by 'Qanadils' which were hung from long chains. Light, when has a divine significance in Islam, was particularly emphasised near the mihrab area. Today, mosques are fitted with electric lighting. Important and large mosques are often very extravagantly equipped with sumptuous chandeliers but also with inappropriate fluorescent and neon lighting. The resulting paraphernalia of modern fittings such as fans, coolers, wires, and switch-boards, disrupt the historic character of mosques. This is not to advocate a return to oil-lamps but rather a criticism of the insensitive way in which historic mosques are treated today.

Waqfiyas, or legal waqf documents, are often very useful for architectural and urban historians in the study of mosques. However, waqfiyas are not always available and, for this reason, inscriptions that are found in mosques and other Islamic buildings can help throw more light onto their past history. 'Epigraphy', the reading and analysis of such old inscriptions, is a very important but largely overlooked field of research. Foundation inscriptions were customarily erected for all mosques and often contain elaborate titlature, formal terminology, Quranic verses, and even poetry. Few of Baghdad's mosques have been studied in this connection, perhaps because Arabic calligraphy can sometimes be very difficult to decipher. It is regrettable indeed that the Awqaf should be responsible for the destruction of many a fine inscription in the mosques of Baghdad. Today very few authentic inscription panels survive and must therefore be particularly well protected.

Because most mosques in Baghdad (as in all Iraq) are surrounded by shops or houses, they lack exterior elevations. Only a few can justifiably claim to have consciously-designed facades. Indeed, even large and important mosques such as Kadhimiya and Gailani are surrounded by a plain wall; many small mosques are very difficult to distinguish from ordinary houses from the outside. Often, the only external sign of a mosque is a small portal or frontispiece. Recently, the Awqaf has, rather ill-advisedly, 'added' new elevations to several important mosques, e.g. Asifi, as an attempt to enhance their external appearance. Needless to say these elevations are purely conjectural and should therefore be discouraged.

C. Hammams

Hammams, or public hot baths, are a common urban feature in all Islamic countries. They possess religious significance because they fulfil the ritual duties of a Muslim to maintain bodily cleanliness and hygiene. For this reason, hammams are usually found near mosques and their continued existence today is a proof of their association with Islam.

It is more or less accepted by most architectural historians that Islamic hammams first originated from Roman or Hellenistic thermae in the Near East. Byzantine baths continued to be used in Syria and elsewhere long after the Muslim conquest and thus acted as models for early hammams. The most outstanding examples of early Muslim hammams are Umayyad-Qusair Amra and Khirbat al-Mafjar. However, it must be emphasised that even those early hammams show certain adaptations and modifications to the classical thermae. These modifications included the diminution of the 'frigidarium' and the enlargement of the disrobing room or 'apodyterium' into an important audience hall¹⁹. The baths of classic antiquity were largely abandoned in Medieval Islam. By the twelfth century, the 'hypocaust' system, which involved under-floor heating, was largely disused in favour of the simpler system of providing a furnace²⁵. By the fifteenth century, according to

Soudel-Thomine, the intermediate unheated room was discarded in favour of the further enlarging of the inner hot room²⁶. Such generalisations about all hammams should, however, be considered with caution because wide variations exist even within one country.

The importance of hammams in the social and religious urban life of Muslim society is indicated by the relatively large number of such buildings in all towns. According to Ibn Asakir, Damascus had some fifty-seven within its old walls in the twelfth century. Al-Sabi gives seemingly exaggerated figures for Baghdad - between 1,500 and 60,000 in Abbasid times²⁰, Duri gives a figure of forty in 1884²¹. Mosul is claimed to have had some 210 hammams in the middle of the thirteenth century²². Lane gives a figure of seventy for Cairo in the early twentieth century²³, while Sanaa is known now to have eighteen²⁴. Ibn Battuta's description of the hammams of Baghdad is particularly interesting²⁵:

"The bath-houses in Baghdad are numerous, they are among the most sumptuous of baths, and the majority of them are painted and plastered with pitch, so that it appears to the spectator to be black marble. . . . In each of these bath-houses there are a large number of cubicles, each one of them floored with pitch and having the lower half of its wall coated with it, and the upper half coated with a gleaming white gypsum plaster, the two opposites are thus brought together in contrasting beauty. Inside each cubicle is a marble basin fitted with two pipes, one flowing with hot water and the other with cold water. A person goes into one of these cubicles by himself, nobody else sharing it with him unless he so desires. In the corner of each cubicle is another basin for washing in, and this also has two pipes with hot and cold (water). Every one on entering is given three towels, one of them he ties round his waist on going into (the cubicle), the second he ties round his waist on coming out, and the third he dries the water from his body. I have never seen such elaboration as all this in any city other than Baghdad, although some (other) places approach it in this respect."

Today, there are about sixty hammams, old and new, in Baghdad²⁶. According to Ashab, these hammams are used by an average of 3,525 people daily, or 0.24% of the population of the city²⁷. It is significant that thirty-seven of these hammams are located inside the four historic cores. He found out that as many as fifty per cent of the inhabitants of mahallas regularly use hammams. However, out of the fifty or so

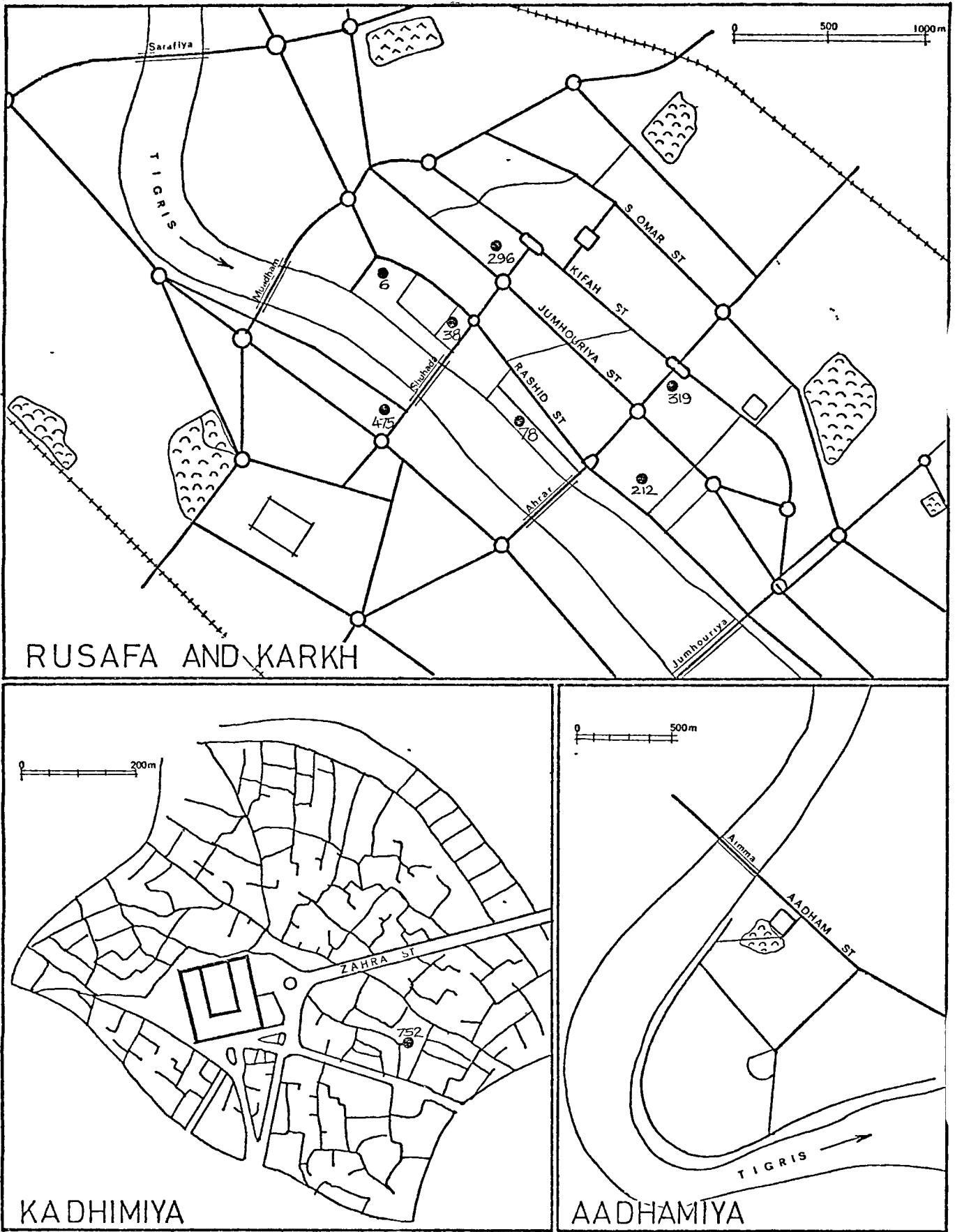
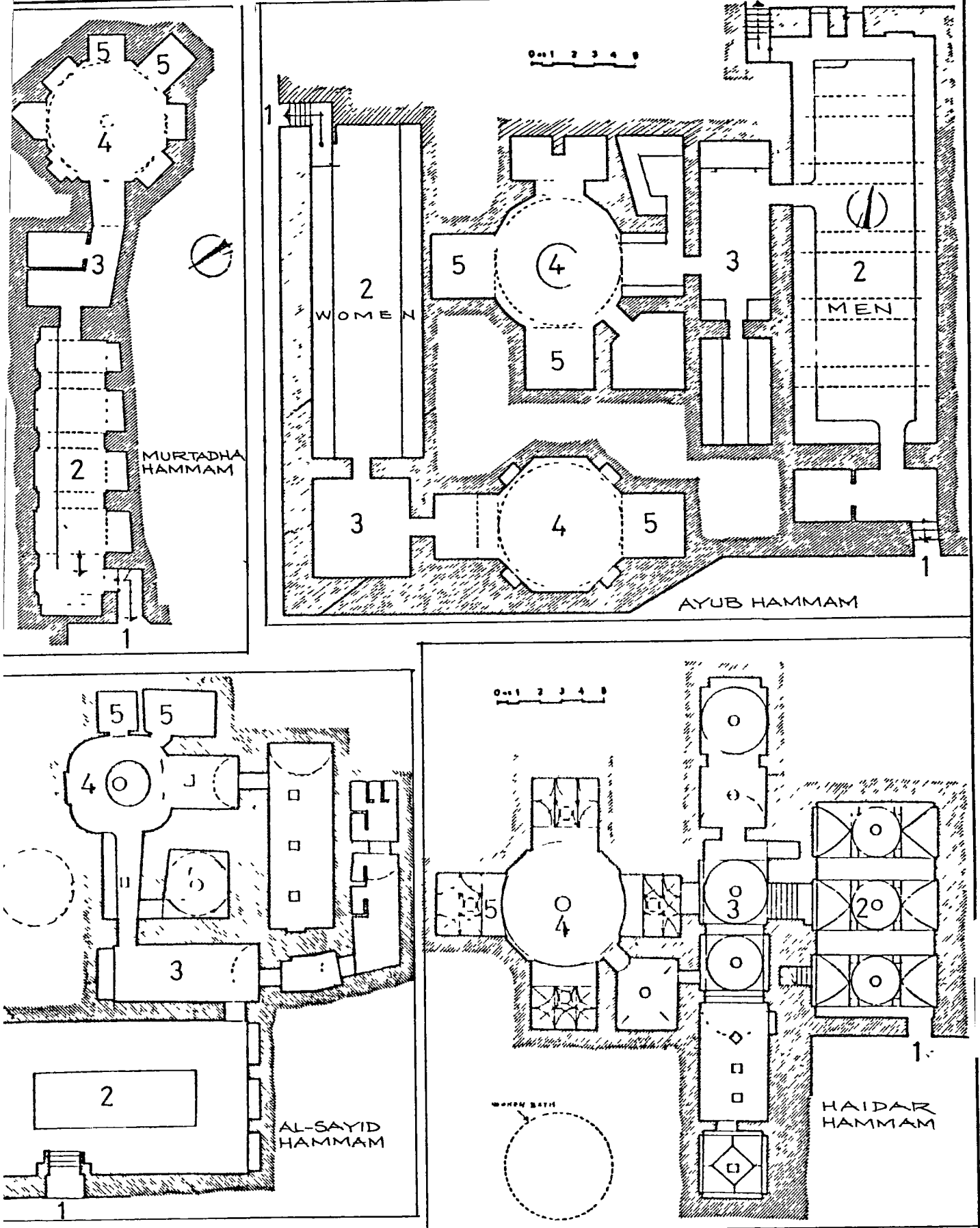


FIG 96 INVENTORY HAMMAMS IN BAGHDAD (with inventory numbers)

TABLE 58 Inventory Hammams: Age Groups and Grades

Age Group	Grade A	Grade B	Grade C
pre 1700	al-Sayid (1400?) Haidar (1650)	-	-
1701-1868	Ayub (1713) Pasha (1720?) Murtadha (1750?)	Malih (1800?)	-
1869-1917	-	Rauof (1880)	-
1918-1930	-	-	Rafidam (1930)
Totals	5	2	1

Source: Author's Conservation Survey, Baghdad, 1975-77



Entrance 2. Disrobing room 3. Intermediate room and latrines 4. Steam room
Iwans (also liwans)

FIGURE 97 FOUR EXAMPLES OF HAMMAMS IN BAGHDAD

Source: Strika and Khalil

hammams which existed a hundred years ago, only seven were discovered by the conservation survey; out of which only four still function as hammams. The increase in the use of private baths in houses has obviously resulted in a drastic reduction in the relative numbers of those using them but they remain a social centre for the inhabitants of traditional mahallas.

To understand the plan of hammams it is necessary to understand the functional procedure of taking a bath in one. After disrobing, the client puts on a simple loin cloth and proceeds to the intermediate room (barranī, or wastanī-barranī). This room is not heated but is usually warm and humid because of its proximity to the heated section. Then he goes into the hot room (bait al-harara) where he can be vigorously massaged by a 'kayyas, or dalak'. The client can also have his bodily hair removed by a special chemical (dawa, a mixture of arsenic and noura). Then he can go to a second hot room in which the steam will help him to perspire. Finally, he will wash himself or immerse in warm water and then goes back to the dressing room where he can regain his lost energy by resting for a while. (Figure 97). In Iraq, a second hot room is normally not provided.

Thus, the basic plan of a hammam consists of a series of spaces designed to meet this sequential programme. This includes:

1. Disrobing room (manza') (Figure 98)
2. Intermediate room (wastanī-barranī) with latrines
3. Heated room (wastanī-jawanī))
4. Steam-room (jawanī)) usually combined in one

Several planning generalisations can be made about the hammams of Baghdad. The disrobing room is nearly always rectangular in plan and is often the largest space in the hammam. The steam room, on the other hand, is usually of the cross-axial four iwans type, and nearly always octagonal in plan. Often it is the most interesting room in the whole hammam. This is largely due to its structure and not ornamentation which is totally lacking in Baghdadi hammams. It is always surmounted by a large dome pierced by small round oculi which are arranged in an interesting geometrical pattern. The dome is supported on heavy piers, pointed arches, and more frequently with

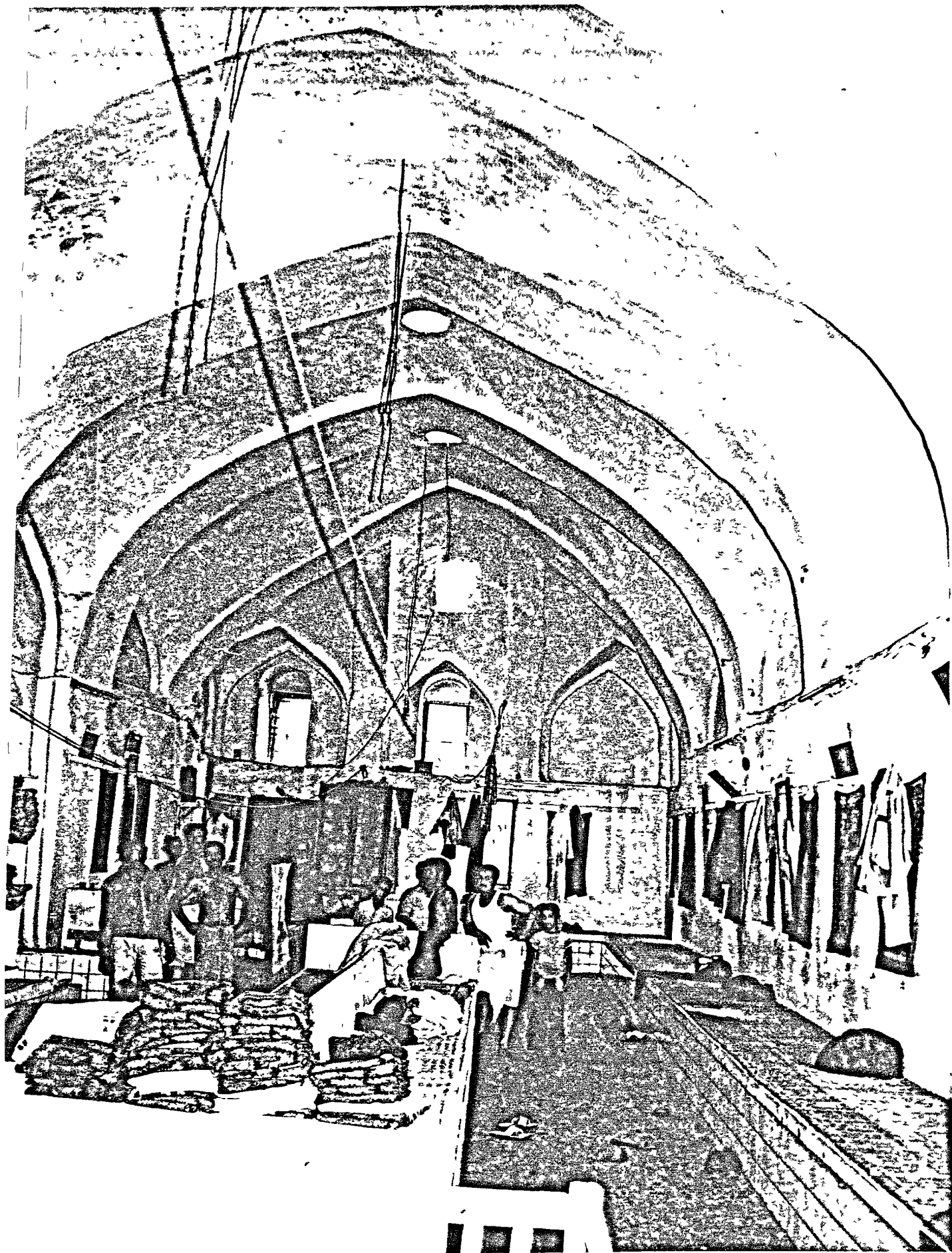


FIGURE 98 THE VAULTED DISROBING ROOM OF AYUB HAMMAM IN KARKH

Source of Photograph: By Author

squinches and never muqarnased pendentives. The iwans themselves are often barrel vaulted and are provided with brick or stone benches, and with hot and cold water taps and small water basins for use by individual bathers.

The furnace room (firn, khizana) is separated from the hot room by a thin wall which is sometimes pierced with holes to allow steamy air to pass. In the furnace room, which always has its own outside entrance, large cauldrons are heated and stoked from underneath. The fuel was rarely wood - a scarce material in Iraq - but mostly rubbish collected from the neighbourhood. The ash is then sold for building purposes which, when mixed with lime (noura), is used in foundations. Nowadays, the heating is carried out by modern liquid fuel burners. The roof was used for storing the fuel as well as for drying towels.

Like mosques, hammams in Baghdad are not expressed externally. All of the seven listed hammams are either entirely sandwiched by shops or simply provided with a plain wall. Unlike many Ottoman hammams, which are often very richly built and ornamented, those in Baghdad seem to have been regarded only as functional buildings and therefore treated with austerity. Indeed it is very curious to see that even the interior is completely devoid of any attempt to enhance the structure and other architectural elements by ornamentation, especially when so many ordinary houses in Baghdad often contain very elaborate neem roof structures and ornamentation.

Very little research and documentation has been carried out so far on hammams in Iraq. The few available statistics indicate that they are being demolished or replaced at an alarmingly fast rate. This is very regrettable because, unlike many traditional houses, their relatively large size, interesting structure, and central location, makes them good candidates for a variety of new uses.

D. Suqs and Khans

The suqs, bazars or markets, are another important urban feature of Islamic cities of the Near East. Centrally located suqs, which are always architecturally more interesting than local suqs of traditional mahallas, are often divided by trades for functional as well as administrative convenience. In Iraq, as elsewhere in Islam, traditional suqs fall into three main types:

1. The covered suq,
2. The open suq, and
3. The open market square, or 'Maidan'.

The first type is usually consciously designed and more permanent.

The market is possibly the oldest urban feature in history and suqs must have been in existence long before the coming of Islam, but their developed architectural form was likely to have been influenced by Roman or Byzantine markets. This was shown by Sauvaget in Aleppo and Damascus, where arcaded Roman thoroughfares (tabernae) were gradually adapted into small booths typical of Islamic suqs²⁸.

The 'Khan', which is the principal suq building, is also believed by many historians to have been developed from the Roman agora. It usually consists of an open central courtyard, storage rooms on ground floor, and lodgings on the first floor. It is often provided with a grand entrance portal and a row of shops on its external perimeter, e.g. Khan al-Zurur in Baghdad (No 59). Visiting traders from other towns or countries rented the stores of these khans and lodged in the rooms above them. Khans were important buildings and therefore were mostly owned by rich merchants, governors, or endowed as waqf. Khans must not be confused with 'caravansarais' - also called khans in most Arab countries because caravansarais were buildings primarily built in desert locations between towns to lodge travellers and merchants with their laden caravans. Similarly, the word 'Qaisariya', is not to be confused with khans - as is the case in some Arab countries - because qaisariyas, whose name clearly indicates their Roman origin, are lock-up suqs especially reserved for valuable goods. They were patrolled by watchmen at night and therefore did not have lodgings in them. Only one such suq was encountered in the conservation survey but they do not seem to have been common in Iraq.

The most extensive, and perhaps the oldest, surviving suq complex in Iraq is the one found in Rusafa, Baghdad (Figure 99). As it stands now, it is roughly square in shape, about 300 m by 300 m., or nine hectares in area. Of course this regular shape is not original but is largely due to the modern streets which surround it today. Its original extent went well beyond its present boundaries and several important suqs which branch off it indicate this, e. g. Mustansir Street and Shorja Suq. The site of this suq complex is believed by several Iraqi historians to have been used for suqs since Sassanid times. It is also indicated in some historical accounts that it included the famous Tuesday Market whose name suggests that it was probably a large open market held only (or mainly) on Tuesdays.

Baghdad's suqs today still show the characteristic division of trades, goods, and crafts. Each suq or group of suqs occupies a certain location that is often inter-related with its adjacent suqs because of functional connections. For instance, Sarai Suq, which specialises in books and stationery, is located next to Mutanabi Street which specialises in printworks and stationery storage. Similarly, Sarafin Suq which is occupied by money lenders and exchangers is now conveniently situated near a modern street of banks.

The survey resulted in listing fifteen suqs and fifteen khans, mostly located in this complex. The covered type of suq which, because of its interesting roof structure deserves more architectural analysis than other types, is basically a narrow street with a row of small shops on either side. Its width ranges from two to three metres but its length can run into several hundreds of metres, sometimes even more than a kilometre. The shops are usually raised about half a metre above ground level to allow for a better view and to act as seating for customers. Because they are usually very small (by Western standards) they do not have adequate storage space and therefore use nearby khans for this purpose. Furthermore, because wholesalers still operate in these suqs and as shops are not usually provided with rear doors, the already crowded narrow suqs are made even more congested by pedestrians, porters, and heavily-laden carts.

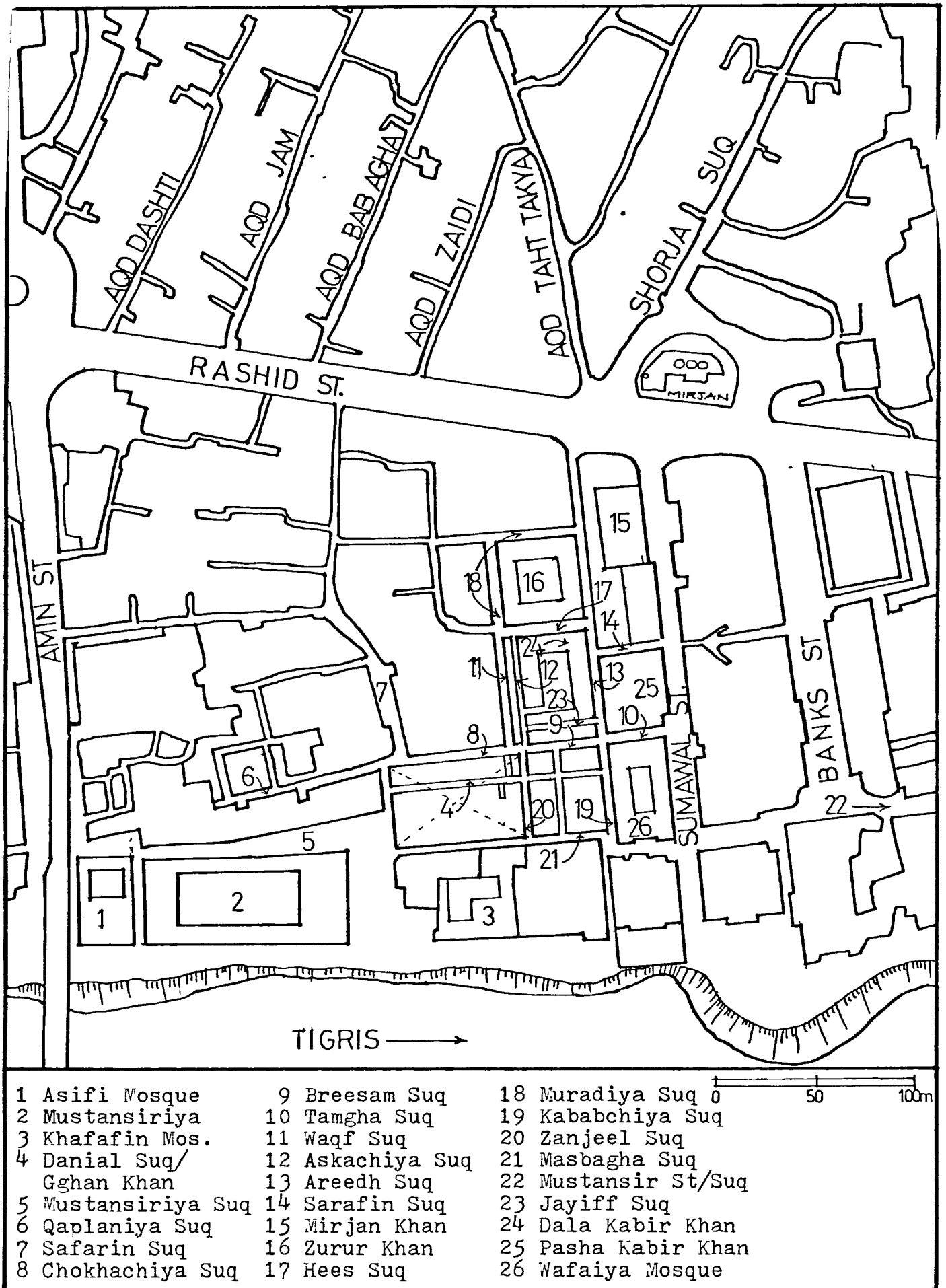


FIGURE 99 THE MAIN SUQ AREA IN RUSAFA, BAGHDAD

Source: Author's Conservation Survey, Baghdad, 1975-77

The roof, usually constructed in brick and mortar, consists basically of a long series of pointed arches at about 2 m. centres with vaults or domes between. Often the dome which surmounts a crossing of two or more suqs is emphasised by its larger size or increased height. In Baghdad, the arches are often expressed on their own by their raised surface beyond the rest of the roof structure and thus resemble a series of ribs in a long dark tunnel. The vaults or domes are normally pierced with small round oculi and, like hammams, these skylights throw very interesting bands of sunlight in daytime. The roof structure is often built in a parquet-like (hasırı) pattern in brickwork. The oculi, however, do not provide adequate levels of illumination and, consequently, neon-lighting is now extensively used by shopkeepers.

Neglect and lack of regular maintenance have resulted in the decay and collapse of several traditional suqs in the city. Some roofs have been replaced by cheap corrugated iron sheets fixed on timber or iron girders which resemble typical European pitched roofs. The sheets are then pierced with numerous small holes for sunlight. Several suqs contain an upper storey for additional shops or storage, e.g. Sarrajın and Astarabadı. Sarrajın Suq has recently been well restored by the Awqaf and serves as a good (but rare) example of how restoration can be successfully achieved without destroying the original fabric, as was the case with the superb Qaplanı Suq demolished by Awqaf in 1976 (Figure 100)

Architecturally, khans closely resemble domestic buildings perhaps because they are also used for residential purposes. Unfortunately, very few medieval khans exist today. The most outstanding examples in Baghdad today are Khan Zurur and Khan Mirjan (Nos. 59 and 65 respectively). Khan Mirjan, which was built in 1356 by an Ilkhanid governor, is perhaps unique in Islam because its courtyard is entirely covered by a splendid vaulted roof. (Figure 101)

Some old khans have been so much modified or taken over by modern shops that their original fabric is hardly recognisable any longer. Khan Gghan, now known as Suq Daniyal, is a good example of this type of gradual destruction. Built in 1590 by a local Pasha called Gghal Zada,

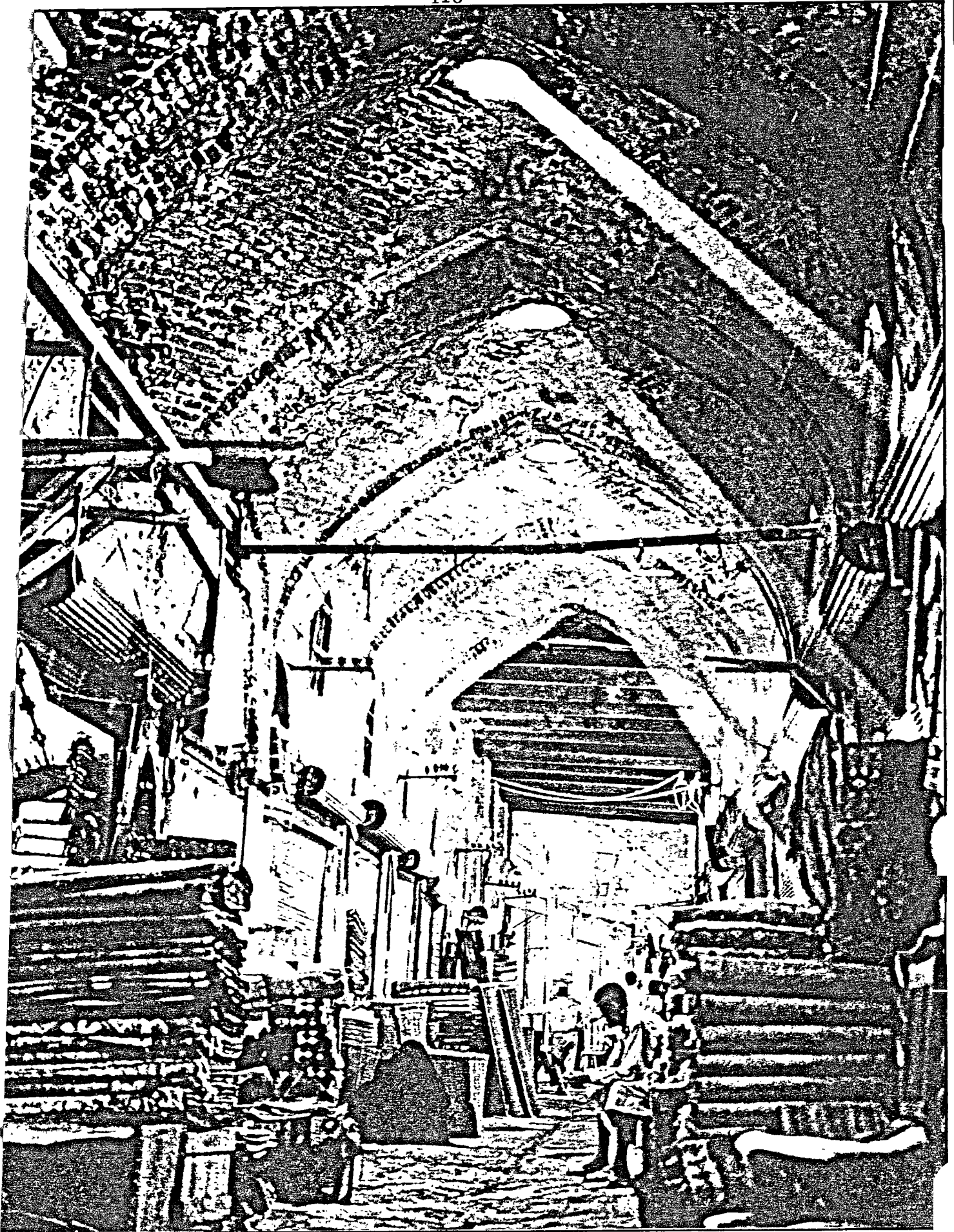


FIGURE 100 QAPLANI SUQ - DEMOLISHED BY THE AWQAF IN 1976

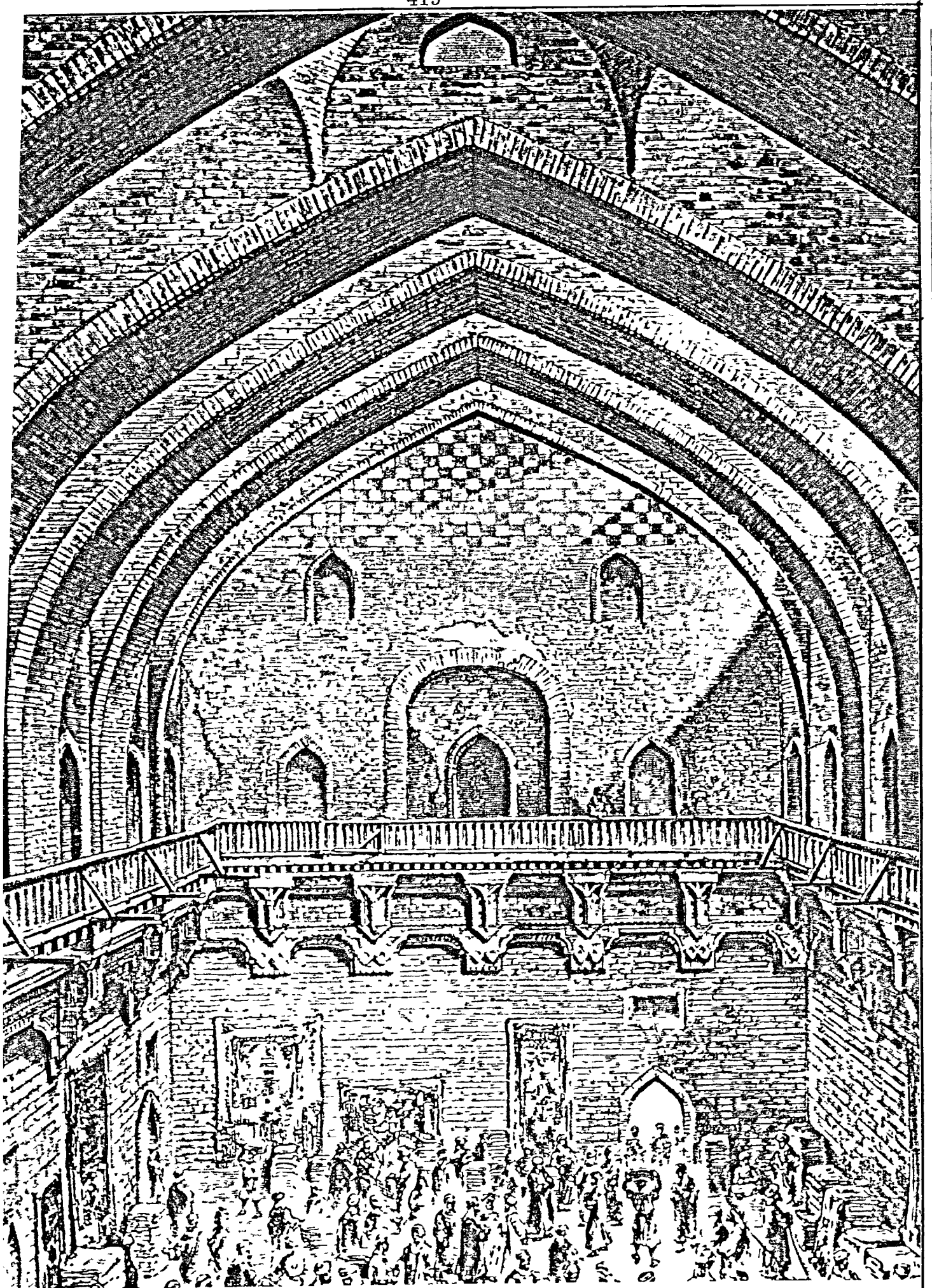


FIGURE 101 MIRJAN KHAN IN MID 19th CENTURY

it remained to function as a major khan in Baghdad until the early decades of this century when it began to be taken over by shops. Its once open courtyard is now entirely occupied by a modern suq. According to Ashab, 22.4% of all khans in Baghdad have been slightly modified by modern uses, and 30.4% have been considerably modified, khans demolished or replaced accounted for 5.6%, while 36% remain unchanged. However, his figures include 'Alwas' which he wrongly regarded as khans. These are buildings primarily built for the storage and wholesale of grains or vegetables²⁹.

Several suqs in Baghdad like Safarin (Coppersmiths) and Sagha (Goldsmiths) have specialised in certain crafts. Such suqs tend to be of the open type, perhaps because of the nature of their industrial processes and resultant fumes. Local craftsmanship has diminished considerably over the last few decades largely as a result of the new competition from modern, often plastic, goods. Consequently, many valuable traditional skills have almost disappeared or been modified to cater for new types of demand. Safarin Suq is now almost totally devoted to the production of stereotyped tourists' souvenirs as a typical example.

As with other Islamic urban features in Iraq, there has been relatively little research and documentation on suqs and khans. Apart from Khan Mirjan, now owned and administered by the Directorate of Antiquities as a museum, no other khan has been restored or measured. Khan Zurur, built in 1534, is in an ashamedly bad state of neglect. It is the only khan of its type and certainly of its age that survives today and, if quick preservative and remedial measures are not taken soon, it is heading for destruction.

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PART III

CONCLUSIONS AND RECOMMENDATIONS

CHAPTER IX
CONCLUSIONS AND RECOMMENDATIONS

9.1 Conclusions

The first part of this thesis, which dealt with the general aspects of conservation and their relevance to Iraq, was intended to provide the background for the more detailed second part which concerns Baghdad. It was shown 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. 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 of 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, and the traffic and infra-structural public services of the area.

To be realistic, conservation policies and plans should be integrated and co-ordinated with the overall development plan of the city. It was concluded that this integral approach is particularly relevant to the traditional Islamic madina of the Near East where, because of its characteristically very dense urban fabric, 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. 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.

The designation of a Conservation Area or the preparation of a conservation plan should not be regarded as an end in itself. They are merely the

first steps of a long and slow process and must be followed by systematic action. It should also be recognised that to the central government and local authorities, new housing, education, health, and other public services will perhaps always receive priority over conservation. Consequently, conservationists should argue that the building of new districts and the rebuilding of central areas both involve large public investment without an immediate return and that, similarly, the rehabilitation and conservation of historic areas should benefit from the same advantages. It should be the aim of conservation that, through careful and sensitive planning, such new development is in harmony and sympathy with the overall character of the historic area. It should seek to reach a fine balance between the new needs of modern society and the need of conserving its national heritage.

If Iraqi conservationists are to succeed in securing both official and public support, then conservation itself must be expressed not in vague aestheticism but in clear and realistic social and cultural objectives. Euphoric and subjective exhortations about the heritage are not only useless but can often be counter-productive. It should not be considered as a nostalgic and emotional attachment to the past, nor should it be approached through a dogmatic ideal to preserve everything old. Such attitudes are very likely to be rejected by politicians and decision-makers. Equally, it should not be associated with naive and indiscriminate attacks on all forms of modern development. Historic towns, like living organisms, have evolved in the past and must be allowed to evolve now.

In many countries, conservation has been shown to contribute positively to the quality of today's environment. In this age of oppressive uniformity, alienation and supposedly efficient pluralist society, conservation is keeping familiar socio-psychological anchorages in distinctive but contrasting old towns alive and thus giving joy and inspiring pride among citizens.

The concept of conservation is a relatively recent development, even in some European countries, and therefore the question of the loss and protection of heritage in Iraq should be seen in this light. Only recently has conservation been introduced to Iraq and its likely success or failure

should be assessed on the basis of the socio-cultural and economic context of Iraqi society. During the last three decades, Iraq has experienced a dramatic transformation towards urbanisation. The once agriculturally-based traditional society is now being rapidly urbanised and industrialised. This fundamental change is being aided by a very high rate of natural increase in its population and by a massive influx of rural migrants into a few large urban centres. The present population, estimated at about twelve million, is expected to reach some twenty million by 1990, and the urban population is expected to increase from the present percentage of about sixty to about seventy-five by 1990. Inevitably, the effects of such alarmingly rapid changes on the historic fabric of cities have been, and will be, serious and considerable.

Urbanisation has long been a familiar social phenomenon in the Near East, Islam itself is largely urban in concept and is closely associated with urban-based culture. What is new and alien, however, is the strong tendency to link urbanisation and modernisation with Westernisation. The incessant and indiscriminate importation of Western culture and its technology has unfortunately - but inevitably - resulted in the rejection of the traditional. Thus the old and the indigenous have now become dirty words falsely associated with reaction and conservatism. 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.

Modernisation does not have to be based on the Western model and the supreme irony today is that, while the Western society is going through a process of self re-appraisal and discovering some values and wisdoms in its past, 'follower' societies such as Iraq are busily trying to emulate and eventually catch up with the West. However, it could also be argued that this race is not wholly self-imposed and that other deeper forces, such as economic and technological colonialism, are at work. But while this is partly true it should also be recognised that a cultural time-gap between different societies will perhaps always exist and therefore the end of this race is fundamentally illusory. International cultural and technological co-operation and borrowing is necessary but

it must be selective and adaptive. Indeed, this is one good way by which Third World countries can take advantage of the Western experience and avoid its costly mistakes. Some Western conservationists have recognised the positive example offered by the traditional Islamic madina and praised its humanity and ecological balance with nature.

Iraq's cultural heritage, architectural and urban, is among the finest and richest in the Near East. Its long and eventful history has endowed it with a massive and varied heritage of immovable cultural property. Four broad types of such property were identified:

1. Archaeological sites and features
2. Ancient and historic monuments
3. Villages and rural areas of architectural or historic interest, and
4. Groups of buildings, areas and towns of architectural or historic interest.

This study has shown that cultural property located within urban areas has been, and is being, rapidly destroyed by pressures for modern development. In contrast, sites and monuments which are located in remote regions are relatively safe from danger except from ill-advised excavation or restoration work. For the same reason, it was possible to generalise that historic monuments have suffered more damage or destruction than ancient ones. The survival potential of cultural property was found to be dependant largely upon three factors: location, religious significance, and durability of its building material. This explains why mosques, 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 possess locational and topographical value.

This research has also shown that Iraq's heritage is being destroyed at a disturbingly rapid rate through several destructive processes. These were identified as follows:

Large-scale engineering works,
Neglect and decay,
Demolition of buildings and clearance of areas,
Ill-advised restoration work,
Looting and vandalism,
Spatial intrusion and removal of context.

Several conclusions can be drawn from the loss of heritage in Iraq. First, that the majority of the destruction is being caused by official actions, the destruction by the private sector is minimal compared with that caused by governmental projects such as driving new roads through historic areas. Second, that the most common causes are neglect and road constructions. Third, that the overwhelming majority of the lost heritage has not been recorded or documented; that 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 such a minimal task.

These conclusions were substantiated by an inventory of lost heritage since 1917 and by the conservation survey of Baghdad in general. It was revealed that more than twenty per cent of Baghdad's historic fabric has been lost since World War I. The inventory of lost heritage showed that some 160 buildings and urban features of outstanding architectural or historic interest have been lost, mostly by official actions. This inventory included 81 mosques, 20 houses, 30 khans, 17 hammams, 4 suqs, 3 gates, and 2 churches. These figures, however, must represent only a small proportion of the total loss for the same period. Because most of this lost heritage was not documented it remains very difficult to trace back.

The legislative, administrative and financial arrangements of conservation in several European and Arab countries were outlined in order to discover their relevance to Iraq. By and large, European countries seem to have adequate legislation and administrative conservation machinery. This legislation is usually incorporated within town and country laws and may include financial incentives and tax reliefs to the owners of private buildings. In nearly every European country,

there is a strong private conservation lobby and considerable public interest. By contrast, legislation in Arab countries was found to be largely prohibitive in nature and containing no financial incentives or tax reliefs to the owners of private buildings of interest. Very few historic towns in the Arab World have documented their cultural heritage, and most vernacular architecture remains unlisted and unprotected.

Because of the lack of enforcement, legislation in Arab countries has proved ineffective in solving the problems which beset historic areas. Without the other concomitant and necessary measures the protection of heritage cannot be secured even by good legislation. Several successful measures in some European and Arab countries seem to merit introduction to Iraq. Generally, these include 'positive' legislation which encourages and helps private owners of buildings of interest, centralised conservation administration, and the protection of historic areas through strong development control measures. Specifically, these range from the concept of 'Conservation Areas' to the provision of a 'Statutory List', a national inventory of heritage, zones of visual interest, special laws for individual historic towns, and co-operation with Unesco and other international organisations to conserve threatened areas or towns.

The existing protective machinery in Iraq is functionally divided into five broad groups which include restoration, urban planning, and the administration of Waqf property. The constituent protective agencies are:

1. Directorate of Antiquities
2. Directorate of Planning
3. Amanat al-Assima
4. Ministry of Awqaf
5. Tourism Administration
6. School of Architecture and Centre for Urban and Regional Planning, Baghdad University
7. Unesco Regional Conservation Centre

The critical analysis of this research has revealed several serious weaknesses and defects in this machinery. It was shown how some of its official organisations such as the Awqaf and Amanat al-Assima were

themselves responsible for much destruction of historic fabric in Baghdad. Generally, this machinery has shown a poor record in protecting the national heritage for the following reasons:

1. A general apathy and a lack of interest toward the value of heritage and the need for its protection. This applies especially to the Ministry of Awqaf and Amanat al-Assima.
2. Inadequate legislation. This applies especially to the urban planning machinery and Awqaf. There is almost a total lack of legislation regarding areas of historic or architectural interest, no listing or grading, and very few development controls. The present Law of Antiquities puts more emphasis on archaeology than on historic areas of towns.
3. Negative nature of legislation. This applies especially to the Directorate of Antiquities whose Law does not provide for any incentives or rewards for private owners of buildings of interest. It is largely prohibitive in spirit and moreover its penalties have proved insufficient as a deterrent against offenders.
4. Lack of legal enforcement. This is especially applicable to the Antiquities but also to Amanat al-Assima. By and large, the protective machinery has shown a general laxity in enforcing the existing legislation.
5. A general and serious lack of documentation of heritage, especially by the Ministry of Awqaf and urban planning authorities.
6. A general critical shortage of qualified staff and technical specialists in conservation. This is particularly true for the planning machinery and educational centres. Both the Awqaf and the Antiquities suffer from a shortage of experienced craftsmen and traditional building masons.
7. Inadequate or sporadic co-ordination and co-operation between the various protective organisations. This applies to all these organisation and is one of the most serious weaknesses in the existing system.
8. Insufficient official promotion of public interest in conservation by all organisations. The almost total lack of public involvement in conservation is also shown by the lack of interest by professional societies and the non-existence of private pressure groups.

These broad defects illustrate the immense tasks which face those who are engaged in protecting the heritage of Iraq, and point the way for the proposal of remedial measures and solutions designed to overcome these problems.

The second part of this thesis, which was specifically concerned with Baghdad, outlined its history, morphological evolution and its present planning and conservation. The city's tremendous overall domination and concentration of industrial and economic activities was shown to have resulted in correspondingly high pressures for modern development. The four historic cores of Baghdad, namely Rusafa, Karkh, Aadhamiya, and Kadhimiya, took, and are still taking, the brunt of these pressures thereby losing much of their historic fabric. It was shown that Rusafa, perhaps more than any other historic core in Iraq, has suffered considerable damage and destruction especially during the last three decades of rapid development. The conservation survey of this research has revealed that as much as 23% of Rusafa has been destroyed since 1917 by new streets and official clearance projects alone. Similarly, Karkh and Kadhimiya were shown to have lost more than 22% and 10% of their historic fabric respectively.

The various attempts to plan Baghdad, all by foreign planning firms, have been largely concerned with physical development and none was seriously related to conservation. In fact some Master Plans, such as those by Doxiadis Associates and Minoprio and Partners, even advocated the demolition of the historic cores. However, the plan by Polservice and especially that for Kadhimiya, represent a hopeful development. But despite its good intentions the Kadhimiya Study was shown to have been responsible for the demolition of an important part of this core. It failed to prepare a detailed and documentative inventory of the area and its general proposals were found to be either over-optimistic or impracticable. This confirmed the fact that, without the availability of detailed knowledge of the individual buildings and character of the area, a conservation study would stay largely irrelevant and of little practical value. The inventory is a basic tool and, therefore, to attempt a conservation plan for an area without it would be not unlike attempting to prepare a development plan for a city without the basic census data and the knowledge of the size, age groups, and socio-economic conditions of its population.

The third part of this research also dealt with Baghdad and included the methodology and analysis of the conservation survey and the inventory of cultural heritage. Among other objectives, the survey investigated the problems of the four historic cores and analysed their individual urban and architectural features. On the other hand, the inventory resulted in:

1. Listing 53 sites of archaeological interest.
2. Proposing 36 Conservation Areas.
3. Identifying 47 zones of special visual interest.
4. Listing, grading and documenting 603 individual items of architectural or historic interest, including 412 houses, 91 mosques, 22 tombs, 18 khans, 15 suqs, 8 hammams, 6 takyas, 5 churches, and 4 madrasas. According to grades, there were 78 A's, 227 B's and 298 C's.

The present Law of Antiquities limits legal protection to items built before AD 1700 - a date which automatically excludes the protection of virtually all vernacular domestic architecture. Consequently, the date of 1932 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 cores are being gradually but consistently destroyed and replaced by modern uses. These cores, which constitute only some six per cent of the total municipal area of the city, contain the overwhelming majority of its heritage.

The inventory shows that more than a half of the listed items are either in a poor or very poor physical condition, that houses and mosques constitute the majority of listed items, and that nearly a half of all listed mosques have been rebuilt by the Awqaf which resulted in the destruction of much of their historic fabric. It was also shown that about seventeen per cent of all inventory items have either been converted to another use, or are being used unconverted for a new use that is different from their original one. The findings highlighted the glaring inadequacy of documenting the city's heritage: only about eighteen per cent of listed items are of a known date; less than twenty per cent have written references, about ten per cent have plans or sketch drawings, and none has comprehensive and accurate measured drawings or photogrammetric coverage.

As a rough estimate the cost of repairing and restoring all the listed items would be somewhere between six million and twelve million Dinars, while the cost for eighty-seven per cent of these items (mainly houses) would be between 2.6 and 6.5 million Dinars. However, the implementation of conservation plans in all proposed Conservation Areas would require much more financial resources than the restoration of several hundred buildings. This is because 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. Consequently, in the absence of such plans it is difficult to estimate such costs. But the implementation of any conservation plan is necessarily carried out in several stages and therefore such finances would not all be needed immediately. They could be phased and co-ordinated with regular governmental allocations and, therefore, could be spread over a fairly long period.

Apart from the essential cultural value of historic areas to the nation, it has now become more economical to conserve many such areas. The recent sharp increases in the price of building materials, inflation, acute shortage of both housing and urban land have all swayed the cost-benefit argument in favour of up-dating and conserving the existing traditional housing stock. Furthermore, historic buildings and areas are a scarce national resource and their loss is irretrievable and should therefore be protected for future generations. Indeed, it is argued that the present favourable movement towards recycling materials and conserving depletable natural resources presents urban conservationists with an expedient and perhaps unique opportunity to see their policies approved and initiated by the central government.

Although successful conservation in Iraq will ultimately depend on central governmental support and action, initiative is also required from private and public sources, especially from the locality where action takes place and problems first arise. In the final analysis, therefore, success will depend upon the formulation of an overall protective policy, the will to legislate, administer and enforce these powers, awakening public opinion, and the provision of financial, technical and professional resources necessary for implementation.

9.2 Recommendations

The preceding conclusions and findings lead to several general and specific recommendations. These recommendations are presented here in two main parts: the first consists of proposals designed to improve and strengthen the protective machinery according to its individual constituent agencies; and the second is related specifically to Baghdad and includes action that is urgently required to safeguard particular items of its cultural heritage.

9.2.1 A New Conservation Authority

A central recommendation of this study is the creation of a new official advisory agency to act as a national conservation authority for Iraq. In order to exercise its work effectively and impartially, this Authority should be administratively independent of the present planning machinery in Iraq but linked directly to the Presidential Secretariat.

The administrative structure of this Authority should be kept as small and as simple as possible. Broadly, it should consist of a director, an advisory council of some ten to fifteen members, and a small administrative section. It is anticipated that the director and the members of the council will be directly appointed by the Presidential Secretariat on the basis of their professional experience, technical expertise and interest in conservation. The members could be recruited from Iraqi universities, research centres or professional societies.

The main aims of this Conservation Authority should be as follows:

1. To advise the Planning authorities, i. e. Amanat al-Assima for Baghdad and the Directorate of Planning for the rest of the country, on conservation matters generally; and to give its expert consultative assessment on specific problems which arise from conflict between modern development and conservation.
2. To co-ordinate the work of those protective agencies which are to be involved in the preparation of a national inventory of immovable cultural property.

3. To bring to the attention of central government, protective agencies and the public, any general or specific dangers which arise or might arise from official or private action affecting the heritage.
4. To receive complaints or suggestions from the owners of affected property and from the general public which it can pass on to the appropriate authority with its recommendations, and,
5. To promote public interest and participation in conservation through regular national campaigns and the active use of the mass-media.

It is proposed that planning applications which affect the character of a Conservation Area or a listed building of grade A or B should be referred to the Conservation Authority for a consultative opinion. The expert evaluation of a particular case by the advisory council should always be respected but, for practical reasons, should not be made legally binding. In other words, the final decision should remain with Amin al-Assima (Mayor) for cases in Baghdad, or with the Minister of Municipalities for the rest of Iraq.

9.2.2 Directorate of Antiquities

The existing Law of Antiquities of 1936 should be generally up-dated to cope with the new developments in protecting the heritage. It is recommended that this Law should remain as the main legal framework for the protection of single buildings and monuments of cultural interest as well as archaeological sites. However, specifically, the following recommendations are proposed:

1. To introduce the system of listing and grading of single buildings or monuments, and change the legal date of their protection to 1917 instead of 1700. The existing provision to protect items of a later date (i. e. Chapter II, article 14) if needed, should be kept;
2. To provide incentives and financial tax reliefs to owners of listed buildings. In general, public funds should be used when private owners are not able to afford their normal obligations to maintain their listed buildings. The owner of a listed property should undertake to protect it against neglect, and unauthorised alteration or demolition. The building should be totally exempted from income and estate taxes.

3. Failure to maintain a listed building properly should result, after serving an official notice and giving a certain period to comply, in compulsory purchase at values estimated by appropriate authorities and from which tax reliefs and other incentives should be deducted. This would then replace the somewhat harsh article 7 from the Law, which obliges negligent owners to "abandon his right of occupation" to the Antiquities;
4. The owner of a listed property (especially grades A and B) should be legally obliged to open his property by arrangement or at specific times to the public;
5. Any change in ownership must be notified to the Directorate of Antiquities before it is effected and such conveyance should not change the status of the listed property;
6. Depending upon his income-group, the private owner should be eligible for grants of up to ninety per cent of the total cost of repair and restoration,
7. Owners of listed property should be allowed to obtain low-interest loans from the Real Estate Bank, 'Iqari Bank', which hitherto grants only to new houses;
8. The maximum penalties should be increased. Article 55 of Chapter VI of the existing Law, which calls for an imprisonment of up to one year or a fine of two hundred Dinars or both, has certainly proved inadequate. The fine should be unspecified but calculated according to the nature and extent of the offence itself. The fine should also apply to cases of unreported archaeological finds during building excavations. The terms of imprisonment should be increased to five years maximum.
9. It is recommended that the respect of historic authenticity of the fabric of any listed item should be clearly spelled out either in the Law itself or in its regulations. It must be made clear that the restoration or preservation of the historic fabric should be carried out only by qualified personnel and be stopped where conjecture begins, and that new materials should preferably be made distinguishable from the old. It should also be compulsory for all protective agencies to document all such operations.
10. The Directorate should start preparing maps of urban areas of potential archaeological interest in Iraq, and introduce specific references in the Law to the question of finds during building excavations, penalties against offenders, and financial compensation for delays. The Directorate should set up a specialised 'rescue-squad' to take prompt action whenever the need arises.

9.2.3 Listing

The main purpose of listing buildings and other types of immovable cultural property is to identify them for legal protection. Thus in order to protect a historic building it has to go through three processes: first, it has to be selected and legally declared as listed, second, it has to be repaired or restored, third, it has to be provided with a suitable use, inspected and maintained regularly. It is recommended that listing is formally introduced to Iraq and that two types of lists should be used:

1. Approved List:

This should be a national statutory list containing all listed items built before 1917. It essentially contains only a minimum amount of necessary data on each item, such as grade and address. The Directorate of Antiquities should give the preparation of this list top priority and it is estimated that such a list could be completed in two to three years.

2. Supplementary List:

This list should also be of national coverage but should contain items built after 1917 which are considered worthy of protection. This list should be attempted only after the completion of the approved list. It is to be basically of a reserve value for future listing, and an item included in it should also be protected wherever possible.

The approved list should be published in the official Iraqi gazette, 'al-Waqai al-Iraqiya', and also in a cumulative form and made available in all relevant governmental offices, local authorities, libraries, universities and research centres. It should also be made available on sale to the public. The listing should be carried out by qualified experts, such as archaeologists or architectural historians. It is recommended that listed buildings are identified by means of a suitable external sign showing its listing number and grade. Listed buildings which are associated with historical figures could be provided with additional data including the relevant name and date. Major alterations or demolitions of listed buildings should be opposed as far as possible. It should be made an offence to alter, sell, or demolish a listed building without first obtaining a written consent

from the relevant protective agency. In cases of grade A and B buildings, the agency should refer the applications to the Conservation Authority for a consultative opinion. In order to preserve the original character of a listed building it is necessary to control internal and external alterations. Such alterations should require a special written official consent before the work proposed can be carried out. Generally, the following should be regarded as operations affecting the character of the listed building:

Removing original features including doors, windows and ursi and shanashil windows, balustrades, columns and archways, decorated ceilings, cornices, panels and friezes, badgeers (air-scoops), screens; and glazed tilework. In the case of mosques and other types of Islamic buildings, original features such as mihrabs, minbars, inscribed panels, qanadils, carpets and other mosque furniture should also be included in this category

Replacing original features with modern substitutes in a design and material different from the original.

For example, replacing wooden sash ursi windows with iron windows, or replacing a decorated door by a plain one

Adding new features like modern doors and windows, courtyard roofs, false ceilings, canopies, railings and staircases. Unsightly signs, flue pipes and drainage should not be located on the face of the listed building

Repairs in unsuitable materials such as brick in place of natural stone or marble. The use of artificial substitutes for the repair of original features should not be allowed

Painting unpainted brickwork or stonework, or repainting walls, windows and doors in unsuitable colours or in colours different from their original.

The consent should be made compulsory even when the application is by an official organisation such as the Awqaf. A consent to demolish a listed building should not be issued until it is fully recorded and documented by the relevant authority. In such a case, the private owner should be legally obliged to give adequate access to officials making the documentation.

9.2.4 National Inventory

The preparation of a national inventory of immovable cultural heritage in Iraq is another important recommendation of this study. This inventory, which should be attempted only after the completion of the approved list and the designation of conservation areas, should be prepared by the various protective agencies under the co-ordination of the proposed Conservation Authority. It should be divided into three main parts:

1. Sites and features of archaeological interest,
2. Buildings and monuments of architectural or historic interest, and
3. Areas of architectural or historic interest (both rural and urban).

The first and second parts of the inventory should be carried out by the Directorate of Antiquities which is best qualified for this work. The third part is to be prepared by the planning authorities. The inventory is a basic reference and a census of items of cultural interest. It should be produced in a standardised form and systematically presented, perhaps along the lines of the inventory of this study. Similarly, the basic data should be coded and computerised so that it can be quickly reproduced, altered and updated.

The documentation of the inventory should be authoritative, accurate and as comprehensive as possible. Measured drawings or photogrammetric documents should be extensive and capable of being used for the reconstruction of a listed item if it is destroyed for some reason or another. Given the will, determination and expertise, such a mammoth task could be accomplished by a well-equipped and staffed team within fifteen years. However, it must not be regarded as a once and for all job, it should be continually fed back, corrected and up-dated. Students and other interested individuals who prepare measured drawings of listed buildings, or research papers on them, should be rewarded by an appropriate honorarium. The Conservation Authority should keep a central register of measured drawings so that duplication can be avoided. The drawings and research papers should then be linked to the inventory.

9.2.5 Architectural Restoration Section

Steps should be taken to establish a new section within the Directorate of Antiquities 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 will become protected when the legal date is raised to 1917 as proposed. However, this restoration is to be co-ordinated with the Conservation Authority which may advise on such restoration.

It is recommended that a materials bank associated with this section should be started. Storing architectural elements such as windows, columns, urns, and accessories such as wrought iron work and brass work, and so on, 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.

To make it possible for this section to carry out its tasks, it is essential to recruit qualified and experienced architects and restorers, both Iraqi and foreign. It is also recommended that several well-known master-masons are 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-ironwork, calligraphy and ornamentation. Masters 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.

There are various other suggestions which are recommended here in outline.

- *To increase the protection and supervision of archaeological sites, especially those in urban areas which should be fenced as soon as possible
- *To improve the presentation of sites and monuments by the sensitive planning and location of tourist facilities, and to provide them with informative placards

- *To discourage prestige-projects such as the Ctesiphon Panorama or the proposed reconstruction of Babylon in favour of essential work such as preservation
- *To increase and improve the existing research and documentation facilities, and intensify research into the problems of mud-brick preservation
- *To increase central government funds to the Directorate by a substantial amount to enable it to carry out these improvements.

9.2.6 Planning Authorities: Directorate of Planning and Amanat al-Assima

The lack of legislation specific to town and country planning calls for immediate action. It is recommended that the appropriate authorities should start drafting the necessary laws as soon as possible. It is proposed that this new legislation should include the concept of protecting and enhancing rural and urban areas of historic or architectural interest. In particular, the new law should specify the following measures:

All municipal authorities, including Amanat al-Assima of Baghdad, should, with the help of the Directorate of Planning and the proposed Conservation Authority, seek to identify 'Conservation Areas' in their own towns and villages. Such areas should then be accurately surveyed and their individual buildings and other items of interest marked on a base map.

Approved Conservation Areas should then be officially designated by the planning authorities as such and announced to the public. These areas should be clearly defined as protected areas on the master or development plan of towns.

A programme of action and a conservation plan should be prepared for these designated areas primarily by the Directorate of Planning but also in co-ordination with the Conservation Authority. Pilot schemes could

then be initiated in various towns to show how conservation can improve and enrich the environment, to study and meet the problems encountered during such action, and to gather public support and participation.

Development control is usually the cornerstone of the town planning process and through it conservation is conveyed and enforced. The planning authorities should be obliged to exercise stringent and sensitive control of development in Conservation Areas. They should formulate policies as well as general guidelines for the protection and enhancement of these areas. Apart from the proposed listed building controls in the Antiquities Law, the new planning legislation should elaborate special control measures including: general environmental improvements, such as the removal of eyesores, control of modern development such as infill, external design, and advertisements. However, special development controls and policies may be formulated for areas or towns of particular character or needs.

To establish a Conservation Section in the Directorate of Planning and in Amanat al-Assima to carry out these conservation proposals and administer planning applications and development within Conservation Areas. These sections could be staffed by Iraqi as well as foreign planners or architect-planners with some experience in conservation work. However, they could be recruited only if sufficient financial incentives were offered. Iraqi personnel inexperienced in conservation could be given special training courses at either the Unesco Regional Conservation Centre in Baghdad or Iraqi universities.

There are other various specific recommendations which Amanat al-Assima and other local authorities are asked to undertake:

- *To prevent speculation, the price of land in historic areas, especially in Conservation Areas, should be controlled. Such control has already succeeded in many countries and persuaded private owners of buildings within such areas of the validity of regular maintenance and upkeep. But this demands strong governmental action and a strict enforcement of planning legislation.

- * To create pedestrian areas and traffic-free zones, and to restrict vehicular parking in streets and areas of special visual, historic or architectural interest.
- * To improve the amenity generally, by removing insensitive advertisements which detract from the architecture of listed buildings, replacement of garish and obtrusive shop signs by appropriate ones sympathetic to the character of the area, and by removal or rewiring of overhead telephone and electricity cables, especially in zones of visual interest.
- * To regard the question of introducing or improving public infra-structural services, especially sewage and surface drainage, as a top priority as far as historic areas are concerned. The present condition of these areas in wet seasons is intolerable and is seriously damaging both the health of the inhabitants and the fabric of buildings.
- * To preserve existing trees and encourage suitable planting in these areas.
- * To introduce floodlighting to illuminate monuments and landmarks of outstanding historic or architectural interest. Citadels such as those in Kirkuk and Arbil and Grand Mosques would particularly benefit from such a measure because of their height and dominant skyline in relation to their surrounding areas.

9.2.7 Ministry of Awqaf

It is recommended that the principle of protecting Islamic architectural heritage is added or embodied to the existing Law of Awqaf. The authenticity of listed mosques and other waqf buildings of religious or historic significance should always be respected and maintained, this question could be dealt with in the Law or in its regulations.

Any restoration or reconstruction work of a listed waqf building should be carried out only after the approval of the Directorate of Antiquities and the Conservation Authority, and such work should always be recorded.

A systematic programme to document its buildings of cultural interest, both listed and unlisted, should be introduced. The documentation of listed mosques could be carried out in co-ordination with the Conservation Authority so that such work as measured drawing is not duplicated. It is also recommended that the Awqaf should make a start in documenting its lost buildings of outstanding architectural or historic interest by searching through its existing files, waqfiyas, and documents. In particular, all available waqfiyas should be recorded, microfilmed and published in bibliographic form.

An Awqaf Museum should be established. This museum could not only exhibit the valuable rare copies of the Quran, illuminated manuscripts and other movable waqf cultural property, but also such architectural elements as mihrabs, minbars, glazed tiles, calligraphy, and other mosque furniture. This museum could also be used to promote public interest in Islamic architecture and the work of Awqaf in preservation and restoration.

The Awqaf should establish its own restoration and maintenance section, workshop and materials bank. This section could also be in charge of the regular inspection of historic mosques and general enforcement work. Again, the required restorers and architects could be recruited from local sources as well as Arab and other Islamic countries.

The architectural presentation of all mosques should be improved generally. In particular, listed mosques should receive special attention and should be provided with informative signs or plaques briefly showing their history and overall description. These could be of a standard approved design as in many European countries. Grand and other important mosques should be illuminated by floodlighting instead of the present system of using chains of individual electrical bulbs or neon-lighting.

Research into the history and architecture of Iraqi mosques should be encouraged and initiated by the Awqaf. Private researchers and writers could be helped by financial grants or rewards and by giving fuller access to its historical records.

9.2.8 Research and Educational Centres

Conservation and its importance to the national heritage is still recognised only by a very small minority of professionals and scholars in Iraq. It is recommended that the appropriate educational authorities should involve schools and universities in conservation and its various aspects.

In particular, conservation should be included in the curricula of the College of Arts, School of Architecture, and the Urban and Regional Planning Centre of Baghdad University. Research and involvement into conservation, urban archaeology and Islamic architectural history should be encouraged at both under and post-graduate levels. Projects could be organised to engage students in practical schemes to investigate and document the conditions and problems of historic buildings and areas. Joint training courses, seminars and workshops could be arranged with the existing Unesco Conservation Centre in Baghdad and with the proposed Conservation Authority. Special emphasis should be placed upon the value of measured drawings and it is strongly recommended that a resumption of such work by the architectural school is organised as soon as possible.

9.2.9 Tourism Administration

It is recommended that this Administration should not be permitted to carry out restoration work on its own historic buildings. Instead, such work should be referred to the Directorate of Antiquities whose speciality it is to restore such buildings.

It is strongly proposed that the location of tourist facilities at sites of archaeological, historic or landscape interest, such as rest-houses

and restaurants, should be very carefully considered, and implemented only after the approval of the conservation section in the Directorate of Planning and the Conservation Authority.

The existing architectural section of this Administration should, in conjunction with the Directorate of Planning, formulate general guidelines for the design of tourist facilities near historic areas and buildings. These guidelines could attempt to reach overall design suggestions on such questions as scale, proportion, materials, colour and general presentation work. The over-riding principles in such suggestions should be the respect of the integrity of the historic monument or site and the sympathetic location and sensitive design of modern development.

9.3 Miscellaneous

The following is a list of various miscellaneous proposals which are not specifically related to any of the aforesaid authorities:

To establish open-air museums in historic towns. These should deal mainly in vernacular architecture, and exhibit houses and other listed buildings whose demolition becomes unavoidable and which are capable of being dismantled and re-erected. They should be arranged in such a way as to recreate a street or a small mahalla typical of the region in which the museum is sited.

To organise a regular national lottery for conservation. National appeals to collect funds for specific monuments should also be considered.

To set up a national society for the protection of heritage in Iraq. The organising committee should include as many outstanding personalities as possible and should seek central government help but maintain its independence and political impartiality.

Special national campaigns should be organised on certain days or weeks to promote public interest in conservation. An 'Arab Heritage Year' could be organised by the cultural section of the Arab League or the Organisation of Arab Cities.

Wherever possible, the original names of historic streets and mahallas should be restored and used for official purposes including postal services. This should also apply to buildings and especially mosques.

To start a periodical dealing with the various aspects of heritage in Iraq, such as architecture, urban planning and conservation. This periodical could be published by the proposed national society for the protection of heritage but should be subsidised by the Ministry of Information.

The Iraqi government should propose to the Arab League the setting up of a special 'Inter-Arab Conservation Fund' to help finance conservation programmes for historic areas and buildings throughout the Arab World. This fund would be particularly beneficial to the poorer Arab countries.

9.4 Baghdad

The establishment of a conservation section within the administrative structure of the Amanat al-Assima was proposed earlier. It is envisaged that this section will not only be in charge of protecting the four historic cores of Baghdad but also in development control and planning within them. The section could operate initially within the framework of the Law of the Master Plan of Baghdad of 1972 until more detailed planning legislation is passed.

The first tasks of this section should be the identification and initial designation of Conservation Areas. The approval of these areas should be finalised in conjunction with the proposed Conservation Authority. However, some areas of outstanding architectural or historic interest are now seriously threatened by decay and by intrusion by incompatible modern development. Consequently they are in need of immediate remedial action and any long delay could undermine their very existence. These areas are:

Rusafa

Jadid Hassan Pasha (in block 110)

Bab al-Agha and Mustansir Street (in block 110)

Murabaa (in block 104)

Sinak (in block 104)

Batawiyin (in block 101)

Karkh

Sitta Nafisa (in block 212)

Suq al-Jadid (in block 212)

Sif, Shawaka and Kraimat (in block 216)

Jnaid Cemetery (in block 202)

Kadhimiya

Whole core (blocks 400 to 434)

These areas need to be surveyed immediately and conservation plans for them 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 sewage and surface drainage systems, paving of alleyways and suqs, cleaning up and removal of eyesores such as garish signs and advertisements, and the removal or tidying-up of overhead wires.

To implement these measures, it is recommended that the Amanat makes full use of the available fund which was started in 1974 by the Ministry of Planning under the heading 'Conservation of Cultural Property in Baghdad'. This fund, however, is not sufficient to meet these measures and therefore additional allocations are necessary. These could be obtained from the central government either as grants or loans.

It is also recommended that Polservice's plans for the intensive redevelopment of Rusafa and Karkh are entirely re-assessed on the basis of the listing of buildings and the designation of Conservation Areas. The conservation plan for Kadhimiya, also prepared by Polservice, should be revised but it is recommended that its overall proposals, especially pedestrianisation and visual improvements, are adhered to. Its plot-merger proposals should be abandoned on the basis of impracticability and possible destructiveness.

There are several other projects which the Amanat is recommended either to revoke or radically re-assess. These include the proposed elevated corniche road along both banks of the Tigris affecting both historic cores of Rusafa and Karkh, and the projected use of overhead mono-rail transport system through the city including its historic cores. If these two very large-scale projects are implemented as they are now proposed they will very seriously alter the character and also damage the fabric of the last remaining historic areas of Baghdad. It is also strongly recommended that the recent practice of demolishing the areas surrounding historic monuments is immediately stopped.

In addition to threatened historic areas, there are some 71 individual buildings and urban features which are today either in immediate or near-immediate danger of being seriously damaged by decay, major alteration, or even demolition. Consequently, they need urgent

protective action by the various appropriate authorities. It is assumed that these buildings will be listed by the Directorate of Antiquities and that, perhaps with some help from the inventory of this research, an official statutory list will be compiled for Baghdad within the first year of commencing its work.

The following list of such buildings and features is derived from the inventory of this research and it includes only grades A and B. It is envisaged that mosques and tombs in this list will be preserved or restored by the Awqaf, whilst houses and other buildings are recommended to be protected and restored by the proposed architectural restoration section in the Directorate of Antiquities. This would probably involve some use of compulsory purchase powers which are provided for in existing legislation. To sum up, the items in this list should be officially listed as a first step towards their protection. They should then be preserved or restored and provided with an appropriate use.

Seriously Threatened Buildings of Cultural Interest

1. MOSQUES

- A. 007 Numaniya Mosque, Jadid Hasan Pasha, Rusafa
- B. 077 Amin al-Pachachi Mosque, Mustansir Street, Rusafa
- B. 087 Numan al-Pachachi Mosque, Ras al-Qarya, Rusafa
- A. 124 Hussain Pasha Mosque, Haidarkhana, Rusafa
- B. 189 Ammar Mosque, Ammar, Rusafa
- B. 274 Saada Mosque, Sinak, Rusafa
- B. 298 Tayar Mosque, Hammam al-Malih, Rusafa
- B. 307 Khidhir Beg Mosque, Qanbar Alı, Rusafa
- B. 321 Khidhairi Mosque, Sidriya, Rusafa
- A. 873 Aaraji Mosque, Tell, Kadhimiya
- A. 906 Haidari Husainiya, Tell, Kadhimiya

2. TOMBS

- A. 031 Najib al-Sahrawardi, Markaziya Secondary School, Rusafa
- A. 219 Abu al-Faraj al-Jawzi, Sinak Riverfront, Rusafa
- B. 318 Muhammad al-Alfi, Sidriya, Rusafa
- B. 346 Abı al-Nithur Abdulla, Abdulla, Rusafa
- A. 400 Junaid and Saqti, Junaid Cemetery, Karkh
- A. 401 Bahlul Dana, Junaid Cemetery, Karkh
- A. 415 Hussain b. Mansur al-Hallaj, Near Karkhi Cemetery, Karkh
- A. 522 Maryam b. Umrān, Karradat Maryam, Karkh
- A. 551 Abu al-Hasan al-Nouri, Suq al-Takya, Aadhamiya
- A. 552 Um Rabaa, Ras al-Hawash, Aadhamiya

3. HAMMAMS

- A. 006 al-Pasha Hammam, Suq al-Mıdan, Rusafa
- A. 078 Haidar Hammam, Mustansir Street, Rusafa
- B. 212 Rauf Hammam, Murabaa, Rusafa
- B. 296 al-Malih Hammam, Hammam al-Malih (Mahalla), Rusafa
- A. 319 al-Sayid Hammam, Suq al-Sidriya, Rusafa
- A. 475 Ayub Hammam, Shaikh Bashar, Karkh
- A. 752 Murtadha Hammam, Off Bab al-Dırwaza Street, Kadhimiya

4. SUQS

- B. 055 Zanjl Suq, Bab al-Agha, Rusafa
- B. 057 Ibrısam Suq, Bab al-Agha, Rusafa
- B. 063 Tamgha Suq, Bab al-Agha, Rusafa
- B. 064 Sarrafın Suq, Bab al-Agha, Rusafa
- B. 312 al-Ghazıl Suq, Suq al-Ghazıl (Mahalla), Rusafa

5. KHANS

- B.047 Sumikh Khan, Bab al-Agha, Rusafa
- A.059 al-Zurur Khan, Bab al-Agha, Rusafa
- B.052 Tabatabai Khan, Bab al-Agha, Rusafa
- B.062 Pasha al-Kabir Khan, Bab al-Agha, Rusafa
- B.800 Farman Khan, Mufid Street, Kadhimiya

6. HOUSES

- B.018 Salima Daud House, Jadid Hasan Pasha, Rusafa
- B.022 Shabandar House (1), Jadid Hasan Pasha, Rusafa
- B.023 Shabandar House (2), Jadid Hasan Pasha, Rusafa
- B.070 House 5/25, Ras al-Qarya, Rusafa
- B.073 House 3/38, Ras al-Qarya Riverfront, Rusafa
- A.076 Butrus Kaka House, Ras al-Qarya, Rusafa
- B.081 Lynch House, Rashid Street, Rusafa
- A.085 Sasson House, Mustansir Street, Rusafa
- B.120 Hamid Salman House, Haidarkhana, Rusafa
- B.137 Aquoliya House, Aquoliya Mahalla, Rusafa
- A.192 Shahrabali House (Masbagha Ahliya), Suq al-Ghazil, Rusafa
- B.193 Shahrabali House (Annex to 192), Rusafa
- B.225 al-Naqib House, Sinak Riverfront, Rusafa
- B.228 Inspectorate House, Sinak, Rusafa
- B.248 al-Yahu House, Sinak, Rusafa
- B.303 Muiz Amin House, Tawrat, Rusafa
- B.323 Muhyi al-Gailani House, Bab al-Shaikh, Rusafa
- B.327 Ibrahim al-Gailani House, Bab al-Shaikh, Rusafa
- B.359 Abd al-Rahman al-Naqib House, Bab al-Shaikh, Rusafa
- B.477 Waheed Hotel, Shaikh Bashar Riverfront, Karkh
- A.645 Nawab House, Tell, Kadhimiya
- A.646 Qasim Khan House, Tell, Kadhimiya
- A.647 Qasim Khan House, Tell, Kadhimiya
- B.728 Amir Astarabadi House, Qattana, Kadhimiya
- B.731 Iqbal al-Dawla House, Qattana, Kadhimiya
- B.738 Abd al-Amir al-Khatib House, Qattana, Kadhimiya
- B.840 Abd al-Ridha Atifa House, Shiyoukh, Kadhimiya
- B.855 al-Khalisi House, Shiyoukh, Kadhimiya
- B.857 Kubai House, Shiyoukh, Kadhimiya

7. MISCELLANEOUS

- B.034 Law Courts, Jadid Hasan Pasha Riverfront, Rusafa
- A.146 Panja Ali Memorial, Imam Taha, Rusafa
- B.794 Tram Station, Shiyoukh, Kadhimiya
- B.874 al-Aaraji Cemetery, Tell, Kadhimiya

Finally, it must be stressed that these items represent only a small proportion of the total number of the inventory, they were enlisted here only because they are more immediately threatened than the others.

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2. Sources in English
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REPUBLIC OF IRAQ

MINISTRY OF CULTURE AND GUIDANCE

DIRECTORATE GENERAL OF
ANTIQUITIES

BAGHDAD

ANTIQUITIES LAW No 59 OF 1936.

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ANTIQUITIES LAW NO 59 OF 1936

WF KING of Iraq

With the concurrence of the Senate and the Chamber of Deputies, do hereby order the enactment of the following Law:—

CHAPTER I
DEFINITIONS AND GENERAL PROVISIONS

Article 1—For the purpose of this Law the term Antiquities means anything made or formed by the hand of man before 1700 A.D. and the year 1118 A.H. such as buildings, caves, coins, sculptures, manuscripts and such objects as are illustrative of sciences, arts, crafts, literature, religions, customs, morals and politics in past ages.

Article 2—Antiquities shall hereby be divided into two categories, movable and immovable.

Immovable Antiquities include all antiquities erected on and attached to the soil such as buildings, monuments, caves and any objects usually attached to buildings and thus constituting a part thereof.

Movable Antiquities include all antiquities detached from the soil or from buildings and are either removed therefrom and transported to any other place.

Article 3—All antiquities discovered in Iraq whether movable or immovable that are now on or under the surface of the soil shall be considered to be the common property of the State. No individuals or groups are allowed to claim any such property or claim the ownership thereof except under the provisions of this Law.

Article 4—The ownership of a land shall not entitle the owner to dispose of the antiquities discovered on or under the surface of that land nor does it entitle him to excavate for antiquities thereon.

Article 5—It is forbidden to break, mutilate, distress or damage antiquities whether movable or immovable.

CHAPTER II
IMMOVABLE ANTIQUITIES

Article 6—The Directorate of Antiquities shall cause all ancient buildings and historical sites existing in Iraq to be surveyed and to inform the public in connection therewith and open a special file for each subject.

Article 7—Mosques, madrasas, synagogues, churches, convents, monasteries and other ancient buildings, owned or conserved in Iraq in the occupation of persons *de facto* or *de jure* whether registered in the Title or being of proved ownership or otherwise by legal deeds or by oral decrees, shall continue to be in the occupation of the owners or the guardians provided they are used for the purpose for which they have been built, subject to the supervision of the Antiquities Directorate. The owner or guardian thereof shall be responsible for carrying out any necessary preservation or repair work. Should the guardian or owner prove to be incapable of doing so the Department of Antiquities shall carry out the necessary preservation or repair provided that the owner or guardian

Article 8—When the existence of antiquities is an established fact with the Department of Antiquities the Minister may decide whether such site and according to scientific requirements the surrounding land may be considered as an historical site, subject to the publication of such decision in the Government Gazette. This shall not prevent the owner from enjoying his right of occupation.

Article 9—The Government may acquire any ancient building or historical site as a matter of public utility under the Expropriation Law, and any necessary right of way or easement of access thereto. In valuing the land for such acquisition no account shall be taken of the existence or value of antiquities which are existing or have been found on or in such land.

Article 10—The Government shall be entitled to render movable and to remove any immovable antiquities from their original place to other places only to the owner of the land compensation for the repair or damages sustained by the land through such removal. Where the land is government land no such compensation shall be paid.

Article 11—Any person who discovers an immovable antiquity and any owner or proprietor of land where such antiquity has been discovered who knows of such discovery and any public servant, Sheikh of a tribe, Sirkal Mukhtar of a village or quarter who knows of such discovery shall report the same within ten days to the local administrative authorities.

Article 12—Any occupier of land containing immovable antiquities shall allow the Director of Antiquities and any other official authorized by him to enter that land at all appropriate times with the aim of examining it, drawing maps and taking photographs thereof.

Article 13—No person shall, without special permission, render any immovable antiquity or dispose of any of its constructional materials or utilize such antiquity in a manner which is likely to injure or destroy it or alter its character.

Article 14—The Council of Ministers may pass a resolution to the effect that any building erected after the year 1700 A.D. and 1100 A.H. shall be considered as an ancient building, if the Council have reason to believe that its preservation is necessary on public utility on account of its historical or artistic value. Such resolution shall be published in the Government Gazette and the building in question shall thus be reckoned as an ancient building as provided for in this Law and shall be subject to the provisions of the Expropriation Law.

Article 15—Immovable antiquities belonging to the State shall be neither sold nor subjected to prescriptive measures preventing legal procedure.

CHAPTER III
MOVABLE ANTIQUITIES

Article 16—Movable antiquities which at the time of the issue of this Law are in the possession of private persons *de facto* or *de jure* shall remain in their possession provided that they are registered with the Department of Antiquities within six months from the date of the execution of this Law.

The period which shall not be less than one year for the registration of manuscripts in Arabic characters shall be limited by a regulation.

Article 17—Whoever, by chance discovers a movable antiquity after the issue of this Law shall report his discovery to the governor's office or administrative authority nearest to the place of discovery within seven days. The authority concerned shall acknowledge the report in writing and shall immediately refer

the Directorate of Antiquities accordingly, within three months from the date of the notification. The Directorate of Antiquities may decide that the antiquity is necessary to be added to the collection of the Iraq Museum or elect to leave it in the possession of the Finder.

(a) If the Directorate decides to keep the antiquity it shall pay to the discoverer a suitable reward provided that in the case of gold, silver or precious stones the reward shall not be less than the intrinsic value of the material, the amount to be paid to the antiquity workshop and historical value.

(b) If the Directorate decides to leave the antiquity in the possession of the finder such article shall be registered and returned to the finder within a written statement showing the number of the registration.

Article 18—Any movable antiquity found in the possession of a person after the lapse of the period prescribed in article 16 of this Law and proved to be unregistered with the Department of Antiquities within that period shall be considered as a movable antiquity and the Department

Article 19—Any person who knows of the discovery of a movable antiquity shall report the same to the Department of Antiquities and shall grant that person a suitable reward as determined by the Council of Ministers.

Article 20 —(a) The Department of Antiquities may require any of the registered movable antiquities in private possession at the value mutually agreed upon by both parties or in default of agreement to be fixed by a Board of Arbitrators consisting of an official representing the Department of Antiquities, a nominee of the dealer and a third person agreed upon by them. If both parties fail to agree upon the third person he shall then be appointed by the Administrative Council.

(b) If the owner of an antiquity declines to elect the expert the Administrative Council shall appoint the arbitrators at the request of the Directorate of Antiquities.

(c) The Board of Arbitrators shall be formed of residents in Iraq regardless of their nationality and its decision shall be final.

Article 21 —The Directorate of Antiquities may demand from persons possessing antiquities registered in its files that the Department may find necessary to exhibit for the purpose of study or making photographs or models thereof provided that the antiquity shall be returned to its owner with the least possible delay. The owner of the movable antiquity shall be given a receipt in which mention shall be made that the said antiquity shall be in the safe custody of the Department of Antiquities throughout the period during which the antiquity remains in the possession of the said Department. The cost of transport shall be borne by the Department of Antiquities. The right of reversion shall not apply to cases of antiquities registered in whole shares.

Article 22 —It is hereby prohibited to counterfeit or forge antiquities. Any scientist or artist wishing to make moulds and models of certain antiquities shall obtain the permission of the Directorate of Antiquities for each case separately and in making the models he shall strictly follow the conditions and methods prescribed by the said Directorate in order to avoid any probability of cheating or forgery.

Article 23 —All the movable antiquities which are in the possession of the Government shall be exhibited to the public and scientists in the museums which are instituted in the Capital as well as in various towns and at places where to certain archaeological sites. The Department may collect admissions fees from persons visiting the museums from time to time according to a regulation.

Article 24 —Movable antiquities which may be dispersed with owing to an abundance or similar examples thereof in the Iraqi Museums and whose loss by the Department of Antiquities will not impair in any way the value of the Iraqi Museum may be sold provided that the quantities and qualities of such antiquities shall be specified by a special regulation.

Article 25 —The Department of Antiquities may upon the approval of the Ministry exchange certain antiquities in its possession for antiquities possessed by other museums and scientific institutions, provided that such an exchange tend to increase the value of collections in the Iraqi Museums.

Article 26 —No person shall export any antiquity from Iraq save under written permit issued by the Directorate of Antiquities. This permit shall specify the nature and description of the antiquity in such a manner as to distinguish it from others. Anyone desiring to export any antiquity in his possession shall submit an application in which he shall mention the type of antiquity, its description, the way he acquired it, its destination and the name of the person to whom it is being sent. He shall declare the value and deliver the antiquity together with its photograph to the Directorate of Antiquities before any decision is taken thereon.

The Directorate of Antiquities acting upon the advice of a scientific committee may permit the exportation of the antiquity or refuse permission or may purchase the object at the value declared in the application for exportation. If the Directorate grants permission for the export of the antiquity the exporter shall comply with the following requirements:

- (a) He shall pay the exportation fee.
- (b) He shall comply with all the orders of the Directorate in connexion with the method of packing.
- (c) The exportation fee shall be charged on the basis of a percentage to be prescribed by special regulation provided it shall not exceed twenty five per cent or the declared value of the antiquity. This fee shall replace the Customs duties.

The price declared by the exporter shall be considered a basis for the value of the antiquity for the purpose of charging the fees unless the Director is convinced of the existence of obvious difference between the declared value and the actual value of the antiquity in question. In such cases the fee shall be charged on the value estimated by the Department of Antiquities.

CHAPTER IV
TRAFFIC IN ANTIQUITIES

Article 27 —No person shall be allowed to trade in antiquities unless he obtains a written licence from the Directorate of Antiquities signed by the Minister of Education and the Director of Antiquities.

Article 28 —Antiquities which may be sold or bought shall be those registered in the file of movable antiquities in accordance with the provisions of this Law. The licence to traffic in antiquities does not entitle the holder to deal with the export of antiquities regardless of how such antiquities become available for purchase.

Article 29 —Application for a licence to traffic in antiquities shall be made to the Directorate of Antiquities in the form prescribed and entered the name of the applicant his family name, his place of residence, the town where he wishes to trade and the address of his business office.

Article 30 —The licence shall be granted for a period of one year only and may be subsequently renewed yearly. The Department of Antiquities shall have the right to decide whether to grant the licence or refuse to do so or refrain from renewing it for justifiable reasons provided that the applicant is notified accordingly. A protest may be made to the Education Council within ten days of the date of the above notification against the decision of the Department of Antiquities refusing renewal of the licence. The decision of the Council shall be final.

Article 31 —The Director of Antiquities or any official authorised by him may, at all times judged convenient for inspection enter and inspect the premises allotted for traffic in antiquities and examine and register any of the antiquities existing thereon. If the premises mentioned by the dealer in his official statement as the premises for his business are his personal domicile that place for the purpose of this Law shall be considered a commercial store and shall be subject to inspection any time as in the case of any other commercial premises.

Article 32 —No person shall be given a licence to traffic in antiquities in more than one town and the holder of a licence shall not extend the limits of his business beyond the municipal limits of the city for which the licence to carry on such a traffic has been obtained.

Article 33 —Every licensed dealer shall fulfil the following as well as any other conditions which may be added to the licence under instructions issued by the Minister —

- (a) He shall post a notice over the door of his registered premises indicating that he is licensed to traffic in antiquities.
- (b) He shall not hold in stock or keep a reserve of the antiquities meant for sale in any place other than the premises established for his business.
- (c) He shall keep a register in the form required by the Director showing the contents of his store in detail and according to the transactions of his business daily according to instructions issued by the said Director.
- (d) He shall submit on inspection, to the Director or the person representing the Directorate, any antiquity in his possession.
- (e) He shall provide the Department of Antiquities, as necessary with the photographs of any antiquity in his possession.
- (f) He shall submit to the Department of Antiquities a detailed statement of any antiquity bought by him on the next day after the purchase. He shall also submit to the Department of Antiquities on the day of sale a statement showing any object sold. This statement must be signed by both the dealer and the buyer and show the nature and description of the article.
- (g) This licensed dealer or any person employed by him shall give the Directorate and the officials representing it all the necessary facilities and assistance when carrying out the inspection.
- (h) When a dealer desires to move his business to another place he shall inform the Department of Antiquities of the location of his new premises at least one week beforehand.

Article 34 —The Directorate of Antiquities may withdraw the licence for traffic in as well as the licence for selling antiquities if the holder neglects or contravenes any of his responsibilities or obligations if he is sentenced by any competent court for an act which may be considered a contravention to the provisions of this Law.

Article 35 —If on the expiration of the term of the licence the Directorate of Antiquities refuses to renew the licence and if the decision to this effect has become final in accordance with Article 70 of this Law the holder shall be granted a licence of sale only for a period not exceeding six months. This dealer shall replace the notice posted above the door of his premises by another one reading "licensed to sell antiquities".

This licence shall entitle its holder to keep his business premises for the sale of the antiquities which are still in his possession but shall not entitle him to buy any other antiquities with the intention of dealing in them. At the expiry of the said period the antiquities which remain in his possession shall be considered antiquities in the possession of private individuals according to the provisions of Article 16 of this Law.

Article 36 —If the licence is withdrawn according to the provisions of Article 34 the premises shall be closed and the owner shall not be allowed to carry on his business under any form whatsoever. The antiquities remaining with him shall be considered as registered antiquities according to the provisions of Articles 16 and 17 of this Law.

Article 37 —A fee of eight Dinars shall be collected from the holder of a licence to traffic in antiquities and for the renewal of the licence and a fee of two Dinars for the licence to sell antiquities.

Article 38 —The Director of Antiquities has the right to buy any antiquity in the possession of holders in accordance with the provisions of Article 29 of this Law.

Article 39—(a) Whoever wants to make a present of or sell any antiquity in his possession to any person he shall inform the Department of Antiquities of the case

(b) The sale or making a present of an antiquity does not imply the right to export without a licence under the provisions of this Law

CHAPTER V

EXCAVATIONS FOR ANTIQUITIES

Article 40—Only the Government and groups or individuals authorized by the Government under this Law shall be entitled to excavate for antiquities

No one is, therefore, entitled to excavate for antiquities, even in his own land, unless he obtains an official permit

Article 41—Permits to excavate shall be available only to scientific societies and institutions and to qualified scholars of established archaeological capacity from the scientific and financial points of view

Article 42—Applications for permit to excavate shall be made to the Directorate of Antiquities setting forth firstly particulars about the applicant and his qualifications as an excavator and secondly, the boundaries of the area it is intended to excavate with a general programme of the work to be followed in the excavation

The Director of Antiquities shall fully examine the request and submit the same together with his observations, to the Minister of Education. If the Minister approves of the recommendation of the Director the permit shall be granted signed by both the Minister and the Director

Article 43—Excavations shall be carried out scientifically under the supervision of an Expedition composed of at least four specialists—

- (a) A director who shall be a well known archaeologist with previous experience in archaeological excavations
- (b) An architect specializing in archaeological architecture
- (c) A general assistant competent in drawing and photography
- (d) An epigraphist possessing the necessary knowledge of ancient languages and scripts
- (e) The Directorate of Antiquities may waive the last specialist if the site desired for excavation belongs to prehistoric or ancient periods which do not require an epigraphist

Article 44—The holder of the permit shall comply with the following conditions—

- (a) To form the excavating expedition as laid down in the previous article
- (b) To provide the Expedition with all the equipment necessary for the excavation, photography and preservation of antiquities by means of recognized scientific methods
- (c) That the operations of the excavation shall continue for a period of at least three months or a year unless the excavation be completed within a shorter period
- (d) To send every fortnight at least to the Directorate of Antiquities a report on the operations of excavations and their results accompanied by full details of all antiquities discovered
- (e) To prepare all necessary cross-sectional drawings and photographs of all buildings discovered. The plans and sectional drawings shall be made on a scale of at least 1/100 and shall contain details showing the state of the buildings at the time of discovery sufficient to permit of reconstruction when necessary
- (f) He shall not demolish or remove any of the buildings except after the fulfilment of the conditions laid down in the previous paragraph and with the approval of the Directorate of Antiquities
- (g) He shall keep a detailed scientific register in which a record shall be made of all the movable antiquities discovered with all necessary scientific descriptions in a form agreed upon between him and the Directorate of Antiquities
- (h) He shall pay to the Directorate of Antiquities the necessary allowances for meeting the expenses of the representative of that Directorate
- (i) A number of guards to be agreed upon between him and the Directorate of Antiquities shall be posted at his own expense at the site of excavation during the whole excavation season and after the cessation of operations
- (j) He shall take all the necessary measures for the preservation of the site against the imminent danger of fire, flood and loss whether through climatic conditions or human interference
- (k) He shall supply the Directorate of Antiquities at the close of the season of digging with a copy of the full list of antiquities together with a complete list of the objects of value and importance which have been drawn and of the objects of value taken

Article 45—The Ministry of Education may upon the proposal of the Directorate of Antiquities, in certain instances restrict the permit to excavate with certain conditions in addition to the general provisions, laid down in the previous article provided that such conditions are imposed prior to granting the permit and introduced in the text of the permit or included in a supplement attached to it

Article 46—The sites excavated and the antiquities discovered shall, at all times, be open for inspection by the Directorate of Antiquities, its representative or any other Antiquity officials specially delegated by the Directorate

Article 47—The holder of the permit shall be considered responsible for the following undertakings—

- (a) He shall within six months of the conclusion of the season of digging, supply in a form suitable for publication by the Department of Antiquities, or in a form of a pamphlet or article to be published in one of the recognized archaeological periodicals a summary report of the main results of the excavations
- (b) He shall produce within a period of two years after the completion of the excavations a detailed scientific publication recording the general results of the excavations with a mention of the provenance of the antiquities found and a record of their respective locations. In case the results of the excavations are of various categories and are so minute as to need a longer period for study the Directorate of Antiquities may again extend that period
- (c) That he shall deliver to the Department of Antiquities one copy of every book published or article he publishes on his excavations and their results

Article 48—If the holder of the permit contravenes any of the general rules laid down in Article 44 or any of the special conditions laid down in the permit according to the provisions of Article 45, the Director of Antiquities upon the approval of the Minister may suspend the excavations or withdraw the permit

Article 49—All antiquities discovered by the excavators shall be the property of the State. The excavator shall however be granted a reward for his work

- (i) The right of taking casts of the discovered antiquities
- (ii) Half of the duplicated objects
- (iii) Any of the antiquities which the Iraq Government may dispense with owing to the existence in the Iraq Museum of similar objects in type, style, material, workmanship, historical indication and artistic value

Article 50—The holder of the permit shall, at the request of the Director of Antiquities pack up and despatch to the Iraq Museum all movable antiquities. He shall also obtain an export permit for the moulds and the objects allotted to him without having to pay any export fee or Customs duty

Article 51—If the holder of the permit ceases to dig for a whole season, the Government shall have the right to consider the permit as cancelled and to grant the excavator or permit holder the same site to any other applicant having the qualifications set forth in Article 41. But if the Directorate of Antiquities believes that unavoidable reasons prevent a holder of the permit from the continuation of the excavation it may postpone the matter to another season provided that it shall not finally cancel the permit at the lapse of two seasons without excavations

Article 52—The Directorate of Antiquities may under such conditions as it thinks fit grant a permit to conduct soundings and in certain cases and for a short period not exceeding one month. The owner of the permit shall report forthwith the results of his soundings to the Directorate who may at any time suspend the work or withdraw the permit if it considers the results unsatisfactory or the work may be suspended pending an application for a permit to excavate is submitted if the results are satisfactory

All antiquities discovered by the excavator during the sounding period belong to the Iraq Government. The excavator however shall be entitled to make casts of such antiquities if he so desires

Article 53—If the site to be excavated is a private property the applicant shall arrange with the owner as to the conditions which he shall be allowed to excavate. The Director of Antiquities shall if the permit holder and the owner of the land so desire and his conditions to effect a settlement between them. If no such agreement is reached the land may be expropriated in Article 9 of this Law

Article 54—The excavating expeditions shall have the right of priority in the publication of antiquities discovered during the excavations. But this right shall depend firstly on the priority of objects known to the Iraq public before their excavation and secondly on the necessity of informing the public through the press of the results without any delay

The following rules shall therefore apply—

- (a) Until the Department of Antiquities issues its publications during the prescribed period assigned for this purpose, no maps or plans supplied by the excavator under Article 44 of this Law shall be published by the said Department without the consent of the excavator
- (b) The Department of Antiquities shall not allow any person to take a photograph of any of the antiquities discovered nor shall he offer the photograph of any of those antiquities for sale before its publication by the excavator
- (c) If the excavator wishes to publish during the season of excavation certain results of the excavations outside of Iraq he shall notify the Director of Antiquities accordingly in order to insure the publication of the same simultaneously in Iraq
- (d) At the close of the season of excavation all necessary measures shall be taken to acquaint the Iraqi Public with the most important results. The Directorate of Antiquities and the excavating expedition shall negotiate and agree upon the method suitable for such information
- (e) If the period stipulated in Article 47 of this Law for the publication of reports on excavations expires, the right of priority in publication shall be automatically lost
- (f) The excavator's right of priority in publication shall not prejudice the right of the Department of Antiquities to mention the antiquities discovered and insert photographs of them in the General Guide Book of the Iraqi Museum

CHAPTER VI PENALTIES

Article 55—Whoever contravenes the provisions of Article 5 of this Law shall be punishable with imprisonment for a period not exceeding one year or with fine not exceeding two hundred Dinars or with both

Article 56—Whoever is required to report to the authorities concerned any discovery of a movable or immovable antiquity under the provisions of Articles 11 and 19 of this Law and fails to do so shall be punishable with imprisonment for a period not exceeding six months or fine not exceeding one hundred Dinars, or with both

Article 57—Whoever contravenes the provisions of Article 13 of this Law shall be punishable with imprisonment for a period not exceeding three years or with fine not exceeding five hundred Dinars or with both

Article 58—Whoever discovers a movable antiquity and fails to report the case to the authorities concerned under the provisions of Article 17 hereof, shall be punishable with imprisonment for a period not exceeding one year or with fine not exceeding one hundred Dinars or with both, and shall be deprived of the right of possessing the antiquity and of receiving the reward laid down in paragraph (a) of the said article

The antiquities, which at the time of the issue of this Law are in the possession of individuals but have not been registered within the period stipulated in Article 16 shall be considered as punishable offences under this article

Article 59—Whoever contravenes the provisions of Article 22 hereof shall be considered guilty of an offence and be punishable with imprisonment not exceeding six months or with fine not exceeding one hundred Dinars or with both, and the counterfeit or imitated article shall be liable to confiscation

Article 60—Whoever exports or attempts to export or assists in the export of antiquities contrary to the provisions of Article 26 of this Law, shall be punished with imprisonment for a period not exceeding three years or with fine not exceeding five hundred Dinars or with both and the antiquities in respect of which the offence is committed shall be liable to be confiscated. If the export or the attempt to export or the assistance to export is committed by a licensed dealer the penalty prescribed in this article shall be doubled

Article 61—Whoever traffics in antiquities contrary to the provisions of the article 27 and 28 of this Law shall be punishable with imprisonment for a period not exceeding three months or with fine not exceeding one hundred Dinars, and the articles in his possession shall be liable to be confiscated

Article 62—Whoever contravenes the provisions of Article 39 hereof shall be punished with a fine not exceeding ten Dinars

If the said contravention lead to the non declaration of the new possessor or to the loss of the traces of the antiquity the person guilty of the offence shall be punishable with imprisonment for a period not exceeding one year or with fine not exceeding one hundred Dinars or with both

Article 63—Whoever excavates for, or attempts to discover antiquities contrary to the provisions of Article 40 of this Law, shall be punishable with imprisonment for a period not exceeding one year or with fine not exceeding one hundred Dinars or with both, with the confiscation of the digging instruments and the antiquities found and if the offence be committed on a site already announced to be a historical site he shall be punished with imprisonment for a period not exceeding three years or with fine not exceeding five hundred Dinars and with the confiscation of the digging instruments and the antiquities discovered

Article 64—Whoever fails to give the information and assistance required of him under this Law shall be considered as guilty of the offence of preventing Government Officials from fulfilling their duties and shall be punishable under the provisions of the Penal Code

CHAPTER VII MISCELLANEOUS

Article 65—The inspectors of antiquities shall enjoy the powers granted to investigators as far as contravention of the provisions of this Law is concerned

Article 66—Guards and attendants of antiquities shall have the same powers as those granted to policemen in respect of their duties of preventing illicit digging and traffic

Article 67—Official reports submitted by the experts in the Department of Antiquities as to whether the object is an antiquity, a fake or not an antiquity shall be considered as legal documents

Article 68—Any antiquity confiscated under the provisions of this Law, shall be delivered to the Department of Antiquities

Article 69—The Minister may delegate to the Director all the powers or part thereof vested in him under this Law. Such an authorization shall be made through an announcement published in the Official Gazette. He may amend or cancel the announcement

Article 70—Permits to traffic and excavate granted before the issue of this Law under the Antiquities Law of 1924 shall remain valid provided the provisions of this Law are conformable to. But antiquities discovered during the two following years in archaeological sites in which excavations have been going on regularly for the last two years shall be divided according to the provisions of article twenty two of the Antiquities Law of 1924 and the provisions of Article 49 of this Law shall not be applied until after the lapse of two years from the date of the coming into force of this Law

Article 71—The Law of Antiquities of 1924 is hereby cancelled

Article 72—This Law shall come into force from the date of its publication in the Government Gazette

Article 73—The Ministers of Education and Justice are charged with the execution of this Law

Made at Baghdad the 28th day of Muharram 1355, and the 26th day of April, 1936

GHAI

YASIN AL HASHIMI RASHID ALI SADIQ AL BASSAM
Prime Minister 1g Minister of Justice Minister of Education

APPENDIX 2 THE VENICE CHARTER

VENICE CHARTER

adopted by the IInd International Congress
of Architects and Technicians of Historic Monuments
(Venice, May 1964)

Influenced with a message from the past, the historic monuments or generations of people remain to the present day as living witnesses of their age-old traditions. People are becoming more and more conscious of the unity of civil values and regard ancient monuments as a common heritage. The common responsibility to safeguard them for future generations is recognised. It is our duty to hand them on in the full richness of their authenticity.

It is essential that the principles guiding the preservation and restoration of ancient buildings should be agreed and be laid down on an international basis, with each country being responsible for applying the plan within the framework of its own culture and traditions.

By defining these basic principles for the first time, the Athens Charter of 1931 contributed towards the development of an extensive international movement which has assumed concrete form in national documents, in the work of ICOM and UNESCO and in the establishment by the latter of the International Centre for the Study of the Preservation and the Restoration of Cultural Property. Increasing awareness and critical study have been brought to bear on problems which have continually become more complex and varied. Now the time has come to examine the Charter afresh in order to make a thorough study of the principles involved and to enlarge its scope in a new document.

Accordingly, the IInd International Congress of Architects and Technicians of Historic Monuments, which met in Venice from 25 - 31 May 1964, approved the following text.

DEFINITIONS

Article 1. The concept of an historic monument embraces not only the single architectural work but also the urban or rural setting in which is found the evidence of a particular civilisation, a significant development or an historic event. This applies not only to great works of art but also to more modest works of the past which have acquired cultural significance with the passing of time.

Article 2. The conservation and restoration of monuments must have recourse to all the sciences and techniques which can contribute to the study and safeguarding of the architectural heritage.

Article 3. The intention in conserving and restoring monuments is to safeguard them no less as works of art than as historical evidence.

CONSERVATION

Article 4. It is essential to the conservation of monuments that they be maintained on a permanent basis.

Article 5. The conservation of monuments is always facilitated by making use of them for some socially useful purpose. Such use is therefore desirable but it must not change the layout or decoration of the building. It is within these limits only that modifications demanded by a change of function should be envisaged and may be permitted.

Article 6. The conservation of a monument implies preserving a setting which is not out of scale. Wherever the traditional setting exists, it must be kept. No new construction, demolition or modification which would alter the relations of mass and colour must be allowed.

Article 7. A monument is inseparable from the history to which it bears witness and from the setting in which it occurs. The moving of all or part of a monument cannot be allowed except where the safeguarding of that monument demands it or where it is justified by national or international interest of paramount importance.

Article 8. Items of sculpture, painting or decoration which form an integral part of a monument may only be removed from it if this is the sole means of ensuring their preservation.

RESTORATION

Article 9. The process of restoration is a highly socialised operation. Its aim is to preserve and reveal the aesthetic and historic value of the monument and is based on respect for original materials and authentic documents. It must stop at the point where conjecture begins, and in this case moreover any extra work which is found essential must be distinct from the architectural composition and must bear a contemporary stamp. The restoration in any case must be preceded and followed by an archaeological and historical study of the monument.

Article 10 Where traditional techniques prove inadequate, the consolidation of a monument can be achieved by the use of any modern technique for conservation and construction, the efficacy of which has been shown by scientific data and proved by experience.

Article 11 The valid contributions of all periods to the building of a monument must be respected, since unity of style is not the aim of a restoration. When a building includes the superimposed work of different periods, the revealing of the underlying state can only be justified in exceptional circumstances and when what is removed is of little interest and the material which is brought to light is of great historical, archaeological or aesthetic value, and its state of preservation good enough to justify the action. Evaluation of the importance of the elements involved and the decision as to what may be destroyed cannot rest solely on the individual in charge of the work.

Article 12 Replacements of missing parts must integrate harmoniously with the whole, but at the same time must be distinguishable from the original so that restoration does not falsify the artistic or historic evidence.

Article 13 Additions cannot be allowed except insofar as they do not detract from the interesting parts of the building, its traditional setting, the balance of its composition and its relation with its surroundings.

HISTORIC SITES

Article 14 The sites of monuments must be the object of special care in order to safeguard their integrity and ensure that they are cleared and presented in a seemly manner. The work of conservation and restoration carried out in such places should be inspired by the principles set forth in the foregoing articles.

EXCAVATIONS

Article 15 Excavations should be carried out in accordance with scientific standards and the recommendation defining international principles to be applied in the case of archaeological excavation adopted by UNESCO in 1956.

Remains must be maintained and measures necessary for the permanent conservation and protection of architectural features and of objects discovered must be taken. Furthermore, every means must be taken to facilitate the understanding of the monument and to reveal it without ever distorting its meaning.

Reconstruction work should however be ruled out a priori. Only anastylosis, that is to say, the reassembling of existing but dismembered parts can be permitted. The material used for integration should always be recognisable and its use should be the least that will ensure the conservation of a monument and the reinstatement of its form.

PUBLICATION

Article 16 In all works of preservation, restoration or excavation, there should always be precise documentation in the form of analytical and critical reports, illustrated with drawings and photographs.

Every stage of the work of clearing, consolidation, rearrangement and integration, as well as technical and formal features identified during the course of the work, should be included. This record should be placed in the archives of a public institution and made available to research workers. It is recommended that the report should be published.